AGENDA



Garden Grove Sanitary District Board of Directors

Tuesday, September 27, 2016

6:30 PM

Community Meeting Center, 11300 Stanford Avenue, Garden Grove, CA 92840 Christopher V. Phan
President
Kris Beard
Vice President
Phat Bui
Member
Steven R. Jones
Member
Bao Nguyen
Member

<u>Meeting Assistance</u>: Any person requiring auxiliary aids and services, due to a disability, to address the Sanitary District should contact the City Clerk's Office 72 hours prior to the meeting to arrange for accommodations. Phone: 714) 741-5040.

Agenda Item Descriptions: Are intended to give a brief, general description of the item. The Sanitary District may take legislative action deemed appropriate with respect to the item and is not limited to the recommended action indicated in staff reports or the agenda.

Documents/Writings: Any revised or additional documents/writings related to an item on the agenda distributed to all or a majority of the Sanitary District Members within 72 hours of a meeting, are made available for public inspection at the same time (1) in the City Clerk's Office at 11222 Acacia Parkway, Garden Grove, CA 92840, during normal business hours; (2) on the City's website as an attachment to the Sanitary District meeting agenda; and (3) at the Council Chamber at the time of the meeting.

<u>Public Comments</u>: Members of the public desiring to address the Sanitary District are requested to complete a pink speaker card indicating their name and address, and identifying the subject matter they wish to address. This card should be given to the City Clerk prior to the start of the meeting. General comments are made during "Oral Communications", and should be limited to matters under consideration and/or what the Sanitary District has jurisdiction over. Persons wishing to address the Sanitary District regarding a Public Hearing matter will be called to the podium at the time the matter is being considered.

Manner of Addressing the Sanitary District: After being called by the President, you may approach the podium, it is requested that you state your name for the record, and proceed to address the Sanitary District. All remarks and questions should be addressed to the Sanitary District as a whole and not to individual Sanitary District Members or staff members. Any person making impertinent, slanderous, or profane remarks or who becomes boisterous while addressing the Sanitary District shall be called to order by the President. If such conduct continues, the President may order the person barred from addressing the Sanitary District any further during that meeting.

<u>Time Limitation</u>: Speakers must limit remarks for a total of (5) five minutes. When any group of persons wishes to address the Sanitary District on the same subject matter, the President may request a spokesperson be chosen to represent the group, so as to avoid unnecessary repetition. At the Sanitary District's discretion, a limit on the total amount of time for public comments during Oral Communications and/or a further limit on the time allotted to each speaker during Oral

PLEASE SILENCE YOUR CELL PHONES DURING THE MEETING.

AGENDA

Open Session

6:30 PM

ROLL CALL: MEMBER BUI, MEMBER JONES, MEMBER NGUYEN, VICE PRESIDENT BEARD, PRESIDENT PHAN

1. ORAL COMMUNICATIONS (to be held simultaneously with other legislative bodies)

2. CONSENT ITEMS

(Consent Items will be acted on simultaneously with one motion unless separate discussion and/or action is requested by a Sanitary District Member.)

- 2.a. Approval of the Sewer System Management Plan Update for the Garden Grove Sanitary District. (*Action Item*)
- 2.b. Receive and file the minutes from the June 28, 2016, meeting. (Action Item)
- 3. PUBLIC HEARINGS

(Motion to approve will include adoption of each Resolution unless otherwise stated.)

- 4. <u>ITEMS FOR CONSIDERATION</u>
- 5. MATTERS FROM THE PRESIDENT, BOARD MEMBERS AND GENERAL MANAGER
- 6. ADJOURNMENT

The next Regular Meeting will be held on Tuesday, October 25, 2016, at 6:30 p.m. in the Community Meeting Center, 11300 Stanford Avenue, Garden Grove, CA.

Garden Grove Sanitary District

INTER-DEPARTMENT MEMORANDUM

To: Scott C. Stiles From: William E. Murray

Dept.: General Manager Dept.: Public Works

Subject: Approval of the Sewer Date: 9/27/2016

System Management Plan Update for the Garden Grove Sanitary District. (Action

Item)

OBJECTIVE

To receive Garden Grove Sanitary District (GGSD) Board approval of the updated Garden Grove Sanitary District Sewer System Management Plan (SSMP) to the State Water Resources Control Board (SWRCB) and authorization for the Public Works Director to sign the document as the Legally Responsible Official.

BACKGROUND

On May 2, 2006, the SWRCB adopted the Statewide General Waste Discharge Requirements and the Monitoring and Reporting Program (WDR) by issuing Order No. 2006-0003-DWQ. It required GGSD to update the previously approved SSMP. The SSMP is an all-inclusive plan that includes all the plans and programs as ordered by the WDR. The SSMP requires the development and implementation of sewer system best management practices.

The WDR also required GGSD to provide the publicly available internet website address to the California Integrated Water Quality System Project (CIWQS) Online Sanitary Sewer Overflows (SSO) Database where a downloadable copy of GGSD's approved SSMP, critical supporting documents referenced in the SSMP, and proof of local governing board approval of the SSMP is posted.

DISCUSSION

The SSMP is intended to serve as a comprehensive management plan for preventing SSO ensuring compliance with the WDR and the regulations of the State of California and the Federal Government. Overall, the plan provides for a financially sound and sustainable infrastructure replacement and improvement program, the implementation of best management practices, an emergency spill response plan and a routine operations/preventative maintenance plan.

The completed SSMP consists of (11) district program elements as listed in the WDR. These elements are listed below:

- 1. Goal
- 2. Organization
- 3. Legal Authority
- 4. Operation and Maintenance
- 5. Program Design and Performance Provisions
- 6. Overflow Emergency Response Plan
- 7. FOG Control Program
- 8. System Evaluation and Capacity Assurance Plan
- 9. Monitoring, Measurement, and Program Modifications
- 10. SSMP Program Audit
- 11. Communication Program

FINANCIAL IMPACT

There is no financial impact that will result from this action.

RECOMMENDATION

It is recommended that the Board of Directors:

- Approve the updated Sewer System Management Plan, subject to modification as requested by the State Water Resources Control Board and subject to periodic update by the Garden Grove Sanitary District General Manager; and
- Authorize the Public Works Director to sign the document as the Legally Responsible Official.

By: Brent Hayes, Public Works Supervisor

ATTACHMENTS:

Description	Upload Date	Туре	File Name
SSMP Report	9/15/2016	Backup Material	SSMP_Report.pdf
SSMP Appendix	9/15/2016	Backup Material	SSMP_Appendix.pdf

GARDEN GROVE SANITARY DISTRICT

SEWER SYSTEM MANAGEMENT PLAN

Prepared for:

Garden Grove Sanitary District 13802 Newhope Street, Garden Grove, California 92843 (714) 741-5395

Prepared by:

AKM Consulting Engineers 553 Wald, Irvine, California 92618

AUGUST 2016



Date of Signing: 08/19/16

GARDEN GROVE SANITARY DISTRICT SEWER SYSTEM MANAGEMENT PLAN

Certification

I certify under penalty of law that this document and all attachments were prepared under my direct supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted.

Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment.

Bill Murray
Public Works Director
Garden Grove Sanitary District

TABLE OF CONTENTS

<u>SE</u>	CTION	<u>PAGE</u>
Се	rtification	
1	Introduction	1-1
	1-1 Waste Discharge Requirements Order No. 2006-003	1-1
	1-2 Monitoring and Reporting Program Order No. WQ 2013-0058-EXEC	1-1
	1-3 Document Availability	1-1
	1-4 About this Document	1-1
2	Goals	2-1
	2-1 Compliance	2-1
3	Organization	3-1
	3-1 Compliance	3-1
4	Legal Authority	4-1
	4-1 Compliance	4-1
5	Operation and Maintenance Program	5-1
	5-1 Compliance	5-1
6	Design and Performance	6-1
	6-1 Compliance	6-1
7	Overflow Emergency Response Plan	7-1
	7-1 Compliance	7-1
8	Fats, Oils, and Grease Control Program	8-1
	8-1 Compliance	8-1
9	System Evaluation and Capacity Assurance Plan	9-1
	9-1 Compliance	9-1
10	Monitoring	10-1
	10-1 Compliance	10-1
11	Audits	11-1
	11-1 Compliance	11-1

12	Comr	munication
	12-1	Compliance
SE	CTION	<u>PAGE</u>
13	Chan	ge Log
	13-1	Waste
	PEND 	
App		A – Introduction
	A-1	State Water Resources Control Board Order No. 2006-0003-DWQ
	A-2	State Water Resources Control Board Order No. WQ 2013-0058-EXEC
App	pendix	B – Organization
	B-1	Roles and Responsibilities
	B-2	Reporting Guidelines
App	pendix	C – Legal Authority
	C-1	Code of Regulations (2010)
	C-2	Stormwater Quality
	C-3	Ordinance No. 6 (FOG Requirements)
	C-4	City of Anaheim Agreement
	C-5	City of Orange Agreement
	C-6	City of Stanton Agreement
	C-7	City of Midway Agreement
	C-8	City of Santa Ana Agreement
App	pendix	D - O&M
	D-1	Sewer and Storm Drain Map
	D-2	Pump Station Description
	D-3	CCTV Database
	D-4	Condition Assessment Priorities
	D-5	Equipment Inventory
App	pendix	E – Design and Performance
	E-1	Design Criteria for Sewer Facilities
	E-2	Standard Drawings

Appendix F – FOG Control Program

- F-1 FOG Control Program for Food Service Establishments
- F-2 FOG Informational Handouts
- F-3 Certified Liquid Wastehauler Vehicles

Appendix G - SECAP

- G-1 Recommended Capacity Improvement Projects
- G-2 Ordinance No. 10

TAB	<u>LES</u>	<u>PAGE</u>
3-1	SSMP Responsibilities	3-5
4-1	District Ordinances	4-2
5-1	Hot Spot Cleaning Inventory	5-5
5-2	Sags, Grease, Deposits, and Obstacles	5-15
5-3	Root Control Program Reaches	5-20
5-4	Defect Codes and Condition Grades	5-32
5-5	Structural Replacement / Rehabilitation	5-35
5-6	District CWEA Certification	5-42
9-1	Unit Wastewater Flow Factors	9-2
9-2	Unit Wastewater Flow Factors – Future Developments	9-2
9-3	Future Developments	9-4
9-4	Pipes with Model Calculated Capacity Deficiencies	9-8
9-5	Recommended Capacity Improvement Projects	9-12
FIGU	JRES	PAGE
3-1	GGSD Organization Chart	3-3
3-2	Operation and Maintenance Organization Chart	3-4
3-3	SSOERP Response Procedures	3-6
5-1	Hot Spot Location Map	5-13
5-2	Root Control Program	5-19
5-3	CCTV Footage by Phase	5-28
5-4	CCTV Inspection Phasing	5-29
5-5	Sewer Reaches with Identified Deficiencies	5-33
5-6	CCTV Inspection Priority Ratings	5-34
9-1	Collection System Hydraulic Deficiencies and Tributary Areas	9-7

SECTION 1 INTRODUCTION

1-1 WASTE DISCHARGE REQUIREMENTS ORDER NO. 2006-003

Provision 11 of State Water Resources Control Board (SWRCB) Order No. 2006-0003 (Order), Statewide General Waste Discharge Requirements for Sanitary Sewer Systems sets the requirement for the preparation of a Sewer System Management Plan:

11. The enrollee (Garden Grove Sanitary District) shall develop and implement a written Sewer System Management Plan (SSMP) and make it available to the State and/or Regional Water Board upon request. A copy of this document must be publicly available at the District's office and/or available on the internet. This SSMP must be approved by the Garden Grove Sanitary District Board of Directors at a public meeting.

The essential elements of the SSMP are detailed in Provision 13 of the Order No. 2006-0003, which is included in Appendix A-1 of this report.

The Garden Grove Sanitary District (District) addresses each element listed in Provision 13 of the Order, throughout this SSMP document. The following sections list each essential element of the SSMP, and describe how the District is in compliance with each.

1-2 MONITORING AND REPORTING PROGRAM ORDER NO. WQ 2013-0058-EXEC

The District shall comply with the SWRCB Monitoring and Reporting Program Order WQ 2013-0058-EXEC, which is included in Appendix A-2 of this report. Order WQ2013-0058-EXEC is an amendment to Order 2006-0003. The District shall stay educated and in compliance with all future revisions thereto, as specified by the Executive Director.

1-3 DOCUMENT AVAILABILITY

As required by the SWRCB, copies of this SSMP are maintained at the following locations:

- 1. Municipal Service Center: 13802 Newhope St, Garden Grove, CA 92843
- 2. City Clerk's Office: 11222 Acacia Parkway, Garden Grove, CA 92840

These copies are available to sanitary sewer system operating and maintenance personnel at all times.

1-4 ABOUT THIS DOCUMENT

The District has prepared this SSMP document to comply with Order 2006-0003 and Order WQ 2013-0058-EXEC. Some elements of this document have been summarized from comprehensive stand-alone reports to minimize the physical size of the SSMP document. These reports often include large maps, detailed tables, and more details to address the requirements of the SSMP.

SECTION 2 GOALS

Order 2006-0003-DWQ states that:

The goal of the SSMP is to provide a plan and schedule to properly manage, operate, and maintain all parts of the sanitary sewer system. This will help reduce and prevent SSOs, as well as mitigate any SSOs that do occur.

The purpose of Order 2006-2003 is to prevent sanitary sewer overflows (SSOs). The Garden Grove Sanitary District (District) has prepared its SSMP to comply with this order.

The SSMP document will ensure that the District properly fund, manage, operate and maintain, with adequately trained staff and/or contractors possessing adequate knowledge skills and abilities as demonstrated through validated program at all times, all parts of the sanitary sewer system owned and/or operated by the District.

2-1 COMPLIANCE

The goals of the SSMP are to:

- Prevent or reduce Sanitary Sewer Overflow (SSOs)
- Provide a plan and schedule for measures to continue implementing measures to prevent or reduce SSOs
- Provide adequate sewer capacity
- Reduce the discharge of Fats, Oils, and Grease (FOG) into its sewer system
- Provide adequate sewer cleaning and maintenance
- CCTV inspect the condition of the sewer system on a regular basis
- Maintain adequate legal authority to implement all elements of the SSMP
- Implement sewer improvement projects as indicated in the District's Capital Improvement Program
- Maintain adequate funding for the operation, maintenance, and repair of its system
- Provide detailed plan to address SSOs. This shall include the procedures to respond to the SSO, notify the appropriate individuals/parties, contain the SSO, clean up the affected areas, and properly report the SSO. The time to respond to the spill shall not exceed one hour.
- Provide routine training for safety, updated equipment and technology, spill response, and all other relevant operation and maintenance topics

SECTION 3 ORGANIZATION

Order 2006-0003-DWQ requires that the SSMP identify:

- (a) The name of the responsible or authorized representative as described in Section J of this Order,
- (b) The names and telephone numbers of management, administrative and maintenance positions responsible for implementing specific measures in the SSMP program. The SSMP must identify lines of authority through an organization chart or similar document with a narrative explanation; and
- (c) The chain of communication for reporting SSOs, from receipt of a complaint or other information, including the person responsible for reporting SSOs to the State and Regional Water Board, and other agencies as applicable (such as County Health Officer, County Environmental Health Agency, and/or State Office of Emergency Services (OES)).

3-1 COMPLIANCE

A. LEGALLY RESPONSIBLE OFFICIAL

Order 2006-0003-DWQ requires that the SSMP identify, "The name of the responsible or authorized representative as described in Section J of this Order."

The District identifies Bill Murray, the Water Services Manager and Public Works Director, as the responsible representative, who shall sign and certify all reports required by Order 2006-0003-DWQ.

B. ORGANIZATION CHART

Order 2006-0003-DWQ requires that the SSMP identify, "The names and telephone numbers of management, administrative and maintenance positions responsible for implementing specific measures in the SSMP program. The SSMP must identify lines of authority through an organization chart or similar document with a narrative explanation."

Figure 3-1 and Figure 3-2 illustrate the line of authority for the District officials and staff responsible for implementing the SSMP measures. The current contact information for the responsible officials and staff are included.

Specific Responsibilities for officials and staff are described for each position is summarized in Table 3-1.

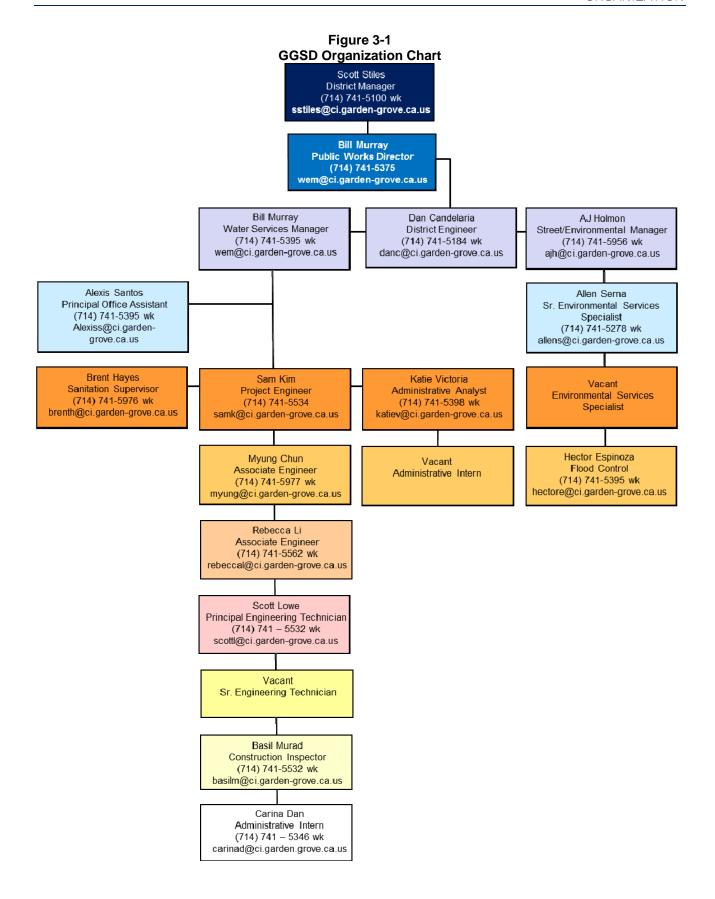
Roles and responsibilities for District personnel are described in further detail in Appendix B-1 of this document.

C. CHAIN OF COMMUNICATION FOR SSOS

Order 2006-0003-DWQ requires that the SSMP identify, "The chain of communication for reporting SSOs, from receipt of a complaint or other information, including the person responsible for reporting SSOs to the State and Regional Board, and other agencies as applicable (such as County Health Officer, County Environmental Health Agency, and/or State Office of Emergency Services (OES)."

The District has prepared a stand-alone document for the Sanitary Sewer Overflow Emergency Response Plan (SSOERP) element of the SSMP requirements. It includes a list of individuals and agencies that need to be contacted in the event of a sanitary sewer overflow (SSO). Figure 3-3 details the procedures to respond to SSOs. The Sanitation Supervisor will be the responsible staff to report the SSO to the State Water Board and other appropriate agencies.

A summary of SSO notification and reporting procedures are included in Appendix B-2 of this report.

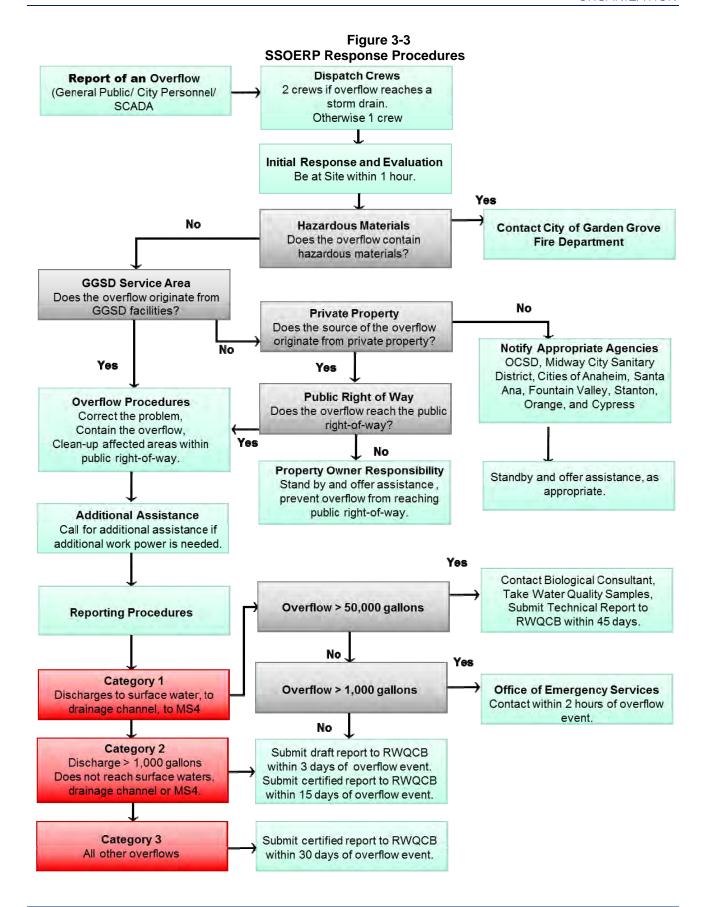


Brent Hayes Sanitation Supervisor brenth@ci.garden-grove.ca.us Steve Porras Frank Howenstein Public Works Foreman Public Works Foreman Stevepoci.garden-grove.ca.us frankh@ci.garden-grove.ca.us Jose Gomez John Zavala Alex Valenzuela Jesse Viramontes Sr. Sewer Maintenance Worker Heavy Equipment Operator Sr. Sewer Maintenance Worker Sr. Sewer Maintenance Worker joseg@ci.garden-grove.ca.us alexv@ci.garden-grove.ca.us jessev@ci.garden-grove.ca.us johnz@ci.garden-grove.ca.us Ervin Dubrul Victor Blas Vacant Keon Nelson Sewer Maintenance Worker Sewer Maintenance Worker Sewer Maintenance Worker Sewer Maintenance Worker victorb@ci.garden-grove.ca.us ervind@ci.garden-grove.ca.us keonn@ci.garden-grove.ca.us Allen Kirzhner Frank de la Rosa Sewer Maintenance Worker Sewer Maintenance Worker allenk@ci.garden-grove.ca.us frankd@ci.garden-grove.ca.us Vacant Sewer Maintenance Worker

Figure 3-2
Operation and Maintenance Organization Chart

Table 3-1 SSMP Responsibilities

and Schedule Reviews, Approves Oversees	Task	Board of Directors/ District Manager	Water Services Manager	Sanitation Supervisor	Public Works Foreman	Field Crews
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SECTION 4 LEGAL AUTHORITY

Order 2006-0003-DWQ requires that:

Each Enrollee must demonstrate, through sanitary sewer system use ordinances, service agreements, or other legally binding procedures, that it possesses the necessary legal authority to:

- (a) Prevent illicit discharges into its sanitary sewer system (examples may include I/I, stormwater, chemical dumping, unauthorized debris and cut roots, etc.);
- (b) Require that sewers and connections be properly designed and constructed;
- (c) Ensure access for maintenance, inspection, or repairs for portions of the lateral owned or maintained by the Public Agency;
- (d) Limit the discharge of fats, oils, and grease and other debris that may cause blockages, and
- (e) Enforce any violation of its sewer ordinances.

Order 2006-0003-DWQ prohibits any SSO that results in a discharge of untreated or partially treated wastewater to the waters of the United States or that creates a nuisance as defined in California Water Code Section 13050(m).

Legal Authority is a very important component of a sewage collection agency's responsibility in regulating the usage of the sanitary sewer system.

4-1 COMPLIANCE

The District possesses legal authority through the following documents:

- Code of Regulations (Appendix C-1)
- Storm Water Quality Ordinance (Appendix C-2)
- Ordinance No. 6. FOG Control Ordinance (Appendix C-3)
- Design Criteria for Sewer Facilities (Appendix E-1)
- Sewer Standard Drawings (Appendix E-2)
- Standard Specifications for Public Works Construction (Greenbook)

These documents are located in Appendix C and E of this document, and are available at the Municipal Service Center. Electronically, these documents can be found on the City of Garden Grove's website:

http://www.ci.garden-grove.ca.us/.

Table 4-1 summarizes the District's relevant ordinance sections that correlate to the requirements.

Table 4-1: District Ordinances

	Waste Discharge Requirement	Legal Document	Section				
			4.10.050 Discharge of objectionable materials-				
	Prevent illicit discharges into its sanitary		Regulations				
	sewer system (examples may include I/I,		4.10.060 Discharge of corrosive harmful wastes				
a)	stormwater, chemical dumping,	GGSD Code of Regulations	4.10.070 Rain and surface water prohibited				
	unauthorized debris and cut roots, etc)		4.10.080 Automobile washing areas regulated				
	lunauthorized debris and cut roots, etc)		4.10.090 Opening manhole prohibited				
			4.10.100 Discharge into sewer manholes regulated				
b)	Require that sewers and connections be	Design Criteria for Sewer Facilities, Sewer Standard Drawings, Greenbook					
U)	properly designed and constructed	Design entertator sewer raci					
-1	Ensure access for maintenance, inspection,	GGSD Ordinance No. 6	4.30.130 Inspection and Sampling Conditions				
c)	or repairs for portions of the lateral owned or maintained by the Public Agency	GGSD Code of Regulations	6.20.010 Maintenance Inspections				
	Lineit the dischause of fate ails and success		4.30 Regulations for Controlling the Discharge of				
d)	Limit the discharge of fats, oils, and grease	GGSD Ordinance No. 6	Fats, Oils and grease from food service				
	and other debris that may cause blockages		establishments				
۵۱	Enforce any violation of its source ordinance	GGSD Code of Regulations	6.20 Code Enforcement				
e)	Enforce any violation of its sewer ordinance	GGSD Ordinance No. 6	4.30.150 Enforcement				

The City of Anaheim, the City of Orange, the City of Stanton, the City of Santa Ana, and the Midway City Sanitary District tie into the Garden Grove Sanitary District's sewer system. The sewers within Unincorporated Orange County that are tributary to the District's sewers are currently owned and maintained by the District. Appendix C-4 to Appendix C-8 include all current agreements that the District has with these satellite agencies.

The District has updated its agreement with the City of Stanton to comply with the regulations of Order 2006-0003-DWQ. There are ongoing discussions and communications with the City of Anaheim, the City of Orange, the City of Santa Ana, and the Midway City Sanitary District to ensure that all systems tributary to the Garden Grove Sanitary District's sewer system are in compliance with the Waste Discharge Requirements.

A. ILLICIT DISCHARGES

Order 2006-0003-DWQ requires that the District have legal authority "to prevent illicit discharges into its sanitary sewer system (examples may include I/I, stormwater, chemical dumping, unauthorized debris and cut roots, etc)"

Illicit discharges are controlled by the Garden Grove Sanitary District's Code of Regulations. The relevant sections include: Discharge of Objectionable Materials, Discharge of Corrosive Harmful Wastes, Rain and Surface Water Prohibited, and Discharge into Sewer Manholes Regulated. The District maintains the legal authority to prohibit illicit discharges.

B. DESIGN STANDARDS

Order 2006-0003-DWQ requires that the District have legal authority to "require that sewers and connections be properly designed and constructed."

In October 2007, the District established and adopted the Design Criteria for Sewer Facilities, which includes the Standard Plans.

C. ACCESS TO FACILITIES

Order 2006-0003-DWQ requires that the District have legal authority to "to ensure access for maintenance, inspection, or repairs for portions of the lateral owned or maintained" by the District.

Section 6.20.010 of the GGSD Code of Regulations states, "The District may inspect as often as it deems necessary, every sewage pumping plant, sewage treatment plant, industrial liquid waste pretreatment plant, residential sewer, grease control device, dilution basin, neutralization basin, backwater trap or valve, or other similar appurtenance to ascertain whether such facilities are maintained and operated in accordance with the provision of this Code. All persons shall permit the District, City or their representatives, to have access to all such facilities at all reasonable times."

Section 4.30.130 of the District's Municipal Code states, "The owner shall allow the District access to the Food Service Establishment premises, during normal business hours, for purposes of inspecting the Food Service Establishment's grease control devices or interceptor, reviewing the manifests, receipts and invoices related to cleaning, maintenance and inspection of the grease control devices."

These sections provide the District the legal authority to access the all sewer facilities, as well as access to Food Service Establishment (FSE) premises.

D. FATS, OILS, AND GREASE

Order 2006-0003-DWQ requires that the District have legal authority "to limit the discharge of fats, oils, and grease and other debris that may cause blockages".

The District has the legal authority to manage the Fats, Oils, and Grease discharges through GGSD Ordinance No. 6 FOG Control Program document.

E. ENFORCEMENT

Order 2006-0003-DWQ requires that the District have legal authority "to enforce any violation of its sewer ordinance".

Enforcement of sanitary sewer overflows (SSOs) is handled through Title 6 of the GGSD Code of Regulations and Section 4.30.150 of Ordinance No. 6. The District provides provisions for the issuance of administrative citations and cost recovery procedures to collect payment for resources utilized to contain and clean up areas affected by SSOs.

SECTION 5 OPERATION AND MAINTENANCE PROGRAM

Order 2006-0003-DWQ requires that:

The SSMP must include those elements listed below that are appropriate and applicable to the Enrollee's system:

- (a) Maintain an up-to-date map of the sanitary sewer system, showing all gravity line segments and manholes, pumping facilities, pressure pipes and valves, and applicable stormwater conveyance facilities.
- (b) Describe routine preventive operation and maintenance activities by staff and contractors, including a system for scheduling regular maintenance and cleaning of the sanitary sewer system with more frequent cleaning and maintenance targeted at known problem areas. The Preventative Maintenance (PM) program should have a system to document scheduled and conducted activities, such as work orders.
- (c) Develop a rehabilitation and replacement plan to identify and prioritize system deficiencies and implement short-term and long-term rehabilitation actions to address each deficiency. The program should include regular visual and TV inspections of manholes and sewer pipes, and a system for ranking the condition of sewer pipes and scheduling rehabilitation. Rehabilitation and replacement should focus on sewer pipes that are at risk of collapse or prone to more frequent blockages due to pipe defects. Finally, the rehabilitation and replacement plan should include a capital improvement plan that addresses proper management and protection of the infrastructure assets. The plan shall include a time schedule for implementing the short- and long-term plans plus a schedule for developing the funds needed for the capital improvement plan.
- (d) Provide training on a regular basis for staff in sanitary sewer system operations and maintenance, and require contractors to be appropriately trained.
- (e) Provide equipment and replacement part inventories, including identification of critical replacement parts.

5-1 COMPLIANCE

The very low spill rate indicates that the existing Operation and Maintenance Program has formed a solid foundation for the District. The District shows compliance with the Waste Discharge Requirements (WDR) through the following stand-alone documents:

Preventative Maintenance Plan

In 2013, the District prepared the stand-alone Preventative Maintenance Plan document. This comprehensive report summarizes the District's Operation and Maintenance Program, which includes but is not limited to the following:

WDR Description

- Training
- Sanitary Sewer System Map
- Sewer Inspections
- Condition Assessment
- Sewer Cleaning
- Pump Station Maintenance
- General Corrective Maintenance
- Equipment and Replacement Part Inventories
- Roving Check Program
- SSO Contractors
- Staff Assessment Program

Sewer System Rehabilitation Plan

The District has prepared a stand-alone document, the Sewer System Rehabilitation Plan, to evaluate and report on the condition of the District's gravity sewers. The Sewer System Rehabilitation Plan has been updated in five phases, beginning in 2005 with the latest phase completed in 2013. All updates to the previous Sewer System Rehabilitation Plan are detailed within this report.

A. SANITARY SEWER SYSTEM MAP

Order 2006-0003-DWQ requires that the District "maintain an up-to-date map of the sanitary sewer system, showing all gravity line segments and manholes, pumping facilities, pressure pipes and valves, and applicable storm water conveyance facilities."

The District keeps up-to-date GIS files of its sewer and storm water facilities. The GIS is available on the City's intranet and is maintained by the City's Information Technology Division and the Water Services Division. The Water Services Division catalogues the plans, paper records, and all the database information that needs to be inputted into the GIS. Information for the following items is included in the GIS database:

- Pipes
- Manholes
- Hot Spot Log
- Inverted Siphons
- Pump Stations
- Forcemains
- Storm Drains
- Catch Basins
- 5 foot contour data

To comply with the WDR requirements, the District has prepared the sewer and storm drain map, which is included in Appendix D-1. The map includes the street flow arrows and the drainage boundaries to each catch basin within the District's service area.

The District has produced hard copies of Appendix D-1, and they are available on the District's maintenance

trucks, along with the sewer atlas. The maps have also been included in the District's stand-alone Overflow Emergency Response Plan document.

B. ROUTINE PREVENTIVE OPERATION AND MAINTENANCE ACTIVITIES

Order 2006-0003-DWQ requires that the SSMP "describe routine preventive operation and maintenance activities by staff and contractors, including a system for scheduling regular maintenance and cleaning of the sanitary sewer system with more frequent cleaning and maintenance targeted at known problem areas. The Preventative Maintenance program should have a system to document scheduled and conducted activities, such as work orders."

The Garden Grove Sanitary District updated its Preventative Maintenance Plan (PMP) in September 2013. The PMP details the operation and maintenance activities implemented to minimize the risk of sanitary sewer overflows (SSOs).

The PMP states that, "The District uses a combination of staff and/or contractors to perform the planned maintenance tasks at scheduled frequencies as part of the District's asset level of care program."

Computer Maintenance Management System

The District manages its cleaning and maintenance activities through its Computerized Maintenance Management System (CMMS), a GIS Intranet program that tracks the maintenance activities, which includes but are not limited to the following:

- Work Orders
- Hot Spot Cleaning
- Manhole Inspections
- Pest Control
- Root Treatment
- Food Service Establishments
- Sewer Spill Locations

- Routine Cleaning
- Emergency Repairs
- CCTV Recording and Inspection Report
- Sewer Line Foaming
- Smart covers/Telog Tracking
- Grease Control Devices

The District's current CMMS program was developed by its Information Technology Department and the consulting firm, Munsys Inc. This program consists of several different software products that monitor different aspects of the District's maintenance activities. The District is in the process of converting to an Esribased IWater software package that will allow the sewer maintenance to be monitored through one comprehensive software product. The District would like the CMMS to provide the following:

- Automated graphical reporting (Routine Maintenance, Hot Spot Cleaning, CCTV, etc)
- > Automated summary reports (Routine Maintenance, Hot Spot Cleaning, CCTV, etc)
- Links to CCTV videos and maintenance photos
- Automatic update of CCTV inspection to GIS shapefiles
- Link between sewer repair reports to sewer ID, not address
- Pump Station work order documentation
- Vehicle work order documentation

Sewer Cleaning

The District maintenance crews are responsible for tracking the completed cleaning tasks by inputting the completed cleaning records into the computerized maintenance management system (CMMS). The District records the following information for all cleaning inspections:

Maintenance Staff

Percent Completed

Grease

Pipe Pieces

> CCTV

Date

Footage

Roots

Egg Shells

Comments

The cleaning procedure consists of using a combination truck to hydraulically wash the pipe walls and vacuuming all detached debris at the downstream manhole. The District owns and operates two (2) combination trucks and one (1) wash truck. Sewer cleaning consists of hydraulically washing the pipe walls, which is followed by the vacuum removal of all debris at the downstream manhole.

Routine Cleaning: The District's goal is to clean all lines within 18 to 24-months. Daily routine cleaning goals have been set at 3,800 feet of sewer per day, which will adhere to the 18-24 month schedule. The cleaning history is reviewed on a monthly basis to ensure that the cleaning target goals are being met.

Hot Spot Sewer Maintenance: The Hot Spot locations are summarized in Table 5-1 and illustrated on Figure 5-1. The District records the following information at each cleaning or inspection:

Pipe ID
Date

Staff performing cleaning

The District has <u>187</u> reaches on its Hot Spot list that are scheduled to be cleaned to prevent blockages and spills.

The District has an additional <u>76</u> Hot Spot reaches that are manually inspected to evaluate if additional maintenance is required. These Hot Spot locations do not have significant maintenance issues, and frequent cleaning is not required at these locations. The District performs visual inspections of these reaches on a regular basis to monitor the condition of the sewer. A thorough cleaning will be performed if maintenance crews observe grease, roots, grit, or any other obstructions. Otherwise, these reaches will be cleaned on the routine maintenance schedule.

The District provides Hot Spot cleaning on the following intervals:

- Monthly (77 Reaches)
- Quarterly (62 Reaches)
- Semiannually (48 Reaches)
- Monthly Inspection Only (53 Reaches)
- Quarterly Inspection Only (12 Reaches)
- Semiannually Inspection Only (11 Reaches)

Table 5-1 Hot Spot Cleaning Inventory

Hot Spot Cleaning Inventory										
Previous	Existing							Hot Spot Cleaning		
Sewer ID	Pipe ID	US MH	DS MH	Pipe Size	Material	Length	Location	Frequency		
SPD110002	1440	7818	7825	8	VC	258	Tiffany Lift Station	Monthly		
SPD110026	1940	7943	7818	8	VC	258	Tiffany Lift Station	Monthly		
SPD120002	1551	7949	7950	12	VC	300	Tiffany Lift Station	Monthly		
SPD120003	1552	7950	7951	12	VC	158	Tiffany Lift Station	Monthly		
SPD120004	1553	7951	7952	12	VC	268	Tiffany Lift Station	Monthly		
SPD120007	1584	7955	7951	8	VC	216	Tiffany Lift Station	Monthly		
SPD120009	1586	7957	7958	8	VC	220	Tiffany Lift Station	Monthly		
SPD120010	1587	7958	7952	8	VC	298	Tiffany Lift Station	Monthly		
SPD120013	1715	7952	7820	12	VC	259	Tiffany Lift Station	Monthly		
SPD120014	1942	7960	7820	8	VC	217	Tiffany Lift Station	Monthly		
SPE080021	1735	8895	8896	8	VC	365	Chapman/Stonegate	Monthly		
SPE080022	1736	8896	8899	8	VC	60	Chapman/Stonegate	Monthly		
SPE080024	1338	8906	8907	8	VC	163	Chapman/Bailey	Monthly		
SPE090017	1340	8908	8909	8	VC	320	Bailey/Laurelton	Monthly		
SPE090018	1341	8909	8910	8	VC	320	Bailey/Laurelton	Monthly		
SPE090019	1342	8910	7780	8	VC	122	Bailey/Laurelton	Monthly		
SPE110039	1439	7817	7818	8	VC	350	Tiffany Lift Station	Monthly		
SPE110044	1445	0	0	8	VC	350	Tiffany Lift Station	Monthly		
SPE110045	1446	7825	7827	8	VC	127	Tiffany Lift Station	Monthly		
SPE110046	1447	0	0	8	VC	318	Tiffany Lift Station	Monthly		
SPE110047	1793	7827	7828	12	VC	160	Tiffany Lift Station	Monthly		
SPE120025	1792	7820	7829	12	VC	225	Tiffany Lift Station	Monthly		
SPE120026	1794	7828	7829	12	VC	296	Tiffany Lift Station	Monthly		
SPE120030	2120	8670	8669	10		390	Tiffany Lift Station	Monthly		
SPE120031	2119	8669	7902	10		400	Tiffany Lift Station	Monthly		
							Industry South of			
SPH110013	1732	8157	8177	18	VC	370	Lampson	Monthly		
SPJ080029	2418	8593	8596	8	VC	310	8121 Filmore	Monthly		
							Lampson West of Dale	·		
SPJ110047							(School District)	Monthly		
SPK080046	2094	8509	8510	8	VC	195	Dale/Twana	Monthly		
SPK080047	1996	8510	8512	8	VC	37	Dale/Twana	Monthly		
							Garden Grove	·		
SPK130003	3217	0	0	8	VC	10	Blvd/Yockey	Monthly		
							Garden Grove	•		
SPK130018	3218	9360	9381	8	VC	240	Blvd/Yockey	Monthly		
SPK130044							Central/Wilson	Monthly		
SPK140029	703	7665	8608	12	XS VC	250	Newland/Trask	Monthly		
SPK150020	832	7644	7666	8	VC	330	Newland/Trask	Monthly		
SPL120021	3147	8486	8487	8	VC	345	Magnolia to Hazel	Monthly		
						-	Garden Grove	,		
SPL130024	3158	8498	9359	8	VC	349	Blvd/Hazel	Monthly		
<u> </u>						-	Garden Grove	- /		
SPL130025	3165	9359	9360	8	VC	248	Blvd/Hazel	Monthly		
SPM090038	5164	10378	10379	8	VC	225	Vons Complex	Monthly		

Page 25 of 614

Hot Spot Cleaning Inventory										
Previous	Existing							Hot Spot Cleaning		
Sewer ID	Pipe ID	US MH	DS MH	Pipe Size	Material	Length	Location	Frequency		
							Garden			
SPM120005	2818	11333	11337	10	VC	300	Grove/Brookhurst Way	Monthly		
							Garden Grove			
SPM120014	2657	11548	14484	8	VC	312	Blvd/Galway	Monthly		
							Garden Grove			
SPM130004							Blvd/Galway	Monthly		
SPM160014	2206	0	0	8	VC	310	Westminster/Erin	Monthly		
SPM200009	222	6929	6932	8	VC	263	Lexington/Donegal	Monthly		
SPM200010	223	6930	6931	8	VC	257	Lexington/Donegal	Monthly		
SPM200011	224	6931	6932	8	VC	264	Lexington/Donegal	Monthly		
SPM200013	226	6933	6934	8	VC	371	Bolsa/Bushard Alley	Monthly		
SPM200014	227	6934	6935	8	VC	86	Bolsa/Bushard Alley	Monthly		
SPM200017	232	6939	6940	8	VC	208	Bolsa/Bushard Alley	Monthly		
SPM200018	233	6940	6935	8	VC	376	Bolsa/Bushard Alley	Monthly		
SPN130028	2896	11297	11298	8	VC	340	Flower/Central	Monthly		
							Garden			
SPN130033	2937	11338	11337	8	VC	187	Grove/Brookhurst Way	Monthly		
SPN140037	3084	10708	11298	8	VC	360	Flower/Central	Monthly		
SPN170002	46	6975	7264	8	VC	390	Morningside/Hope	Monthly		
							Morningside/Flood			
SPN170005	135	7296	7264	8	VC	258	Control Channel	Monthly		
SPN170007	137	7264	7265	12	XS VC	151	Jennrich/DeanAnn	Monthly		
SPN170016	2259	10515	10516	8	VC	90	Brookhurst/15th	Monthly		
SPN170032	2019	10396	10526	8	VC	477	Brookhurst/15th	Monthly		
							Brookhurst North of			
SPN170033	3029	10526	10527	8	VC	320	15th	Monthly		
SPN170042	2468	10516	10526	8	VC	350	Brookhurst/15th	Monthly		
SPN180002	139	7266	7267	8	VC	133	Jennrich/DeanAnn	Monthly		
SPN190007	9245	7295	15303	10	VC	383	Hazard West of Lyndon	Monthly		
SPN190007	9246	15303	6893	10	VC	383	Hazard West of Lyndon	Monthly		
SPO120027	9243	12310	15302	6	VC	295	Pearl/Nelson	Monthly		
SPO120027	9244	15302	12268	6	VC	290	Pearl/Nelson	Monthly		
							Century South of			
							Garden Grove Blvd			
SPO130024	4927	12288	12289	8	VC	40	(Double Barrel Siphon)	Monthly		
SPO200014	113	6780	6887	8	VC	114	Bolsa/Ward	Monthly		
SPO200024	179	6887	7301	8	VC	330	Bolsa/Ward	Monthly		
							Garden Grove			
SPP130043	5294	11823	11738	8	VC	265	Blvd/Lincoln	Monthly		

Hot Spot Cleaning Inventory										
Previous	Existing							Hot Spot Cleaning		
Sewer ID	Pipe ID	US MH	DS MH	Pipe Size	Material	Length	Location	Frequency		
SPR090031	5473	0	0	6	VC	115	Buaro/Jentges/Puryear	Monthly		
SPR090032	5474	11696	11697	6	VC	185	Buaro/Jentges/Puryear	Monthly		
SPR090035	5479	11697	12200	6	VC	340	Buaro/Jentges/Puryear	Monthly		
							Harbor South of			
SPS090021	5832	12138	12139	8	VC	320	Chapman	Monthly		
							Harbor South of			
SPS090022	5833	12139	12140	8	VC	320	Chapman	Monthly		
CDC000000	5004	42440	42446			257	Harbor South of			
SPS090023	5834	12140	12116	8	VC	257	Chapman	Monthly		
SPN180001	138	7265	7266	8	VC	95	Jennrich/DeanAnn	Monthly		
COL030001							Gilbert/Pacific	Monthly		
CD1110013	1017	9607	0000		\/C	200	Lampson/School	Ou out out u		
SPJ110012	1817	8697	8698	8	VC	299	District Lampson/School	Quarterly		
SPJ110020	1823	8698	8701	8	VC	338	District	Quartorly		
371110020	1023	8098	8701	0	VC	330	Garden Grove	Quarterly		
SPJ120020	748	7715	7719	8	VC	297	Blvd/Fern	Quarterly		
3FJ120020	740	7713	7713	0	VC	231	Garden Grove	Quarterry		
SPJ130005	783	7718	7719	8	VC	331	Blvd/Fern	Quarterly		
31 3130003	703	7710	7713		VC	331	biva/i citi	Quarterry		
							MacNab/MacAlpine			
SPK080006	3882	10297	10298	8	VC	250	(Double Barrel Siphon)	Quarterly		
3	5552	10257	10250				(20 abit 2 air ei ei piieir)	Q		
							MacNab/MacAlpine			
SPK080007	3883	10298	10308	8	VC	35	(Double Barrel Siphon)	Quarterly		
								, ,		
							Dale/Chapman			
SPK090040	1805	8535	8536	8	VC	170	(Double Barrel Siphon)	Quarterly		
							Dale/Chapman			
SPK090041	7050	13569	8520	8	VC	38	(Double Barrel Siphon)	Quarterly		
							Dale/Chapman			
SPK090041	7051	8536	13570	8	VC	38	(Double Barrel Siphon)	Quarterly		
							Dale/Chapman			
SPK090041	7052	13570	13569	8	VC	38	(Double Barrel Siphon)	Quarterly		
							Josephine North of			
SPK110001	3346	8375	8376	8	VC	344	Garden Grove Blvd	Quarterly		
							Josephine North of			
SPK110002	3347	8376	8377	8	VC	350	Garden Grove Blvd	Quarterly		

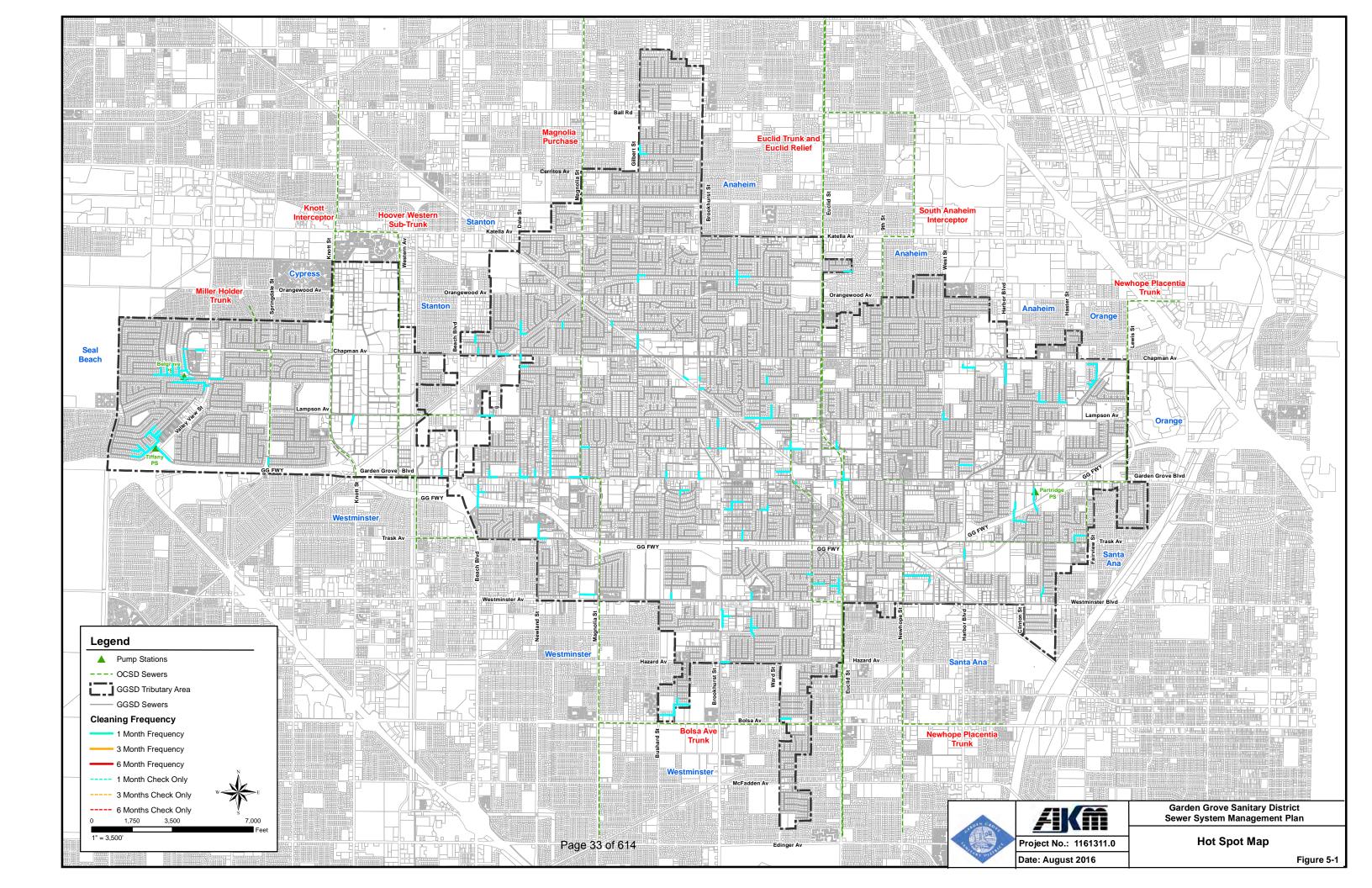
Hot Spot Cleaning Inventory										
Previous	Existing			l				Hot Spot Cleaning		
Sewer ID	Pipe ID	US MH	DS MH	Pipe Size	Material	Length	Location	Frequency		
							Josephine North of			
SPK110003	3348	8377	8378	8	VC	350	Garden Grove Blvd	Quarterly		
							Josephine North of			
SPK120003	3349	8378	8390	8	VC	348	Garden Grove Blvd	Quarterly		
							Josephine North of			
SPK120008	3364	8390	8393	8	VC	332	Garden Grove Blvd	Quarterly		
							Josephine North of			
SPK120011	3367	8393	8399	8	VC	325	Garden Grove Blvd	Quarterly		
							Josephine North of			
SPK120017	3373	8399	8400	8	VC	165	Garden Grove Blvd	Quarterly		
							Josephine North of			
SPK120018	3374	8400	8402	8	VC	317	Garden Grove Blvd	Quarterly		
							OCTD/Shannon			
SPL070007	5190	10138	10139	8	VC	210	(Double Barrel):	Quarterly		
							Magnolia North of	•		
SPL160025	6694	13318	13319	8	VC	0	Westminster (Alley)	Quarterly		
							Magnolia North of	, ,		
SPL160026	6692	13317	13318	8	VC	0	Westminster (Alley)	Quarterly		
							Brookhurst/Chapman	Ψ.σ		
SPM090002	4989	9663	9960	8	VC	172	Cleanouts	Quarterly		
5. 141030002	1303	3003	3300			1,2	Easement North of	Quarterry		
SPM130026	2344	11082	10777	6	VC	361	Belfast	Quarterly		
SPM130027	2345	10777	10762	6	VC	200	Belfast/Donegal	Quarterly		
SPN110002	2378	11141	11142	8	VC	55	Nutwood/Kensington	Quarterly		
SPN110002	2379	11141	11142	8	VC	100	Nutwood/Kensington	Quarterly		
SPN110003	2540	11253	11143	8	VC	320	Nutwood/Lampson	Quarterly		
SPN110008	2919	11254	11137	8	VC	310	Nutwood/Lampson	Quarterly		
SPN110020	2920	11254	11143	8	VC	150	Nutwood/Kensington			
		11325	11326		VC	80	Stanford/Brookhurst	Quarterly		
SPN120024	2931			8			 	Quarterly		
SPN130022	2890	11071	11289	6	VC	410	Crosby/Hope	Quarterly		
SPN140020	7521	11314	11315	10	XS VC	0	Trask/Hope	Quarterly		
SPO100019	2386	11209	11210	8	VC	273	Lampson/McLeod	Quarterly		
SPO100020	2387	11210		8	VC	270	Lampson/McLeod	Quarterly		
SPO110024	2372	11147	11136	8	VC	180	Nutwood/Lampson	Quarterly		
SPO110025	2373	11136	11137	8	VC	300	Nutwood/Lampson	Quarterly		
SPO160024	4620	11002	10983	8	VC	255	Taft/Linnell	Quarterly		
							Garden Grove			
SPP120024	4623	11892	11893	6	VC	321	Blvd/Euclid	Quarterly		
							Garden Grove			
SPP130027	4444	11893	11894	10	VC	65	Blvd/Euclid	Quarterly		
							Garden Grove			
SPP130029	4447	11895	11896	12	VC	20	Blvd/Euclid	Quarterly		
							Garden Grove			
SPP130045	4446	12314	11893	10	VC	200	Blvd/Euclid	Quarterly		
SPP160034	5993	10966	10968	8	VC	306	Blake Alley	Quarterly		
SPP160035	5994	10967	10968	8	VC	325	Blake Alley	Quarterly		

Hot Spot Cleaning Inventory										
Previous	Existing							Hot Spot Cleaning		
Sewer ID	Pipe ID	US MH	DS MH	Pipe Size	Material	Length	Location	Frequency		
SPP160036	5995	10968	10969	8	VC	380	Linnell/Fernwood	Quarterly		
SPP160040	5999	10972	11002	8	VC	194	Taft/Linnell	Quarterly		
SPR150012	592	7541	7542	12	VC	260	Harbor/Cardinal	Quarterly		
SPR150013	593	7542	7543	12	VC	32	Harbor/Cardinal	Quarterly		
SPR150014	847	7543	7544	12	VC	80	Harbor/Cardinal	Quarterly		
SPS130015	559	6738	6739	8	VC	316	Blackbird/Pearce	Quarterly		
SPS130016	560	6739	6740	8	VC	71	Blackbird/Pearce	Quarterly		
SPS140031	561	6740	6743	8	VC	479	Blackbird/Pearce	Quarterly		
SPS140034	595	6743	6744	8	VC	227	Clinton/Pearce	Quarterly		
SPS140035	596	6744	6745	8	VC	90	Clinton/Pearce	Quarterly		
SPS140036	597	6745	6746	8	VC	33	Clinton/Pearce	Quarterly		
SPS140037	598	6746	6760	8	VC	184	Clinton/Pearce	Quarterly		
SPS160010	456	7473	7474	8	VC	126	Roxy/Westminster	Quarterly		
SPS160011	457	7474	7475	8	VC	70	Roxy/Westminster	Quarterly		
SPS160012	458	7475	7477	8	VC	75	Roxy/Westminster	Quarterly		
SPS160015	461	7477	7478	8	VC	134	Roxy/Westminster	Quarterly		
SPT140020	7765	6674	14124	6	VC	435	Trask/Ranchero Way	Quarterly		
SPT140021	7777	6675	14130	8	VC	287	Trask/Ranchero Way	Quarterly		
MHR110027							West/Emrys	Quarterly		
							Yockey South of	,		
MHK130015							Oakdale	Semiannually		
							Buena/Morningside	,		
MHS170013							from Mar Les	Semiannually		
SPE090002	1147	7854	7857	8	VC	294	Belgrave Lift Station	Semiannually		
							Valley View to			
SPE090010	1741	8860	7787	8	vc	190	Emerald	Semiannually		
SPE090021	2096	8912	8913	10	VC	335	Belgrave Lift Station	Semiannually		
SPE090023	1347	8652	8653	12	VC	197	Belgrave Lift Station	Semiannually		
SPE090024	2098	8653	8918	12	VC	200	Belgrave Lift Station	Semiannually		
SPE090029	1392	7779	7780	8	VC	141	Belgrave Lift Station	Semiannually		
SPE090030	1393	7780	8652	8	VC	325	Belgrave Lift Station	Semiannually		
SPE090040	1795	7856	7857	12	VC	350	Belgrave Lift Station	Semiannually		
SPE090041	1796	7857	7880	12	VC	260	Belgrave Lift Station	Semiannually		
SPE090047	1527	7871	7881	8	VC	328	Belgrave Lift Station	Semiannually		
SPE090051	1535	0	0	8	VC	290	Belgrave Lift Station	Semiannually		
SPE090052	1797	7880	7881	12	VC	258	Belgrave Lift Station	Semiannually		
SPE090053	1959	8651	8652	8	VC	169	Belgrave Lift Station	Semiannually		
SPE090054	1960	7881	8653	12	VC	258	Belgrave Lift Station	Semiannually		
SPE100009	1746	7783	8862	10	VC	188	Belgrave Lift Station	Semiannually		
SPE100010	1747	8862	8863	10	VC	90	Belgrave Lift Station	Semiannually		
SPE100011	2128	8863	8864	10	VC	205	Belgrave Lift Station	Semiannually		
SPE100012	2099	8864	8865	10		215	Belgrave Lift Station	Semiannually		
SPE100013	2100	0	0	10		530	Belgrave Lift Station	Semiannually		
SPE100014	2101	8866	8913	10	VC	210	Belgrave Lift Station	Semiannually		
SPE100017	1503	8869	8862	8	VC	220	Belgrave Lift Station	Semiannually		
SPE100034	1415	7796	8648	8	VC	260	Belgrave Lift Station	Semiannually		

	Hot Spot Cleaning Inventory									
Previous	Existing							Hot Spot Cleaning		
Sewer ID	Pipe ID	US MH	DS MH	Pipe Size	Material	Length	Location	Frequency		
SPE100053	1954	0	0	8	VC	260	Belgrave Lift Station	Semiannually		
							Valley View to			
SPF090045	1496	8857	8858	8	VC	21	Emerald	Semiannually		
							Valley View to			
SPF090049	1500	8858	8860	8	VC	268	Emerald	Semiannually		
							Seneca from Acacia to			
SPF120001	1218	7406	7407	8	VC	260	Anthony	Semiannually		
SPJ080034	2423	8598	13535	8	VC	240	Chapman/Arthur	Semiannually		
							Groveview South of			
SPN110029	2620	10685	10686	8	VC	322	Lampson	Semiannually		
SPO160010	6014	10991	10992	8	VC	210	Taft/Blake	Semiannually		
SPP060004	6607	12791	13157	8	VC	192	Wakefield/Euclid	Semiannually		
SPP060008	6599	13167	12791	8	VC	157	Wakefield/Euclid	Semiannually		
SPQ160001	3710	10926	11444	8	VC	385	Newhope/Anabel	Semiannually		
SPQ160015	3851	11444	10870	8	VC	385	Newhope/Anabel	Semiannually		
SPQ160020	4857	11438	10924	8	VC	100	Better Way	Semiannually		
SPQ160022	4859	10925	10926	8	VC	405	Newhope/Anabel	Semiannually		
SPQ160024	F2FC	12620	12620		\/C	200	Better Way	Semiannually		
SPT090003	5256	12628	12629 12630	8	VC VC	200	Bayport Alley/Allard	Semiannually		
SPT090004	5257	12629		8	VC	245	Bayport Alley/Allard	Semiannually		
SPT090005	5258	12630 12631	12631 12632	8	VC	200 165	Bayport Alley/Allard Bayport Alley/Allard	Semiannually		
SPT090006 SPT090027	5259 4028	12674	12843	8	VC	180	Bayport Alley/Allard	Semiannually Semiannually		
SPT090027	4032	12846	12845	8	VC	185	Bayport Alley/Allard	Semiannually		
SPT090031	4032	12845	12678	8	VC	150	Bayport Alley/Allard	Semiannually		
SPT090041	6537	12843	12628	8	VC	200	Bayport Alley/Allard	Semiannually		
SPT090041	6538	12844	12632	8	VC	120	Bayport Alley/Allard	Semiannually		
SPT090042	6539	12632	12845	8	VC	150	Bayport Alley/Allard	Semiannually		
31 10300 13	0333	12032	120.3	_ Ŭ		130	Garden Grove	Semaniaany		
SPI120011	1004	7151	7152	8	vc	290	Blvd/Village	Monthly - Inspection Only		
							Garden Grove	, ,		
SPI130002							Blvd/Village	Monthly - Inspection Only		
							Garden Grove	, ,		
SPI130003							Blvd/Village	Monthly - Inspection Only		
							Garden Grove			
SPI130006							Blvd/Hoover	Monthly - Inspection Only		
							Garden Grove			
SPI130012							Blvd/Hoover	Monthly - Inspection Only		
SPJ080020	7090	13590	13554	8	VC	180	Chapman/Nearing	Monthly - Inspection Only		
SPJ090002	6995	13548	13547	8	VC	175	Chapman/Nearing	Monthly - Inspection Only		
SPJ090003	6991	13546	13545	8	VC	90	Chapman/Nearing	Monthly - Inspection Only		
SPJ090004	6987	13544	13541	8	VC	255	Chapman/Nearing	Monthly - Inspection Only		
SPJ130023	843	7105	7106	15	XS VC	333	Coast/Larson	Monthly - Inspection Only		
SPJ130031	759	7058	7106	8	XS VC	270	Coast/Larson	Monthly - Inspection Only		
SPK080049	7085	8512	0	8	VC	210	Dale/Augusta	Monthly - Inspection Only		
SPK080050	2001	8515	8516	8	VC	365	Dale/Augusta	Monthly - Inspection Only		

Hot Spot Cleaning Inventory										
Previous	Existing							Hot Spot Cleaning		
Sewer ID	Pipe ID	US MH	DS MH	Pipe Size	Material	Length	Location	Frequency		
SPK090038	1803	8533	8534	8	VC	300	Dale/Amy	Monthly - Inspection Only		
							Garden Grove			
SPK130035	707	7669	7670	8	VC	334	Blvd/Dale	Monthly - Inspection Only		
SPK140027	701	7663	7664	8	VC	330	Newland/Gloria	Monthly - Inspection Only		
SPK140028	702	7664	7665	8	VC	25	Newland/Gloria	Monthly - Inspection Only		
SPK140037							Newland/Gloria	Monthly - Inspection Only		
SPL060002	4699	10103	10108	8	VC	300	Gilbert/Joyzelle	Monthly - Inspection Only		
SPL060004	6854	13428	13429	10	VC	105	Gilbert/Oma	Monthly - Inspection Only		
SPL060005	6856	10109	0	10	VC	100	Gilbert/Oma	Monthly - Inspection Only		
SPL060006	4163	10110	10111	10	VC	75	Gilbert/Oma	Monthly - Inspection Only		
SPN100045	3191	9455	9456	8	VC	170	Brookhurst/Bonser	Monthly - Inspection Only		
							Garden Grove			
SPN130003							Blvd/Rosewood	Monthly - Inspection Only		
SPN160008	2188	10474	10475	8	VC	185	Westminster/Dawson	Monthly - Inspection Only		
SPN160009	2189	10475	10468	8	VC	130	Westminster/Dawson	Monthly - Inspection Only		
SPO110012	6845	12275	13424	8	VC	330	Stanford/Nelson	Monthly - Inspection Only		
SPO120003	5395	11832	11834	8	VC	460	Stanford/Westlake	Monthly - Inspection Only		
SPO120025	4432	12309	11832	8	VC	270	Stanford/Nelson	Monthly - Inspection Only		
							Garden Grove			
SPO130029							Blvd/Nelson	Monthly - Inspection Only		
							Cypress/Luders			
SPO140048							(Double Barrel)	Monthly - Inspection Only		
655440026	400=	44740	44740			0.5	Euclid/Pinehurst			
SPP110026	4397	11742	11743	8	VC	85	Apartments	Monthly - Inspection Only		
CDD440033	4620		_			425	Euclid/Pinehurst	Marriel Incompless Onl		
SPP110032	4630	0	0	6	VC	135	Apartments	Monthly - Inspection Only		
CDD110033	4621				\/C	140	Euclid/Pinehurst	Monthly Inconstion Only		
SPP110033 SPQ100023	4631 6164	0 11681	0 11672	6 8	VC VC	140 298	Apartments West/Lampson	Monthly - Inspection Only Monthly - Inspection Only		
SPR100023	5689	11671	11672	10	VC	75	West/Lampson	Monthly - Inspection Only		
SPR100037 SPR120024	6092	11661	11665	8	VC	280	Dungan/Acacia	Monthly - Inspection Only		
SPR120024 SPR120039	6467	12158	11661	8	VC	275	Dungan/Acacia	Monthly - Inspection Only		
3PK120039	0407	12136	11001	0	VC	2/3	Duligali/Acacia	Monthly - mspection only		
SPN060022	6139	9895	9896	8	VC	145	Palmwood/Parliament	Monthly - Inspection Only		
3F1V000022	0139	3633	3630	0	VC	143	rainiwood/rainament	Monthly - mspection omy		
SPN060023	6140	9896	9897	8	VC	90	Palmwood/Parliament	Monthly - Inspection Only		
31 11000023	0140	3630	3637	0	٧٠		r anniwood/r annament	Monthly - mspection omy		
SPN060024	4865	9897	14803	8	VC	115	 Palmwood/Parliament	Monthly - Inspection Only		
31 14000024	4003	3037	1-1003		••	113	T dimwood/T dimament	Worlding mapeedion only		
SPN060025	8632	14823	14824	8	VC	280	Palmwood/Parliament	Monthly - Inspection Only		
31 11000023	0032	11023	11021	- Ŭ		200	T dimwood/T dimament	monthly mopeed on only		
SPN060026	8628	14825	14826	8	VC	280	Palmwood/Parliament	Monthly - Inspection Only		
51003020	3020	- 1025	- 1020			200		, mapeedion only		
SPN060030	4871	9903	9904	8	VC	265	Palmwood/Parliament	Monthly - Inspection Only		
211120000							Garden Grove	in in inspection only		
SPK120030	3404	0	0	8	VC	353	Blvd/Adelle	Monthly - Inspection Only		

	Hot Spot Cleaning Inventory										
Previous	Existing							Hot Spot Cleaning			
Sewer ID	Pipe ID	US MH	DS MH	Pipe Size	Material	Length	Location	Frequency			
							Garden Grove				
SPK120040	3421	8442	8443	8	XS VC	317	Blvd/Dale (Old Line)	Monthly - Inspection Only			
							Garden Grove				
SPK130022	3412	8434	8443	8	VC	325	Blvd/Dale (Old Line)	Monthly - Inspection Only			
SPS100006	8793	12708	14928	8	XS VC	308	Twintree/Firebrand	Monthly - Inspection Only			
SPS100006	8794	14928	12709	8	PVC	20	Twintree/Firebrand	Monthly - Inspection Only			
SPS100030	5651	12644	12709	15	XS VC	285	Twintree/Firebrand	Monthly - Inspection Only			
SPS100011	8783	12713	14922	15	XS VC	271	Twintree/Oertley	Monthly - Inspection Only			
SPS100011	8784	14922	12716	16	PVC	20	Twintree/Oertley	Monthly - Inspection Only			
SPS100013	8781	12715	12716	8	VC	365	Twintree/Oertley	Monthly - Inspection Only			
SPJ130024	772	7106	13418	15	VC	191	Coast/Central	Quarterly - Inspection Only			
SPJ130025	773	7107	7108	18	XS VC	460	Coast/Central	Quarterly - Inspection Only			
SPL020001	3961	9338	9339	10	VC	375	Gilbert/Chanticleer	Quarterly - Inspection Only			
SPL020006	3487	9346	9339	8	VC	290	Gilbert/Chanticleer	Quarterly - Inspection Only			
SPL080002	7492	13904	13903	15	XS VC	0	Gilbert/Cellini	Quarterly - Inspection Only			
SPL080003	7491	13903	13902	15	XS VC	0	Gilbert/Cellini	Quarterly - Inspection Only			
SPL080003	7498	13899	13898	10	VC	270	Gilbert/Cellini	Quarterly - Inspection Only			
SPL080004	7500	13897	13896	10	VC	65	Gilbert/Cellini	Quarterly - Inspection Only			
SPS130004	519	6694	6695	8	VC	313	Partridge/Gloria	Quarterly - Inspection Only			
SPS130005	8375	6695	14605	8	VC	313	Partridge/Gloria	Quarterly - Inspection Only			
SPS130006	521	14603	6697	8	VC	193	Partridge/Gloria	Quarterly - Inspection Only			
SPS130007	8392	14623	6700	8	VC	213	Partridge/Gloria	Quarterly - Inspection Only			
							Stanford/Blackthorn to	Semiannually - Inspection			
SPN120021	2930	11322	11324	8	VC	338	Groveview	Only			
							Mockingbird North of	Semiannually - Inspection			
SPO090036	2573	11154	11213	8	VC	335	Allen	Only			
								Semiannually - Inspection			
SPO130049	2489	11173	11193	8	VC	180	Cypress/Central	Only			
								Semiannually - Inspection			
SPO140033	2492	11176	11193	6	VC	320	Cypress/Central	Only			
								Semiannually - Inspection			
SPO120012							Grove South of Acacia	Only			
							Edinger/Harbor to	Semiannually - Inspection			
SPQ000025							Newhope	Only			
							Edinger/Harbor to	Semiannually - Inspection			
SPQ000026							Newhope	Only			
							Edinger/Harbor to	Semiannually - Inspection			
SPQ000027							Newhope	Only			
							Edinger/Harbor to	Semiannually - Inspection			
SPR000025							Newhope	Only			
CDDOCCOC							Edinger/Harbor to	Semiannually - Inspection			
SPR000026							Newhope	Only			
CDD000037							Edinger/Harbor to	Semiannually - Inspection			
SPR000027							Newhope	Only			



The Hot Spot list is adjusted, as necessary, based on the following historical information gathered for each sewer:

- Sanitary sewer overflow
- Blockages observed from routine maintenance
- Maintenance records of grease, roots, debris from CCTV records
- Odor complaints

CCTV inspections for the reaches listed in Table 5-2 identify the presence of sags, grease, deposits, and other defects may cause spills in the future. These locations are re-inspected within six months following an initial cleaning effort to determine if these reaches should be added to the Hot Spot list. Per the recommendations of the 2011 SSMP Audit, the District reviewed sewers that were identified with similar types of defects from CCTV inspections performed prior to the 2011 SSMP Audit. The District evaluated adding these sewers to the Hot Spot list. The District's comments are summarized in Table 5-2.

The cleaning frequency of Hot Spot reaches may be reduced when the District staff verifies that the increased hot spot cleaning frequencies are unnecessary. The District will review CCTV inspections, visual inspections, and cleaning records to determine if the potential for obstructions are no longer relevant and the cleaning frequency may be reduced.

Root Control Program: Root intrusion was the highest priority maintenance issue identified in the Sewer System Rehabilitation Plan. The District hires a state certified and insured contractor for pesticide application to perform its root control services, which consists of a root control foaming agent that is applied every two (2) years. The District has specified the foaming agent Razorooter II or equivalent. The contractor is required to re-treat a sewer or refund 100% of the payment for the services if roots reappear in the treated sewers within six months or if there is a sanitary sewer overflow that resulted from root obstructions within 2 years of treatment.

The sewers, included in the root control program, are managed by the CMMS program. There are currently 134 reaches on the root control program, which are illustrated on Figure 5-2 and detailed in Table 5-3.

Existing reaches with CCTV data identifying root balls in the sewer and laterals are included on Figure 5-2. Table 5-3 also includes all reaches that were identified through CCTV inspections with root balls in the main and/or lateral. These locations will be re-inspected within one year following an initial cleaning to determine if these reaches should be added to the root treatment list.

Food Service Establishment Inspection

The District staff performs annual inspections of its food service establishments (FSEs) to ensure that they are in compliance with the District's Fats Oils and Grease (FOG) Control Program. The inspections may be conducted during normal business hours at the consent of the owner or with an administrative inspection warrant. The District evaluates the best management practices (BMP) regarding a variety of maintenance activities. In regards to proper FOG disposal, the District evaluates the eating and drinking establishment requirements, the waste handling and disposal requirements, and the spill prevention and control requirements. See Section 8 of this report for further information regarding the District's FOG Control Program.

Table 5-2
Sags, Grease, Deposits, and Obstacles

Sags, Grease, Deposits, and Obstacles										
Previous Sewer ID	Sewer ID	US MH	DS MH	Sags No of Joints	Grease - No of Joints	Deposits No of Joints	Obstacles Highest Percentage	Hot Spot Duration	Existing Root Treatment Reach	Recommendation from 2011 Hot Spot Evaluation
SPE080025	1343	8915	8914		15	99	0			
SPE080033	1403	8914	7788		22	78	0			
SPE080034	1449	7839	7838	22	0	117	0			
SPE090002	1147	7854	7857		81	34	0	Semiannual		
SPE090003	1148	7852	7854		83	40	0			
SPG090032	1471	7330	7331	0	0	112	0			
SPG090052	1172	7350	7357	0	60	98	0			
SPJ080033	2422	8597	8598	18	64	60	20			
SPJ090008	6966	13533	13532	24	98	9	30			
SPJ110009	1814	8694	8695	0	140	0	0			
SPJ140007	798	7060	7059	0	0	1	90			
SPJ140037				0	1	0	50			
SPK050040	1905	8054	8053	0	0	1	50			
SPL000008	3458	9304	9283	0	99	22	0			
SPL010001	3467	9319	9287	0	94	75	0			
SPL010004	3958	0	0	0	159	2	0			
SPL010005	3959	9325	9326	0	159	2	0			
SPL010006	3960	9326	9115	0	159	2	0			
SPL020007	4059	9115	9338	0	159	2	0			
SPL020008	3493	9353	9341	0	121	66	0			
SPL030002	3653	8939	9343	0	141	0	0			
SPL030005	3659	8947	8944	0	90	21	0			
SPL030006	3665	8953	8942	0	125	48	0			
SPL040006	3674	8964	8963	0	196	45	0			
SPL050019	4066	9015	9014	0	75	70	0			
SPL050020	4067	9015	8333	0	76	73	0			
SPL050029	4071	9631	9632	0	85	33	0			
SPL050030	4072	9632	9633	0	85	33	0			
SPL050031	4073	9634	9633	0	85	49	0			
SPL080035	4725	10806	9645	5	82	44	50			
SPL080039	5942	10141	10793	0	0	32	50			
SPL090024	7455	13876	13868	0	52	57	5			
SPL090024	7444	13868	13867	0	109	109	5			
SPL990003	3680	9280	9279	0	100	0	0			
SPL990007	3444	9289	9279	0	106	6	0			
SPM000001	3455	9304	9303	8	98	26 70	0			
SPM000002	3459	9308	9307	0	67		0			
SPM000003	3460	9309	9308	0	67	70	0			
SPM000005	3462	9312	9313	0	184	103	0			
SPM000006	3463	9313	9314	0	184	103	0			
SPM000009	3466	9318	9319	0	80	45	0			
SPM000011	3469	9309	9318	0	90	38	0			
SPM000012	3470	9312	9310	0	173	111	0			
SPM000014	4523	9313	8984	0	129	156	0			
SPM000015	4524	9314	8985	0	142	48	0			
SPM000018	5029	9310	9160	0	173	111	0			
SPM000019	5416	8984	9263	0	129	156	0			
SPM000020	5417	8985	9264	0	142	48	0			
SPM010001	4389	9175	9114	0	119	15	0			
SPM010005	4393	9181	9180	0	150	85	0			
SPM010006	4394	9182	9181	0	150	85	0			
SPM010007	4396	9185	9184	0	185	24	0			
SPM010008	4490	9186	9185	0	185	24	0			

Table 5-2 (Continued)

Sags, Grease, Deposits, and Obstacles										
					Grease -		Obstacles		Existing Root	Recommendation
Previous		US	DS	Sags No	No of	Deposits No	Highest	Hot Spot	Treatment	from 2011 Hot Spot
Sewer ID	Sewer ID	МН	МН	of Joints	Joints	of Joints	Percentage	Duration	Reach	Evaluation
SPM010009	4491	9186	9187	0	96	21	0			
SPM010015	4498	9194	9195	0	91	34	0			
SPM010016	4499	9195	9188	0	98	63	0			
SPM010018	4501	9198	9197	25	150	60	0			
SPM010019	4502	9199	9198	25	150	60	0			
SPM010020	4503	9201	9200	17	124	10	0			
SPM010021	4504	9195	9201	17	124	10	0			
SPM010022	4505	9200	9199	0	105	12	0			
SPM010023	3638	9200	9139	17	124	10	0			
SPM010025	3473	9328	9327	0	102	39	0			
SPM010026	3474	9329	9328	0	145	61	0			
SPM010027	3475	9330	9331	0	98	14	0			
SPM010028	3477	9330	9329	0	145	61	0			
SPM010029	3478	9332	9116	0	61	41	0			
SPM010030	3479	9331	9332	0	61	41	0		 	
SPM010030	3481	9330	9334	0	98	12	0		 	
SPM010032 SPM010033	3482	9336	9334	0	130	40	0			
SPM010033 SPM010034	3482	9335	9337	0	130	40	0			
SPM010034 SPM010035	3483	9335	9336	0	87	68	0			
SPM010036	5030	9327	9173	0	102	39	0			
SPM010038	5032	9336	9176	0	126	126	0			
SPM020006	4395	9183	9182	0	175	81	0			
SPM020008	4506	9202	9267	0	141	96	0			
SPM020009	4507	9202	9189	0	114	31	0			
SPM020011	4509	9204	9205	0	97	40	0			
SPM020012	4510	9205	9206	0	147	52	0			
SPM020013	4511	9206	9207	0	147	52	0			
SPM020014	4512	9205	9183	0	175	81	0			
SPM020015	4513	9204	9189	0	97	50	0			
SPM020024	3591	9223	9222	0	95	42	0			
SPM020025	3592	9219	9223	0	97	21	0			
SPM020029	3639	9267	9140	0	141	96	0			
SPM020031	3485	9344	9345	0	78	56	0			
SPM020032	3486	9345	9346	0	120	34	0			
SPM020033	3488	9344	9347	0	119	11	0			
SPM020035	3489	9349	9345	0	120	10	0			
SPM020036	3490	9346	9350	0	133	64	0			
SPM020038	3492	9352	9353	0	121	66	0			
SPM020045	5034	9207	9344	0	147	52	0			
SPM020046	5035	9210	9776	0	105	0	0			
SPM030007	4517	9212	9213	0	198	0	0			
SPM030008	4518	9213	9214	0	198	0	0			
SPM030009	4519	9214	9215	0	198	0	0			
SPM030013	3597	9227	9228	0	92	8	0		1	
SPM030014	3598	9228	9229	0	106	12	0		1	
SPM030015	3599	9229	8343	54	96	12	0		<u> </u>	
SPM030031	3650	8936	8937	0	115	0	0		 	
SPM030033	3652	8938	8939	0	141	0	0		 	
SPM030035	3658	8946	8947	0	116	14	0		 	
SPM030040	3664	8952	8953	0	125	48	0			
SPM030040	5412	8343	8945	18	99	15	0		 	
SPM040029	3672	8962	8961	0	130	0	0		 	
SPM040029	3673	8963	8962	0	130	0	0		 	
SPM040030	3675	8965	8964	0	196	45	0		 	
31 WO-0001	3073	5505	JJ04	Ū	150		Ū		<u> </u>	

Page 36 of 614

Sags, Grease, Deposits, and Obstacles

Sags, Grease, Deposits, and Obstacles Grease - Obstacles Existing Root Recommen												
Previous Sewer ID	Sewer ID	US MH	DS MH	Sags No of Joints	No of Joints	Deposits No of Joints	Highest Percentage	Hot Spot Duration	Treatment Reach	Recommendation from 2011 Hot Spot Evaluation		
SPM040039	4413	8974	8973	0	176	0	0					
SPM040040	4414	8965	8974	0	176	0	0					
SPM040042	4416	8349	8975	0	0	197	0					
SPM040043	4417	8975	8976	0	0	197	0					
SPM040044	4418	8976	8966	0	0	197	0					
SPM120024	2742	12034	12035	0	0	1	50					
SPM990001	4373	9156	9155	0	150	53	0					
SPM990002	4374	9157	9156	0	150	53	0					
SPM990004	4376	9159	9158			47	0					
SPM990006	4378	9162	9157	0	183	42	0					
SPM990007	4379	9164	9163	0	55	61	0					
SPM990008	4380	9165	9164	0	95	66	0					
SPM990012	4384	9164	9168	0	64	50	0					
SPM990017	3637	9163	9138	0	62	67	0					
SPM990017	3441	9292	9291	0	65	60	0					
SPM990021	3442	9292	9291	0	183	42	0					
			9293	0								
SPM990024 SPM990026	3446 3448	9295 9298	9294	0	85 126	46 56	0					
SPM990027 SPM990030	3449	9299	9298	0	126	56	0					
	3452	9296	9291	0	98	47	0					
SPM990032	3454	9293	9302	0	98	11	0					
SPM990033	5028	9291	9159	0	50	72	0					
SPN110006	2382	11145	11146	0	109	0	0					
SPN180007	144	7271	7558		100	0	0					
SPO100002	5119	11787	11768	0	3	105	0	Manadali				
SPO120003	5395	11832	11834	0 0		150	0	Monthly Check Only				
SPO120010	5400	11838	13491	65	82	58	0	000 0				
SPO140041	2286	11192	11067	0	0	1	50					
SPP080004	6322	12999	13000	0	131	0	0					
SPP080018	6202	12951	12953	0	77	49	5					
SPP090002	6585	12563	12539	0	0	106	25					
SPP090023	6260	12921	12922	0	6	3	70					
SPP100001	6055	12539	12540	13	76	93	40					
SPP100002	6056	12540	12541	0	25	82	20					
SPP100005	6059	12543	12531	0	66	35	5					
SPP110039	4408	11764	11765	0	115	0	0					
SPP120004	5275	11410	11411	0	0	106	5					
SPP140014	4818	11914	11915	0	17	87	5					
SPQ060016	5984	13207	13194	0	57	74	5					
SPQ070036	5897	13148	13149	0	0	111	5					
SPQ080023	6438	12225	12991	0	76	27	5					
SPQ090051	6421	12824	12825	17	78	31	10					
SPQ090052	6453	12825	12826	0	48	59	40					
SPQ100027	6337	12803	12806	0	47	71	5					
SPQ100030	6340	12806	12809	0	42	64	5					
SPQ110012	4136	12515	12516	0	0	104	5					
SPQ110013	4137	12516	12519	0	0	113	5					
SPQ120044	6212	11706	11707	0	0	0	0		Root Treatment			
SPQ130017	3820	11461	11462	0	2	0	0					
SPQ130018	3821	11462	11464	0	0	0	0					
SPQ130018 SPQ140026	3847	11439	10864	0	5	96	5					
SPQ140028	3849	11441	10867	0	59	42	0					
J1 &170020	5545	11-7-71	10001	ı	JJ	74	, , , , , , , , , , , , , , , , , , ,					

Sags, Grease, Deposits, and Obstacles

				Say		e, Deposi	ts, and Obs	stacies		
Previous		US	DS	Sags No	Grease - No of	Deposits No	Obstacles Highest	Hot Spot	Existing Root Treatment	Recommendation from 2011 Hot Spot
Sewer ID	Sewer ID	MH	MH	of Joints	Joints	of Joints	Percentage	Duration	Reach	Evaluation
SPR090010	5961		12194	0		16	50	Duration	Neach	Lvaluation
SPR100004	5776	12193 11630	11631	0	31 2	100	10			
		12163								
SPR100009	5638		12147	0	81	43	5			
SPR100022	5672	12183	12184	0	0	37	65			
SPR110017	5753	12747	12168	0	68	75	5			
SPR110029	6082	11648	11674	0	57	53	5			
SPR110035	5691	11673	11674	0	7	3	90			
SPR110038	5738	11676	11677	0	0	112	45			
SPR120030	6161	11667	11637	0	72	53	5			
SPR130017	3862	11982	11981	0	1	1	50			
SPS110010				0	0	106	5			
SPS120040	7361	13801	13821	0	0	101	35			
SPT080008	6098	13009	13004	0	76	76	5			
SPT100023	5363	12646	12647	1	0	2	50			
SPT100040	3923	12662	12663	0	0	1	55			
SPT100048	6535	12842	12648	0	69	33	5			
SPT110021	3976	12400	12401	0	89	76	5			
SPT110039	4590	12467	12421	0	90	68	5			
SPE080030	1398	8888	8889		111	6	0			Not added to HS list
SPE080031	1399	8894	8893		165	24	0			Not added to HS list
SPE080043	1520	7864	7865		84	34	0			Not added to HS list
SPE080047	1530	7875	7874		0	114	0			Not added to HS list
SPE080049	1957	8917	7859		0	109	0			Not added to HS list
SPE090036	1454	7849	7850		110	4	0			Not added to HS list
SPJ090001	6999	13550	13549	41	15	9	50			Not added to HS list
SPK090001	7428	13863	13864	0	100	74	5			Not added to HS list
SPL060043	5331	10844	10845	0	121	0	0			Not added to HS list
SPQ060005	5972	13195	13197	0	96	93	5			Not added to HS list
SPQ060007	5974	13197	13198	0	80	74	5			Not added to HS list
				-			-			
SPQ060008	5975	13198	13199	0	81	61	5			Not added to HS list
SPQ090010	6076	12564	12573	0	89	20	5			Not added to HS list
SPQ090019	4740	10570	10574	10	100	70	F			Not added to LIC list
SPQ090019 SPQ110004	4746 4128	12573 12601	12574 12510	10 0	100	70 10	5 5			Not added to HS list
					108					Not added to HS list
SPQ120007	6543	12478	12479	0	94	16	40			Not added to HS list
SPR120019	5685	11655	11658	0	72	73	5			Not added to HS list
SPR120021	5686	11658	11636	0	58	57	5		Root Treatment	Not added to HS list
SPR120037	5747	14366	11652	0	86	89	5			Not added to HS list
SPT090019	6026	12250	12251	0	80	54	5			Not added to HS list
SPT090019	6142	12251	12251	0	98	74	5			Not added to HS list
01 1030044	0142	12201	12202	0	30	/	3			Was Replaced CIP
SPS100023				90	1	102	5			Proj.in 2009
										Was Replaced CIP
SPS100024				93	106	0	0			Proj.in 2009
										Was Replaced CIP
SPS100029	5650	12694	12643	0	105	1	5			Proj.in 2009
SPS130014	558	6737	6738	24	23	6	80			Will evaluate. No Access to D/S MH
353130014	ეეგ	0/3/	0738	∠4	23	0	οU			ACCESS TO DIS IVIH

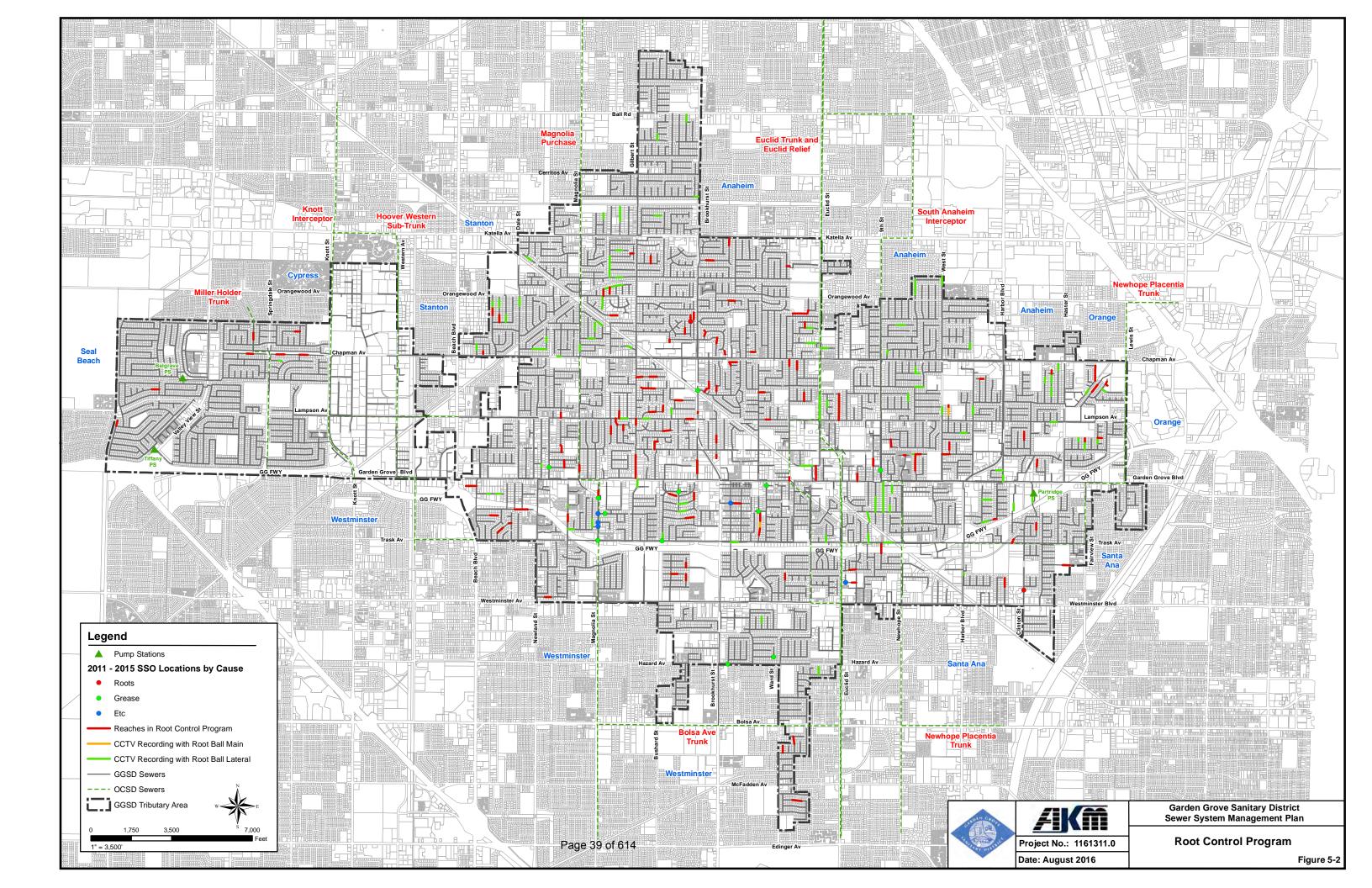


Table 5-3 Root Control Program Reaches

Root Control Program Reaches													
					No.								
					Root	No. Root							
Previous	Sewer			Length	Ball	Ball							
Sewer ID	ID	US MN		(ft)	Main	Lateral	Comment						
SPT150006	433	7452	7453	327	0	1	Currently in Root Control Program						
SPT110028	4093	12367	12420	130	2		Currently in Root Control Program						
SPT110017	3972	12396	12397	198	1		Currently in Root Control Program						
SPT090012	5265	12638	12639	105	0	1	Currently in Root Control Program						
SPT090011	5264	12637	12639	130	0		Currently in Root Control Program						
SPT090009	5262	12635	12624	395	1		Currently in Root Control Program						
SPT090005	5258	12630	12631	200	0	1	Currently in Root Control Program						
SPT090004	5257	12629	12630	245	0		Currently in Root Control Program						
SPT090003	5256	12628	12629	200	0	1	Currently in Root Control Program						
SPS160020	473	7496	7497	395	0	1	Currently in Root Control Program						
SPS140043	602	6752	6753	172	2		Currently in Root Control Program						
SPS140025	543	6725	6726	295	0		Currently in Root Control Program						
SPS120001	4480	12428	12429	305	0		Currently in Root Control Program						
SPS110014	5665	12098	12099	370	0		Currently in Root Control Program						
SPS090008	6513	12734	12735	145	1		Currently in Root Control Program						
SPR140004	6477	12768	12769	30	0		Currently in Root Control Program						
SPR140003	6476	12767	12768	135	0		Currently in Root Control Program						
SPR120021	5686	11658	11636	325	0	1	Currently in Root Control Program						
SPR110034	6088	11656	11657	325	2		Currently in Root Control Program						
SPR100047	5475	0	0	60	1		Currently in Root Control Program						
SPR100038	6165	11684	11685	351	1		Currently in Root Control Program						
SPR090014	5965	12197	12199	145	1		Currently in Root Control Program						
SPQ150014	4312	11491	11492	415	0	1	Currently in Root Control Program						
SPQ120045	6213	11707	11708	350	2		Currently in Root Control Program						
SPQ120044	6212	11706	11707	350	4	2	Currently in Root Control Program						
SPQ120043	6211	11705	11706	240	1	1	Currently in Root Control Program						
SPQ120024	4118	12500	12501	90	0		Currently in Root Control Program						
SPQ110015	4139	12518	12519	325	0		Currently in Root Control Program						
SPP160017	5327	11959	11960	185	0		Currently in Root Control Program						
SPP150028	5311	11940	11941	305	0	1	Currently in Root Control Program						
SPP120013	5135	11017	11018	332	0	1	Currently in Root Control Program						
SPP120005	5276	11411	11412	330	1		Currently in Root Control Program						
SPP100031	4795	11775	11764	600	0	1	Currently in Root Control Program						
SPP100030	4794	11774	11775	530	0	4	Currently in Root Control Program						
SPO230010	17	7229	7230	406	0	1	Currently in Root Control Program						
SPO210016	393	7304	7305	302	0	1	Currently in Root Control Program						
SPO210010	124	6864	6865	329	0	4	Currently in Root Control Program						
SPO160042	2176	10463	10464	270	0	1	Currently in Root Control Program						
SPO140053	2529	11204	11205	305	0		Currently in Root Control Program						
SPO140051	2295	11202	11203	332	0		Currently in Root Control Program						

Table 5-3 (Continued)

Root Control Program Reaches

Root Control Program Reaches No.												
					No.							
					Root	No. Root						
Previous	Sewer			Length	Ball	Ball						
Sewer ID	ID	US MN	DS MN	(ft)	Main	Lateral	Comment					
SPO120017	3024	12263	11624	150	0	1	Currently in Root Control Program					
SPO120015	5405	11843	11844	305	0		Currently in Root Control Program					
SPO120014	6926	13496	11843	310	0		Currently in Root Control Program					
SPO110024	2372	11147	11136	180	0	3	Currently in Root Control Program					
SPO100022	2394	11217	11218	265	0	1	Currently in Root Control Program					
SPO100009	4946	12353	12354	300	0	2	Currently in Root Control Program					
SPO090016	5430	12346	12347	310	0	1	Currently in Root Control Program					
SPO090013	5427	12343	12344	372	0	1	Currently in Root Control Program					
SPO070018	4104	10639	10641	250	0	1	Currently in Root Control Program					
SPO070007	5576	10629	10630	351	0		Currently in Root Control Program					
SPO070006	5575	10628	10629	275	0		Currently in Root Control Program					
SPO070005	5574	10627	10628	140	0		Currently in Root Control Program					
SPO050026	5568	10618	9938	140	0		Currently in Root Control Program					
SPN130022	2890	11071	11289	410	0	2	Currently in Root Control Program					
SPN120028	2938	11079	11323	130	0	1	Currently in Root Control Program					
SPN110031	2622	10687	10688	316	0	1	Currently in Root Control Program					
SPN100050	3567	9476	9454	220	0		Currently in Root Control Program					
SPN100049	3566	9475	9476	95	0		Currently in Root Control Program					
SPN100048	3561	9470	9448	234	0		Currently in Root Control Program					
SPN090054	3565	9474	9475	303	0		Currently in Root Control Program					
SPN090030	3176	9441	9442	160	0		Currently in Root Control Program					
SPN090029	3175	9440	9441	320	0	1	Currently in Root Control Program					
SPN080048	4223	10189	9964	149	0		Currently in Root Control Program					
SPN080041	5382	9977	9978	246	1	1	Currently in Root Control Program					
SPN080037	5378	9973	9974	187	0	1	Currently in Root Control Program					
SPN080036	5377	9972	9973	80	0	1	Currently in Root Control Program					
SPN080011	5867	9913	9854	202	0	2	Currently in Root Control Program					
SPN070021	6124	9882	9884	276	1	1	Currently in Root Control Program					
SPN050048	4888	9944	9945	330	0	1	Currently in Root Control Program					
SPN050018	4563	9696	9697	295	0	1	Currently in Root Control Program					
SPM160009	2201	10553	10554	281	0	2	Currently in Root Control Program					
SPM160003	2195	10548	10549	285	0	1	Currently in Root Control Program					
SPM150013	2035	10543	10544	210	0	2	Currently in Root Control Program					
SPM140020	2729	12020	12021	370	0	1	Currently in Root Control Program					
SPM130014	2335	10763	10764	320	0	3	Currently in Root Control Program					
SPM130005	2672	10754	10755	310	0	3	Currently in Root Control Program					
SPM120004	2817	11332	11333	330	0	1	Currently in Root Control Program					
SPM120003	2816	11331	11332	235	0	2	Currently in Root Control Program					
SPM110055	3342	9488	9510	360	0	1	Currently in Root Control Program					
SPM110049	2497	12046	12029	335	0	1	Currently in Root Control Program					

Table 5-3 (Continued)
Root Control Program Reaches

Root Control Program Reaches												
					No.							
					Root	No. Root						
Previous	Sewer			Length	Ball	Ball						
Sewer ID	ID	US MN	DS MN	(ft)	Main	Lateral	Comment					
SPM110048	2496	12045	12046	135	0	1	Currently in Root Control Program					
SPM110007	3254	9479	9480	330	0	1	Currently in Root Control Program					
SPM100046	3283	9412	9526	80	0		Currently in Root Control Program					
SPM100041	3277	9545	9547	310	0	2	Currently in Root Control Program					
SPM100038	3274	9542	9543	285	0	1	Currently in Root Control Program					
SPM100026	3230	9525	9526	280	0	1	Currently in Root Control Program					
SPM100025	3229	9524	9525	300	0	2	Currently in Root Control Program					
SPM100016	3582	9494	9495	355	0	1	Currently in Root Control Program					
SPM100006	3197	0	0	50	0	1	Currently in Root Control Program					
SPM090034	3292	9562	9563	280	0	1	Currently in Root Control Program					
SPM090032	3290	9560	9561	322	0	2	Currently in Root Control Program					
SPM080017	4651	9606	9607	250	0	1	Currently in Root Control Program					
SPM080013	4647	9669	10273	130	0	1	Currently in Root Control Program					
SPM070011	5045	9626	10275	255	0	1	Currently in Root Control Program					
SPM070010	5044	9624	9625	304	0	1	Currently in Root Control Program					
SPM050040	4086	10038	10039	329	0	2	Currently in Root Control Program					
SPL130039	2957	11584	11592	218	0	1	Currently in Root Control Program					
SPL120035	3163	9357	9358	303	0	1	Currently in Root Control Program					
SPL120005	3116	8457	8458	323	0	1	Currently in Root Control Program					
SPL120004	3115	8456	8457	333	0	4	Currently in Root Control Program					
SPL120003	3114	8455	8456	333	0	1	Currently in Root Control Program					
SPL110028	3312	9586	9587	340	0	1	Currently in Root Control Program					
SPL110023	3308	9581	9582	160	0		Currently in Root Control Program					
SPL110022	3307	9580	9581	130	0		Currently in Root Control Program					
SPL110016	3301	9574	9575	250	0	1	Currently in Root Control Program					
SPL110004	3227	9520	9521	270	0	2	Currently in Root Control Program					
SPL100011	3319	9595	9566	334	0	1	Currently in Root Control Program					
SPL070023	3721	10159	10160	300	2	1	Currently in Root Control Program					
SPL060031	5226	10334	10333	287	0		Currently in Root Control Program					
SPL060018	3731	10169	10170	282	2		Currently in Root Control Program					
SPL050018	5073	10342	10343	145	0		Currently in Root Control Program					
SPK160028	334	7004	6993	264	0	1	Currently in Root Control Program					
SPK140033	763	7679	7684	330	0	2	Currently in Root Control Program					
SPK140032	762	7678	7679	300	0	1	Currently in Root Control Program					
SPK140005	2753	14201	11608	356	0	1	Currently in Root Control Program					
SPK120013	3369	8395	8397	325	0		Currently in Root Control Program					
SPK120004	3360	8386	8388	240	0		Currently in Root Control Program					
SPK110013	3359	8385	8386	85	0		Currently in Root Control Program					
SPK100014	3238	9091	9097	220	0		Currently in Root Control Program					
SPJ140026	817	7080	7081	360	0		Currently in Root Control Program					

Table 5-3 (Continued) Coot Control Program Reaches

Root Control Program Reaches No.												
					Root	No. Root						
Previous	Sewer			Length	Ball	Ball						
Sewer ID	ID	US MN	DS MN	(ft)	Main	Lateral	Comment					
SPJ140014	805	7065	7066	295	0	1	Currently in Root Control Program					
SPJ140012	803	7063	7064	135	0	1	Currently in Root Control Program					
SPJ130029	751	7111	7105	50	0		Currently in Root Control Program					
SPJ130028	846	7110	7111	310	0	1	Currently in Root Control Program					
SPJ130027	6835	0	7110	315	0	1	Currently in Root Control Program					
SPJ080024	2063	8714	8565	120	1		Currently in Root Control Program					
SPJ070020	2080	8581	8582	300	1		Currently in Root Control Program					
SPJ070016	2076	8577	8578	325	1	1	Currently in Root Control Program					
SPG090054	1174	7352	7353	350	0		Currently in Root Control Program					
SPG090018	1066	8278	8279	350	0		Currently in Root Control Program					
SPG080041	1311	8227	8306	253	0	1	Currently in Root Control Program					
SPF090013	1290	8735	8736	314	0	1	Currently in Root Control Program					
SPF080016	1190	7371	7372	332	0	1	Currently in Root Control Program					
SPE100041	1422	7833	7799	347	0	3	Currently in Root Control Program					
SPD110015	1574	7937	8667	260	0	1	Currently in Root Control Program					
SPG090037	1476	7335	7336	213	0	1	Evaluate Addition to Root Control Program					
SPJ070011	2071	8572	8573	325	0	1	Evaluate Addition to Root Control Program					
SPJ070014	2074	8575	8576	325	0	1	Evaluate Addition to Root Control Program					
SPJ070019	2079	8580	8581	300	0	3	Evaluate Addition to Root Control Program					
SPJ080033	2422	8597	8598	250	0	1	Evaluate Addition to Root Control Program					
SPJ130012	791	7051	7052	200	0	1	Evaluate Addition to Root Control Program					
SPJ130015	794	7054	7055	60	0	1	Evaluate Addition to Root Control Program					
SPJ130016	795	7055	7056	60	0	1	Evaluate Addition to Root Control Program					
SPK050039	1904	8052	8054	250	0	1	Evaluate Addition to Root Control Program					
SPK070030	1901	8047	8513	358	0	1	Evaluate Addition to Root Control Program					
SPK080028	1860	8003	8004	266	0	1	Evaluate Addition to Root Control Program					
SPK080031	1906	8055	8058	300	0	1	Evaluate Addition to Root Control Program					
SPK080052	2409	8005	8055	285	0	1	Evaluate Addition to Root Control Program					
SPK090002	5928	10316	10317	150	0	1	Evaluate Addition to Root Control Program					
SPK120024	3391	8413	8414	130	0	1	Evaluate Addition to Root Control Program					
SPK130016	2750	11604	11605	60	0	1	Evaluate Addition to Root Control Program					
SPK140023	2800	11578	11609	267	0	1	Evaluate Addition to Root Control Program					
SPL040011	4924	8334	8335	307	0	1	Evaluate Addition to Root Control Program					
SPL040012	5018	8335	8336	307	0	1	Evaluate Addition to Root Control Program					
SPL040019	5518	9641	9642	254	0	1	Evaluate Addition to Root Control Program					
SPL050014	5069	9742	9743	265	0	1	Evaluate Addition to Root Control Program					
SPL050041	5176	10117	10121	250	0	1	Evaluate Addition to Root Control Program					
SPL060009	5180	10121	10174	319	0	1	Evaluate Addition to Root Control Program					
SPL060015	3728	10166	10168	279	0	1	Evaluate Addition to Root Control Program					
SPL060017	3730	10168	10170	288	0	1	Evaluate Addition to Root Control Program					

Table 5-3 (Continued)

Coot Control Program Reaches

Root Control Program Reaches No.												
					No.							
					Root	No. Root						
Previous	Sewer			Length	Ball	Ball						
Sewer ID	ID	US MN	DS MN	(ft)	Main	Lateral	Comment					
SPL060022	3735	10174	10178	335	0	1	Evaluate Addition to Root Control Program					
SPL060024	3737	10176	10177	271	0	1	Evaluate Addition to Root Control Program					
SPL060044	5946	10170	10334	289	0	1	Evaluate Addition to Root Control Program					
SPL070026	4734	10813	10792	272	0	1	Evaluate Addition to Root Control Program					
SPL070034	4840	10824	10825	270	0	2	Evaluate Addition to Root Control Program					
SPL070035	4841	10825	10826	300	0	1	Evaluate Addition to Root Control Program					
SPL080008	5182	10128	10129	190	0	1	Evaluate Addition to Root Control Program					
SPL080024	4339	10796	10798	300	0	1	Evaluate Addition to Root Control Program					
SPL080031	4721	10803	10806	258	0	1	Evaluate Addition to Root Control Program					
SPL080036	4735	10814	10795	338	0	1	Evaluate Addition to Root Control Program					
SPL110005	4242	9565	9566	310	0	1	Evaluate Addition to Root Control Program					
SPL140025	3099	11564	11565	313	0	1	Evaluate Addition to Root Control Program					
SPM010012	4495	9191	9192	310	0	1	Evaluate Addition to Root Control Program					
SPM010035	3484	9337	9328	270	0	1	Evaluate Addition to Root Control Program					
SPM030029	3642	9148	9272	180	0	1	Evaluate Addition to Root Control Program					
SPM040035	3679	8969	8970	285	0	1	Evaluate Addition to Root Control Program					
SPM100021	3425	9499	9500	215	0	1	Evaluate Addition to Root Control Program					
SPM110031	3260	9506	9507	310	0	2	Evaluate Addition to Root Control Program					
SPM130016	2337	10765	10766	340	0	1	Evaluate Addition to Root Control Program					
SPM130035	2748	12040	12053	315	0	1	Evaluate Addition to Root Control Program					
SPM140002	2340	10769	10770	320	0	1	Evaluate Addition to Root Control Program					
SPM140029	8279	14510	14509	345	0	1	Evaluate Addition to Root Control Program					
SPN150007	2192	10478	10479	325	0	1	Evaluate Addition to Root Control Program					
SPO080008	4105	10640	10641	346	0	1	Evaluate Addition to Root Control Program					
SPO080017	4114	10649	10650	420	0	1	Evaluate Addition to Root Control Program					
SPO100001	5118	11786	11787	535	0	3	Evaluate Addition to Root Control Program					
SPO100002	5119	11787	11768	535	0	1	Evaluate Addition to Root Control Program					
SPO120010	5400	11838	13491	355	0	2	Evaluate Addition to Root Control Program					
SPO140052	2528	11203	11204	316	1	1	Evaluate Addition to Root Control Program					
SPO170043	252	6966	6967	275	0	2	Evaluate Addition to Root Control Program					
SPP080026	6245	12962	12963	346	0	1	Evaluate Addition to Root Control Program					
SPP100036	4643	11780	11782	285	0	1	Evaluate Addition to Root Control Program					
SPP130025	4966	11899	11900	650	0	2	Evaluate Addition to Root Control Program					
SPP140004	4968	11901	11903	400	0	1	Evaluate Addition to Root Control Program					
SPP140007	5358	11905	11906	370	0	4	Evaluate Addition to Root Control Program					
SPP140033	4910	11812	11813	300	0	1	Evaluate Addition to Root Control Program					
SPP190007	64	6799	6800	356	0	1	Evaluate Addition to Root Control Program					
SPQ060001	5765	13109	13110	330	0	1	Evaluate Addition to Root Control Program					
SPQ060007	5974	13197	13198	310	0	1	Evaluate Addition to Root Control Program					
SPQ060008	5975	13198	13199	305	0	1	Evaluate Addition to Root Control Program					

Table 5-3 (Continued) Root Control Program Reaches

ļ 	Reaches						
					No.		
					Root	No. Root	
Previous	Sewer			Length	Ball	Ball	
Sewer ID	ID	US MN	DS MN	(ft)	Main	Lateral	Comment
SPQ070006	6324	13001	12206	370	0	1	Evaluate Addition to Root Control Program
SPQ080022	6437	12224	12225	150	0	1	Evaluate Addition to Root Control Program
SPQ090052	6453	12825	12826	385	0	1	Evaluate Addition to Root Control Program
SPQ090053	6454	12827	12830	220	0	1	Evaluate Addition to Root Control Program
SPQ090055	6456	12829	12830	245	0	1	Evaluate Addition to Root Control Program
SPQ100002	5582	12605	12606	320	0	2	Evaluate Addition to Root Control Program
SPQ100022	6163	11680	11681	298	0	1	Evaluate Addition to Root Control Program
SPQ120001	5480	12468	11706	106	0	1	Evaluate Addition to Root Control Program
SPQ130011	3814	11455	11463	290	0	1	Evaluate Addition to Root Control Program
SPQ130013	3816	11457	11458	340	0	1	Evaluate Addition to Root Control Program
SPQ130016	3819	11460	11461	120	0	1	Evaluate Addition to Root Control Program
SPQ130017	3820	11461	11462	555	0	9	Evaluate Addition to Root Control Program
SPQ130018	3821	11462	11464	570	0	8	Evaluate Addition to Root Control Program
SPQ150004	5354	11468	11469	320	0	1	Evaluate Addition to Root Control Program
SPR080006	6563	13035	13036	265	0	1	Evaluate Addition to Root Control Program
SPR100023	5673	12184	14370	340	0	1	Evaluate Addition to Root Control Program
SPR110020	6042	11640	11642	265	0	1	Evaluate Addition to Root Control Program
SPR120012	4585	12464	13750	310	0	2	Evaluate Addition to Root Control Program
SPR130009	6515	12775	12776	400	0	2	Evaluate Addition to Root Control Program
SPR140006	6479	12770	12771	310	0	1	Evaluate Addition to Root Control Program
SPR160022	571	7548	7549	71	0	1	Evaluate Addition to Root Control Program
SPS090004	6508	12729	12730	269	0	1	Evaluate Addition to Root Control Program
SPS090011	6547	12735	12736	388	0	2	Evaluate Addition to Root Control Program
SPS090014	5646	12739	12740	235	0	2	Evaluate Addition to Root Control Program
SPS100001	6378	15086	15085	288	0	1	Evaluate Addition to Root Control Program
SPS100027	6549	12737	12710	390	0	1	Evaluate Addition to Root Control Program
SPS120033	7319	13768	13769	316	0	2	Evaluate Addition to Root Control Program
SPS130005	8375	6695	14605	313	0	1	Evaluate Addition to Root Control Program
SPS130015	559	6738	6739	316	0	3	Evaluate Addition to Root Control Program
SPT090001	5242	12612	12613	225	0	1	Evaluate Addition to Root Control Program
SPT090033	4034	12678	12659	150	0	1	Evaluate Addition to Root Control Program
SPT110018	3973	12397	12399	155	0	1	Evaluate Addition to Root Control Program
SPT110029	4094	12420	12421	350	0	1	Evaluate Addition to Root Control Program
SPT110031	4471	12368	12422	130	0	1	Evaluate Addition to Root Control Program

Pump Station Maintenance

The District owns and maintains three (3) sewer pump stations: Tiffany Pump Station, Belgrave Pump Station, and Partridge Pump Station. The District eliminated the Harbor- Edinger Pump Station by diverting the flow by gravity to the Orange County Sanitation District's Newhope-Placentia Trunk Sewer on Harbor Boulevard and Heil Avenue. The tributary sewers were annexed to the City of Fountain Valley, who now maintains the service in this area.

Pump station descriptions are included in Appendix D-2 of this report.

The District maintains its pump stations on a daily, monthly, and semiannual frequency. The District keeps maintenance logs for each pump station that include the following items:

Daily Maintenance (Belgrave, Tiffany, and Partridge)

- Atmosphere quality
- Chart review/ Change recorder
- Miltronics check
- Vault check
- > Wet well check
- Pump run checks
- > Sump pump check

- > Amps check
- Dialer check
- Pump alternating check
- Dry well check
- > Noise check
- Security and cleanliness
- > Control system auto check

Bi-Weekly Generator Maintenance (Belgrave and Tiffany)

- Load Hours
- Operate 50-70% Load (30 minutes)
- Drain water from fuel filter
- Visual walk around
- Check fuses

- Non-Load Hours
- > Check engine oil and coolant
- ➤ Air cleaner dust valve restriction indicator check
- > Replace alternator belt
- Check electrical and wiring

Monthly Generator Maintenance (Partridge)

- Load Hours
- Fuel Used

- Elapsed Time Operated
- > Fuel Delivered

Monthly Maintenance (Belgrave, Tiffany, and Partridge)

- Add Degreaser
- Check float (Quarterly)

- > Clean blower filter
- Operate gate valves (Semi-annually)

The procedure for pump station inspections should be reviewed:

> After a sanitary sewer overflow event at a pump station

- If increased operational and maintenance activity is observed during the current inspection frequency
- Annually, at minimum

Corrective Maintenance

The District is prepared to provide immediate corrective maintenance during an emergency situation. When there is a failure of a critical asset, the District prioritizes the workforce for its corrective maintenance. The corrective maintenance repairs include, but are not limited to, the following:

- > Emergency cleaning to eliminate a pipe blockage
- Spot repair or replacement of a failed pipe
- Replacing a rattling or failed manhole cover
- Repairing or replacing a pump that has become clogged or damaged by debris
- Respond to, investigate and mitigate customer complaints
- Repair of earthquake damage
- Vandalism

C. REHABILITATION AND REPLACEMENT PLAN

Order 2006-0003-DWQ requires that the District must "develop a rehabilitation and replacement plan to identify and prioritize system deficiencies and implement short-term and long-term rehabilitation actions to address each deficiency. The program should include regular visual and TV inspections of manholes and sewer pipes, and a system for ranking the condition of sewer pipes and scheduling rehabilitation. Rehabilitation and replacement should focus on sewer pipes that are at risk of collapse or prone to more frequent blockages due to pipe defects. Finally, the rehabilitation and replacement plan should include a capital improvement plan that addresses proper management and protection of the infrastructure assets. The plan shall include a time schedule for implementing the short- and long-term plans plus a schedule for developing the funds needed for the capital improvement plan."

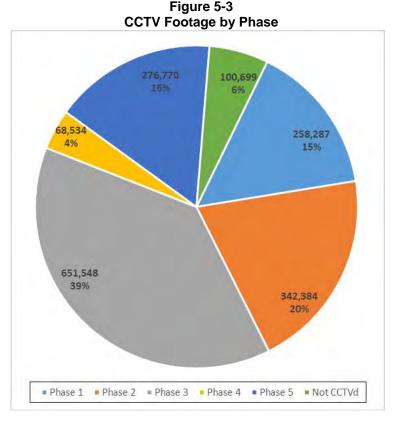
Closed Circuit Television Inspections

The CCTV inspections are continuously conducted for the District's Sewer System Rehabilitation Plan (SSRP), and the inspection data reviewed to assess the conditions of the sewers. The District established a program to CCTV inspect its entire gravity sewer system, consisting of 1,698,223 feet (321 miles, 6,913 reaches) of pipe ranging between 6-inch and 24-inch in diameter.

The District owns and operate a CCTV van with video recording equipment, and currently performs the closed circuit television (CCTV) inspections of its collection sewers and manholes, in house. Inspections are currently documented on hard drives, and the condition assessment is performed by contract services.

The CCTV inspections and condition assessment were performed in five phases by the District staff, Performance Pipeline Technologies, and Empire Pipe. The inspection took place between November 2003 and October 2012. A summary of the CCTV inspection by phase is illustrated on Figure 5-3 and Figure 5-4. A summary of the CCTV inspections is included in Appendix D-3.

Phase 1 of this program was completed in 2004 generally in the central area of the service area. Condition of the CCTV inspected system was evaluated through review of all the written reports developed by the CCTV contractor, and viewing of recordings for 297 reaches of pipe (25 percent of the inspected sewers). Condition assessment of the inspections performed in Phase 1 was documented in the District's Sewer System Rehabilitation Plan (dated September 2005).

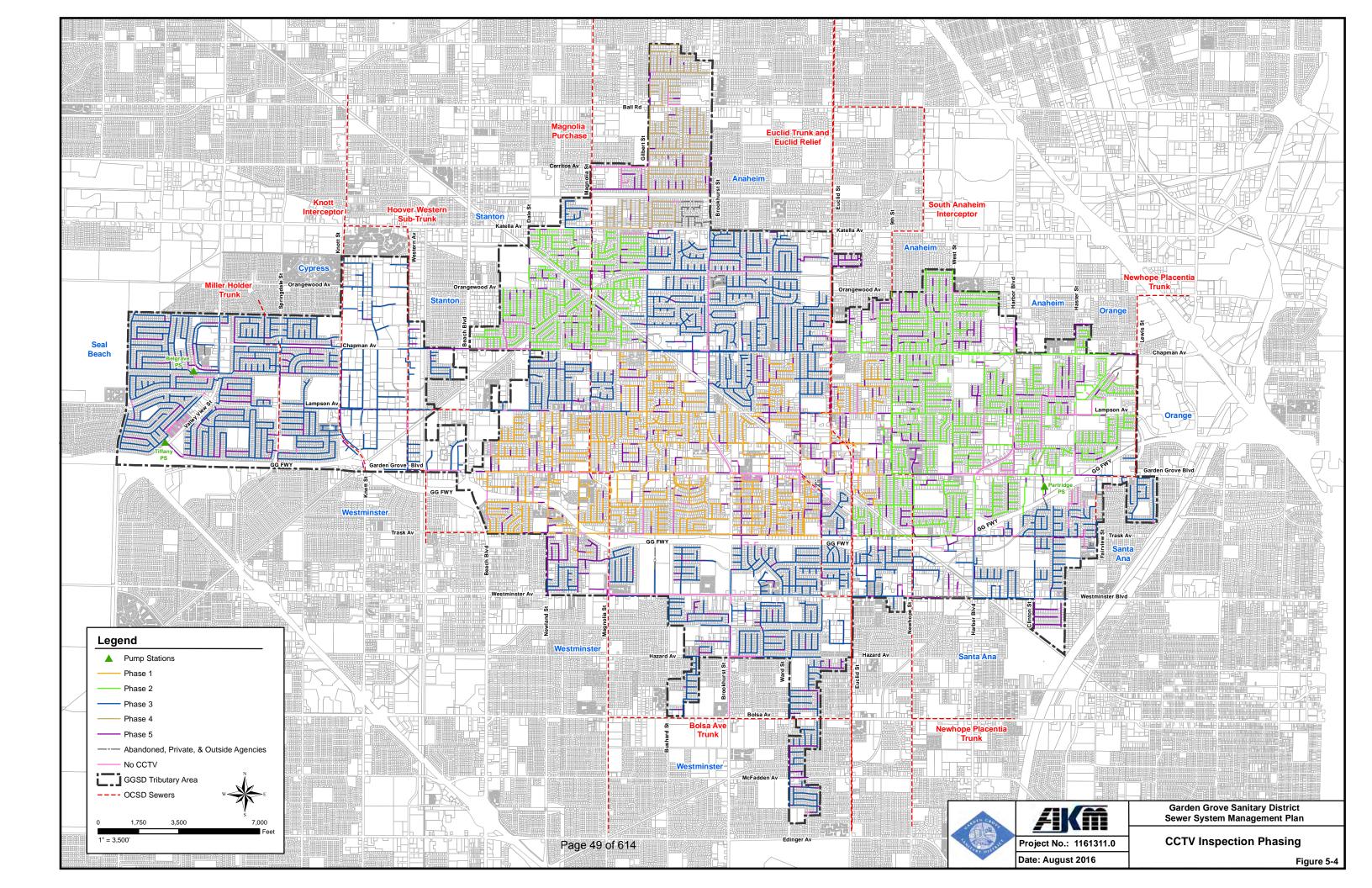


Phase 2 of this program was completed in 2006, generally in the northeast and north central area of the service area. Condition of the CCTV inspected system was evaluated through review of all the written reports developed by the CCTV contractor, and viewing for 548 reaches (37 percent of the inspected sewers). Condition assessment of the inspections performed in Phase 2 was documented in the District's Sewer System Rehabilitation Plan, Phase 2 (dated June 2006).

Phase 3 of the CCTV inspection and condition assessment program includes inspections covering the west area, the south area, and the north central area of the service area. Condition of the CCTV inspected system was evaluated through review of all the written reports developed by the CCTV contractor, and viewing for 332 reaches (13 percent of the inspected sewers). Condition assessment of the inspections performed in Phase 3 was documented in the District's Sewer System Rehabilitation Plan, Phase 3 (dated May 2008).

Phase 4 of the CCTV inspection was completed in 2008 to evaluate the condition of the District's sewers that are located within the unincorporated Orange County areas, generally north of Katella Avenue, between Magnolia Street and Brookhurst Street.

Page 48 of 614



Phase 5 of the CCTV inspection was completed in 2012 with the intent to complete the condition assessment of the District's gravity sewers and to reevaluate the sewers that were identified to have condition deficiencies from the previous four (4) phases. As identified on Figure 5-2 and Figure 5-3, the District has not CCTV inspected approximately 6% of its system. Reasons for no condition assessment include, but are not limited to the following:

- Replacement sewers were constructed to address capacity or condition deficiencies addressed in the District's Capital Improvement Program. These reaches should be CCTV inspected and added to the next phase of the District's comprehensive condition assessment program.
- There are access issues, which make inspecting the reach unfeasible. Some reaches could not be inspected due to heavy calcium.
- The GIS sewer shapefile should be updated to account for all abandoned pipes, which do not require CCTV inspection.

Inspection Report Database Summary

Initially, an Inspection Report Database Summary was developed utilizing the CCTV inspection written reports. Over the years, there have been updates to the District's sewer naming system, as well as updates to the Inspection Report Database Summary. The attributes from the tables for each phase was compiled into one comprehensive database. This Database Summary contained a tabulation of the deficiencies identified in the written reports, including but not limited to the following information:

- DVD Number/ Tape No.
- Inspection (Run) Number
- Reversal DVD Number
- Reversal Inspection (Run) Number
- Location (Street Name)
- CCTV Date
- Sewer Identification Number (Existing and Previous)
- Upstream Manhole and Downstream Identification Numbers (Existing and Previous)
- Direction of Camera
- Pipe Size and Material
- GIS Length and CCTV Inspected Length of Pipe
- Deficiency Tabulation from Written Reports using PACP codes

The Inspection Report Database Summary was used in selecting the recordings to be reviewed in detail. The pipe reaches selected for detailed review were those that showed the most severe structural problems and multiple deficiencies, as well as severe operation and maintenance issues.

The pipe condition assessment was incorporated into the original Inspection Report Database Summary. This combined summary, (Appendix D-3) includes a total of 6,352 reaches (1,597,525 feet GIS length). 102 reverse inspections were conducted and are included in the combined summary.

Rehabilitation/Replacement Priorities

The PACP condition grading system was used to assign a condition rating for structural defects and operation and maintenance defects for each reach of pipe. The rating provides the ability to quantitatively measure the difference in pipe condition between one inspection and subsequent inspections, and to prioritize among different pipe segments. A grade of 1 to 5 is assigned to each defect based on potential for further deterioration or pipe failure. Pipe failure is defined as when it can no longer convey the design capacity. The grades are as follows:

5 – Immediate Attention Defects requiring immediate attention

4 – Poor Severe defects that will become Grade 5 defects within the foreseeable future

3 - Fair Moderate defects that will continue to deteriorate
2 - Good Defects that have not begun to deteriorate

1 – Excellent Minor defects

The grade values for the most common defects are shown in Table 5-4. For defects with variable grade values dependent on the degree of deficiency of the defect, an estimated average value was used.

Figure 5-5 shows the number of reaches where an identified deficiency was found at least once within the reach. It provides a general sense of the magnitude of the problems that were found in the portion of the District's collection system that was CCTV inspected. The problems identified most were cracks (2,091 reaches, 30% of Total), fine roots (1,291 reaches, 18% of total), and fractures (1,115 reaches, 15% of total).

The purpose of CCTV inspections is to determine the condition of the GGSD existing gravity sewers, and formulate a rehabilitation plan for the defective sewers. The rankings provide a good indication as to which pipes are in poor condition, but cannot be relied upon solely to prioritize improvement projects. The priorities are selected primarily with consideration of the health and safety of the public and protection of the environment by minimizing the possibility of sanitary sewer overflows and leakage. The pipe capacity, location of particular defects, and the tributary areas/wastewater flow rates are other considerations used in formulating the final capital improvement project priorities.

The initial priorities for improvements to the sewers are based on the severity of the pipe defects. The seven (7) categories utilized in this report are as follows:

- a. <u>Severe Condition</u> This category primarily includes structural defects of deformed pipe, hole in pipe, broken pipe, and large joint offsets.
- Major Condition This category primarily includes structural defects of multiple fractures, medium
 joint offsets and major sags. Pipes with a large number of cracks are also included.
- c. <u>Moderate Condition</u> Pipes in this category have fractures, cracks, small and medium joint offsets, and sags.
- d. Minor Condition Pipes in this category have slight sags, cracks, and small joint offsets.

Table 5-4
Defect Codes and Condition Grades

Structural Defects	_	Grade
Crack - circumferential	CC	1
Crack - longitudinal	CL	2
Crack - multiple	CM	3
Crack - spiral	CS	2
Crack - Hinge	СН	4
Fracture - circumferential	FC	2
Fracture - longitudinal	FL	3
Fracture - multiple	FM	4
Fracture - spiral	FS	3
Fracture - Hinge	FH	4
Broken - soil visible	BSV	5
Broken - void visible	BVV	5
Hole - soil visible	HSV	5
Hole - void visible	HVV	5
Deformed - horizontal	DH	5
Deformed - vertical	DV	5
Collapsed	XP	5
Joint Offset - medium	JOM	3 ^a
Joint Offset - large	JOL	5 ^b
Joint Separated - small	JSS	1 ^c
Joint Separated - medium	JSM	1
Joint Separated - large	JSL	2
Surface Damage	S	2
Lining Failure	LF	3
Point Repair - defective	RPPD	4
Sags	MWLS	2

^aPACP grade is 1. Grade is increased for this report.

 $^{^{\}rm c}{\rm PACP}$ does not have coding for small separated joints. This coding is developed for this report

Operational & Maintenance	•	Grade
/Construction Feature Defects		Grade
Deposits Attached - encrustation barrel	DAE	2
Deposits Attached - grease	DAGS	2
Deposits Attached - other	DAZ	3
Deposits Settled	DS	2
Deposits Ingress	DN	2
Roots Fine - barrel	RFB	2
Roots Fine - lateral	RFL	1
Roots Fine - joint	RFJ	1
Roots Fine - connection	RFC	1
Roots Tap - barrel	RTB	3
Roots Tap - lateral	RTL	2
Roots Tap - joint	RTJ	2
Roots Tap - connection	RTC	2
Roots Medium - barrel	RMB	4
Roots Medium - lateral	RML	3
Roots Medium - joint	RMJ	3
Roots Medium - connection	RMC	3
Roots Ball - barrel	RBB	5
Roots Ball - lateral	RBL	4
Roots Ball - joint	RBJ	4
Roots Ball - connection	RBC	4
Infiltration - weeper	IW	2
Infiltration - dripper	ID	3
Infiltration - runner	IR	4
Infiltration - gusher	IG	5
Obstacles	ОВ	4
Vermin	V	1
Tap (Lateral) factory made - defective	TFD	2
Tap (Lateral) break in - intruding	TBI	3
Tap (Lateral) break in - defective	TBD	3
Line	L	2
Intruding Sealing Material - ring hanging	ISSRH	4
Intruding Sealing Material - ring	ISSR	4
Miscellaneous - camera underwater	MCU	4
Miscellaneous - camera blocked	MSA	0

^bPACP grade is 2. Grade is increased for this report.

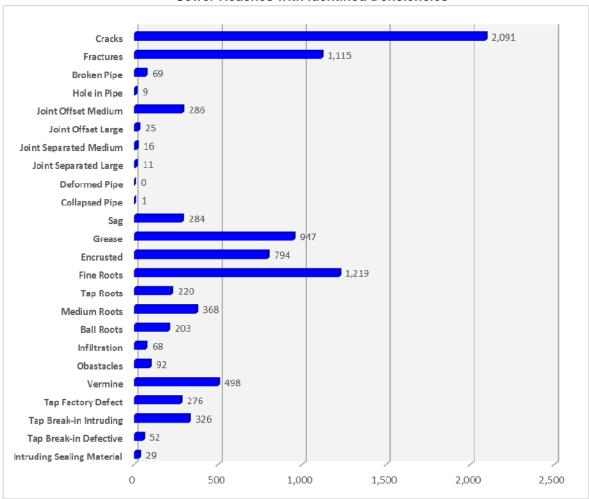


Figure 5-5
Sewer Reaches with Identified Deficiencies

- e. <u>O&M</u> This condition is for operational and maintenance problems and construction feature defects. There are no structural defects.
- f. No Deficiency This condition is for the pipe with no structural, operation and maintenance or construction feature defects.
- g. <u>Reevaluate</u> This condition is for the pipes that have been rehabilitated since the initial condition assessment. CCTV inspection will be performed and a new condition assessment will be conducted to provide these reaches an appropriate categorization.

Appendix D-3 lists the CCTV locations by initial replacement/rehabilitation priorities, from most to least severe, based on the structural condition of the pipes. Pipes that have been abandoned since its inspection are included for record keeping purposes. Appendix D-4 shows the CCTV locations color coded by rehabilitation/replacement priority.

Figure 5-6 illustrates the distribution of the comprehensive sewer priorities for the District's gravity sewer system.

Page 53 of 614

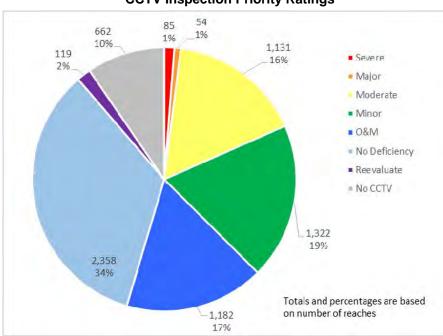


Figure 5-6
CCTV Inspection Priority Ratings

Rehabilitation and Replacement Capital Improvement Program

The Garden Grove Sanitary District will address the "Severe" and "Major" collection system deficiencies. Table 5-5 lists the project priorities assigned to the 139 reaches of collection system identified as in "Severe" or "Major" condition, as well as planning level implementation costs based upon June 2016 dollars (Engineering News Record Index of 11,148.28 for the Los Angeles area). Implementation cost is determined by adding 35 percent of construction cost to cover engineering, inspection, and administration. The total estimated cost of upgrading the "Severe" or "Major" condition priorities is \$19.7M.

The District generally addresses the rehabilitation projects by the priorities included in Table 5-5.

The District has been proactive in implementing rehabilitation projects, by rehabilitating the reaches identified as "severe", "major", and "moderate". The District generally provides improvements at sewers that can be completed by its staff. These sewers are removed from the SSRP improvement list, once the District has performed the rehabilitation, which generally consists of spot repairs.

The reaches that have been repaired are identified as "Reevaluate" in Appendix D-3 and Appendix D-4. There are 99 reaches that have been rehabilitated since its initial condition assessment. Since the rehabilitation, the sewer was not inspected again and the sewer was not prioritized to reflect the improvements that were implemented. These pipes will be recommended to be included in the next phase of the District's Condition Assessment and Rehabilitation/Replacement Plan.

Table 5-5

_								S	truct	ural Re	pla	ace	emei	nt/R	ehal	oilitati	on			1
						ä				Pipe	a									
Dhaca	Tape No.	DVD No.	Inspection No.	Reversal Tape No.	Reversal DVD No.	Reversal Inspec. No.	Location	ссту	Existing Sewer ID	Previous Sewer ID.	Direction of Camera	Size (in)	Material	Length (ft)	CCTV Length (ft)	Priority	Ranking		Construct Costs	Total Cost (Const, Engin, Inspection, & Admin)
á	_ a	16	Ĕ	Re	å	Re	Street Name	Date	ŭ	Ĕ	٥	Siz	Ma		ö	Ę	Ra	Comments 18.7' BROKEN PIPE (SV). 18.7'	(\$)	(\$)
	2	R030	12				8TH ST	9/21/2005	5269	SPP110017	U/S	6	VCP	120	18.7	1_Severe	1	MSA = BROKEN PIPE. SOIL & ROOTS IN BROKEN PIPE, POSSIBLY ABANDONED Repeat inspection, DVD 19 -	\$32,871	\$44,375
3	3	53	22				LEWIS	1/10/2008	369	SPU130017	U/S	8	VCP	271	272	1_Severe	1	Section 6 Spot repair at 120.40 ft BSV, 162.0 ft JOM	\$98,843	\$133,438
	5	MAP 3-B3- 3	30				TAFT STREET	8/21/2012	4333	SPO140030	U/S	6	VCP	350	46.4	1_Severe	1	46.4' MSA (JOM). 46.4' BVV & after BVV Possible Collapsed Ppe(Pipe plugged with broken pipe materials). Severe Defect. No Reversal Video Replace Pipe 46.4' to end of the Collapsed Pipe	\$95,873	\$129,428
T,	21		12				10760 Garden				DS		VCP				^			
2		G003	3	H			Grove Blvd. WASCO DR	3/15/2004 7/14/2005	1887	SPO130006 SPK060027	U/S	8	VCP	63 160	63 174.8	1_Severe 1_Severe	2	Replace pipe 152.5' JOL (D/SH) JOL	\$17,257 \$58,437	\$23,297 \$78,890
3	3	28	33	Н			EASY	7/27/2007	5209	SPO080043	D/S	8	VCP	325	314	1_Severe	2	Replace from 260 ft to 314 ft	\$118,532	\$160,018
	5	MAP 3-3	3				EUCLID STREET	7/27/2012	5119	SPO100002	D/S	8	VCP	535	537.9	1_Severe	2	336.4 % 506' BSV, 508.1 BVV, 509.1 BVV, 510.9" JOL (D/SL), 160' to 166' Deformed Pipe Horizontal. Too many Cracks & Fractures.0' to 234' & 340' to 420' DSZ. Severe Defect Replace All Pipe or Replace Pipe 160 to 166' & 506' to 510.9', Patch Repair @ 336.4. Reline Pipe	\$195,398	\$263,787
Ι.	45		11				10242 Garden Grove Blvd.	4/30/2004		SPN130004	DS	8	VCP	381	381	1_Severe	3	Replace pipe	\$139,153	
F	1 40		<u> </u>				GIOVE DIVU.	4/30/2004		311130004	100	0	VCI	301	301	1_Severe	3	3' & 26.5' MSA =DAGS, HEAVY	ψ139,133	\$107,000
2	2	G058	7		G058	8	VOLKWOOD ST	12/13/2005		SPS110006	D/S	8	VCP	92	91.5	1_Severe	3	GREASE AT 26.5', NO INSPECTION 3' TO 26.5'	\$33,419	\$45,115
ŧ	5	MAP 1-2	7				LAMPLIGHTER STREET	7/19/2012	1126	SPG100014	D/S	8	Clay Tile	177	173.4	1_Severe	3	173.4' MSA (DAE). End of the Sew er Line. 157.2' DH. Severe Defect Replace Pipe 155' to 161' and Clean Deposits	\$64,799	\$87,479
ŧ	5	MAP 2 July- 4	. 5		MAP 2 July- 4	4	LAMPSON AVENUE	6/28/2012	1994	SPK110041	D/S	8	Clay Tile	240	201.7	1_Severe	4	103.2' BVV & 106.8' BSV & Deformed Horizontal Pipe 103.8' to.106.8' .MSA (BVV). Severe Defect Inspection Completed Replace Pipe 103.2' to 109.8'	\$87,655	\$118,335
Ι.	45		12				Garden Grove Bl./Rosew ood Dr.	4/30/2004		SPN130005	DS	8	VCP	193	193	1_Severe	5	Replace pipe	\$70,489	
		MAP 2-1-3	5				FLETCHER DR	7/12/2012	2627	SPN110036	D/S		VCP	330		1_Severe	5	346.4' & 350.6 BVV, 346.6' BSV, 347' Deformed Horizontal Pipe. Severe Defect Replace Pipe 185' to 188'(FM) & 338' to 354'	\$120,526	\$162,710
	5	MAP 4-B1- 2 June	4				NOTTINGHAM A VE	9/10/2012	158	SPO220027	D/S	8	VCP	269	349	1_Severe	6	313' & 315.7' BVV, 313.9' Deformed Pipe. Severe Defect. Inspection Report shows 16.9' JOL. It was JOM & we changed it. Replace Pipe 311' to 317' 148' Deformed Vertical Pipe.	\$98,081	\$132,410
1.	.	Map 2	_				D ESTE DR	0/4/0040	4055	CDM MOCCOC		C	VC5	4.7	454.5	4 Ca	_	Severe Defect. U/S MH is CO.	650.000	670.465
2	2	B1 S006	7 5	Н			VOLKWOOD ST	6/4/2012 10/18/2005	4255	SPM020034 SPS110011	U/S D/S	8	VCP	147 291	151.5 290.5	1_Severe 1_Severe	7 8	Replace Pipe 148' to 152' 3.3' JOL (D/SL)	\$53,689 \$106,099	
ţ		Map 1 May	2				BELGRAVE AVENUE	5/15/2012	1170	SPG090050	D/S	8	VCP	284	286.1	1_Severe	8	140.3' BVV & 269.8' BSV. Continuous Fractures & Cracks. Severe Defect Replace Or Reline Pipe	\$103,652	\$139,931
	5	MAP 1	14				CHAPMAN AVENUE	5/11/2012	1065	SPG090017	D/S	8	VCP	325	326	1_Severe	9	24.4' HVV, 127' & 213' BVV. Continuous FM. Severe Defect Replace Pipe 21' to 27', 124' to 130', 210' to 216' & Reline all pipe. 93.1' & 93.5' BSV, 244.2' BVV.	\$118,839	\$160,432
ŧ	5	MAP 3-B5	10	$\lfloor \rfloor$		L	HAVENWOOD DRIVE	9/13/2012	4815	SPP140011	D/S	8	VCP	295	292	1_Severe	10	Severe Defect Replace Pipe 92.8' to 96' & 240' to 246'	\$107,743	\$145,453
Ę	5	June Map 2 B1	15				HEDLUND DR	6/7/2012	3610	SPM030026	D/S	8	VCP	330	332.3		11	303.3' HSV & 306.4' BVV. Severe Defect Replace Pipe 300' to 309' 27.2' BSV & 358' JOL (D/SL) at	\$120,526	
ţ	5	MAP 3-B3- 1	20				LAMPSON AVENUE	8/2/2012	4408	SPP110039	D/S	8	Clay Tile	230	413.8	1_Severe	12	Material Change Point. Severe Defect Replace Pipe 27' t0 30'to BSV. Fix or Replace JOL @ 358'	\$84,003	\$113,404

_	Structural Replacement/Rehabilitation																			
Phase	Tape No.	DVD No.	Inspection No.	Reversal Tape No.	Reversal DVD No.	Reversal Inspec. No.	Location Street Name	CCTV Date	Existing Sewer ID	Previous Sewer ad	Direction of Camera	Size (in)	Material	Length (ft)	CCTV Length (ft)	Priority	Ranking	Comments	Construct Costs (\$)	Total Cost (Const, Engin, Inspection, & Admin) (\$)
5		MAP 4-B2- 3	9				WESTMINSTER BOULEVARD	9/28/2012	5320	SPP170005	D/S	10	VCP	320	319.8	1_Severe	13	61.8' BVV & 163' JOL (D/SL). Severe Defect. Laterals at 188.6',192.9' and 235.5 plugged with over 50% Deposits. Replace Pipe 61.8' to 65' & 163' to 166' and Clean Laterals by Home Owner	\$146,092	\$197,224
5		MAP 3-5	15				GARY STREET	7/23/2012	5110	SP0080039	D/S	8	Clay Tile	277	270.9	1_Severe	14	253' JOL (D/SL) at Material Change Point. 267.3' BVV . Severe Defect Replace Pipe 253 to 271	\$101,234	\$136,667
5		MAP 3-6	1				9TH STREET	7/31/2012	6053	SPP110004	D/S	8	Clay Tile	312	312.4	1_Severe	15	46.7' BVV, 216.6' BSV. Severe Defect. @ 107.7' Unmapped MH Replace Pipe 42' to 47' & 215.9' to 221"	\$114,098	\$154,032
		MAP 3-B3- 3	22				NUTWOOD						VCP			1 Severe		94.9' MSA (HIGH WATER LEVEL, POSSIBLE OFFSET).76.1' JOL (D'SL) 72.4' Small BVV. Severe Defect. No Reversal Video No Connection 11241 to 11143. Pipe ID is not correct. Ask City, Patch Repair BVV & Replace Pipe @76.1' at Material		
5		MAP 3-B3-	22				NUTWOOD	8/22/2012	2378	SPN110002				55	94.9		16	Changing Point Multiple reaches were evaluated with one inspection. 94.9' MSA (HIGH WATER LEVEL, POSSIBLE OFFSET), 76.1' JOL (D/SL) 72.4' Small BVV. Severe Defect. No Reversal Video No Connection 11241 to 11143. Pipe ID is not correct. Ask City, Patch Repair BVV & Replace Pipe @76.1' at	\$20,088	\$27,118
5		3 MAP 3-6	14				STREET WESTLAKE	8/22/2012	2379	SPN110003	D/S		VCP Clay	100	94.9	1_Severe	17	Material Changing Point Multiple reaches were evaluated with one inspection. 9.7' JOL (D/SH) at Material Change Point & 241.7' BVV. 3 Times SAG. Severe Defect. No Reversal Video Replace Pipe 9.7' to 24.8' & 239' to 242'	\$36,523	\$49,306
		MAP 3-B3-					STREET	7/27/2012	4932	SPO110014			Tile	360	243.4	1_Severe	18	21.7' & 112' Small BVV. Severe Defect Replace Pipe19' to 24' &	\$131,483	\$177,502
5		2 MAP 3-3	7				TAFT STREET EUCLID STREET	8/20/2012 7/27/2012	3836 5118	SPO130010 SPO100001	D/S U/S		VCP	535	134.8	1_Severe	19	Patch Repair @ 112' 173.3' JOL (D/SH). Alignments & Sags. Severe Defect. After 462', Looks Like Abandoned pipe Replace Pipe 173.3' to 176.3'. Also Should Replace All Pipe	\$51,132 \$195,398	\$69,028 \$263,787
5		MAP 4-B1- 3	12				BALLAST AVE	9/11/2012	161	SPO230020	D/S	8	VCP	170	169.1	1_Severe	21	167.4' JOL (D/SH). Severe Defect Replace Pipe 163' to 168'	\$62,100	\$83,835
5		MAP 3-5	9				STANFORD AVENUE	7/26/2012	5395	SPO120003	D/S		Clay Tile	460	473.5	1_Severe	22	2' JOL (D/SL) at Material Changing Point. Too Many Cracks & Fractures also Deposits. Severe Defect Replace Pipe 2' to 15.4', Reline Pipe and Clean Deposits	\$168,006	
5		MAP 2 July- 4 June	13				COVEY	6/26/2012	5042	SPM080033	D/S	8	Clay Tile	312	310.7	1_Severe	23	243.4 JOL (D/SL). Too many Fractures & Cracks. Severe Defect Replace Pipe 234.4' to 246.4, Also Reline Pipe	\$113,952	\$153,835
5		Map 2 B1	64				HOMEWAY DRIVE	6/13/2012	5230	SPL060035	D/S	8	VCP	330	323.4	1_Severe	24	317' JOL (D/SL). Severe Defect Replace Pipe 317' to 321.5' 60.7' JOL (D/SL). Severe Defect.	\$120,526	\$162,710
5		MAP 3-B3- 3	29				TAFT STREET	8/21/2012	3941	SPO140006	U/S	8	VCP	145	217.9	1_Severe	25	Unmarked MH @139.2'. Inspection Report Camera Direction w as U/S, but it w as D/S & w e changed it. Replace Pipe 60.7' to 68.3'	\$52,958	\$71,494
5		MAP 3-B5	15				NUTWOOD STREET	9/7/2012	2382	SPN110006	D/S	8	VCP	330	328.4	1_Severe	26	90.8' JOL (D/SL) @ Material Changing Point . Severe Defect Replace Pipe 90.8' to 112'	\$120,526	\$162,710

	Structural Replacement/Rehabilitation																		
Tape No.	DVD No.	Inspection No.	Reversal Tape No.	Reversal DVD No.	Reversal Inspec. No.	Location Street Name	CCTV Date	Existing Sewer ID	Previous Sewer ID.	Direction of Camera	Size (in)	Material	Length (ft)	CCTV Length (ft)	Priority	Ranking	Comments	Construct Costs (\$)	Total Cost (Const, Engin, Inspection, & Admin) (\$)
	MAP 3-5	6				ACACIA AVENUE	7/25/2012	2806	SPO120022	D/S	8	Clay Tile	330	328.6	1_Severe	27	73.1' JOL (D'SL) at Material change point. Too Much Fractures & Cracks. 4 Lateral (73,102.6', 199.1' & 232.2') have 50 % Grease. Severe Defect Replace Pipe 73.1' to 78.6'. Reline Pipe & clean Laterals. 263.3' JOL (D'SL) & Cracks.	\$120,526	\$162,710
	MAP					BROOKHURST	7/0/0040	5000	000 1000000	D/0		VOD	000	005.0	4 0	00	Severe Defect Replace Pipe	#04.000	0400 400
	2-1-1 MAP 3-B2- 4	15				STREET FREDRICK DRIVE	7/6/2012 8/24/2012	5368 4757	SPM090005 SPP090026	D/S D/S		VCP	330	265.6 313.9	1_Severe	28	263.3' to 265.6' & Reline all Line Same Inspection Map 3-B3-3 # 18. Use this one & delete other. Replace Pipe @ 311.4 to next joint	\$94,960 \$120,526	\$128,196 \$162,710
	MAP 2-1-4	13				SEACREST DRIVE	7/17/2012	5880	SPN080024	D/S	8	VCP	245	247.8	1_Severe	30	5' JOL (D/SL). Severe Defect Replace Pipe 5' to 7'	\$89,481	\$120,800
	MAP 4-B1- 6	4				TRASK AVE	10/3/2012	421	SPR140021	D/S		VCP	46	70.5	1_Severe	31	18.4' JOL (D/SL). Severe Defect Replace Pipe 16.2' to 18.4' 294.1' BSV. Cracks & too many	\$20,772	\$28,043
	MAP 1	13				CHAPMAN AVENUE	5/11/2012	1066	SPG090018	D/S	8	VCP	350	348	1_Severe	32	Fractures . Severe Defect Replace Pipe or Reline	\$127,830	\$172,571
	MAP 1	12				CHAPMAN AVENUE	5/11/2012	1321	SPG090058	D/S		VCP	350	348.1	1_Severe	33	98.7' BVV. Cracks & too many Fractures . Severe Defect Replace Pipe or Reline	\$127,830	\$172,571
	MAP 1	11				CHAPMAN AVENUE	5/11/2012	1173	SPG090053	D/S	8	VCP	303	300.6	1_Severe	34	43.3' BVV. Cracks & too many Fractures . Severe Defect Replace Pipe or Reline 83.1' BSV. Continuous Fractures	\$110,533	\$149,220
	Map 1 May	5				VANGUARD AVENUE	5/16/2012	1475	SPG090036	D/S	8	VCP	213	211 2	1_Severe	35	& Cracks. Severe Defect. Pipe ID wasn"t exist Reline Pipe	\$77,684	\$104,874
	Map 1 May	6				VANGUARD AVENUE	5/16/2012	1476	SPG090037	D/S		VCP	213	213.3	1_Severe	36	169.1' BVV. Continuous Fractures & Cracks. Severe Defect Reline Pipe	\$77,688	\$104,879
	Map 1 May	3				BELGRAVE AVENUE	5/15/2012	1171	SPG090051	D/S	8	VCP	300	279.5	1_Severe	37	25.4' BVV. Severe Defect Replace Pipe 23' to 29'	\$109,569	\$147,918
	MAP 3-5	14				WAKEFIEID AVENUE	7/23/2012	6604	SPP060007	D/S		Clay Tile	300	293.7	1_Severe		273.3' BSV, Fractures & Cracks. Severe Defect Replace Pipe 273.3' to 276' & Reline Pipe	\$109,569	\$147,918
	MAP 3-B3- 4 MAP	31				STUART DRIVE	8/28/2012	3709	SPQ130002	D/S	8	VCP	305	298.2	1_Severe	39	174.2' Small BVV, Fractures. Severe Defect Patch Repair BVV & Reline Pipe 387.6' BVV, Close to Ending MH.	\$111,395	\$150,383
	3-B2- 5	8				FALLINGLEAF STREET	8/28/2012	6547	SPS090011	D/S	8	VCP	388	392.3	1_Severe	40	Severe Defect Replace Pipe 387.6' to 391' & Reline Pipe	\$141,753	\$191,367
	MAP 3-B3- 3	28				TAFT STREET	8/21/2012	3942	SPO140007	D/S	8	VCP	340	252.6	1_Severe	41	50.2' Small BVV. Cracks & fractures. Severe Defect. @ 181' Unmarked MH Patch Repair 50.2' & Reline Pipe	\$124,178	\$167,641
	MAP 3-6	11				STANFORD AVENUE	7/27/2012	4403	SPP120037	u/s		Clay Tile	407	406	1_Severe		221.4' BVV (Mssing Pipe) Severe Defect Replace Pipe221.4' to 224'	\$148,795	\$200,873
	MAP 2-2-2	9				GARDEN GROVE	7/20/2012	3375	SPK130004	U/S		Clay Tile	50	149.6			2.8' BVV. Severe Defect. Ending MH w as 8386. We checked GIS & Changed it. Replace Pipe 0' to6'	\$18,261	\$24,653
	June Map 2 B1	91				MA GNOLIA STREET	6/15/2012	4240	SPL050054	D/S	8	VCP	247	258.3	1_Severe	44	257.5' HVV. Severe Defect Replace Pipe 254.5' to 257.5'	\$90,212	\$121,786
	June Map 2 B1	8				CHANTICLEER RD	6/4/2012	3487	SPL020006	D/S	8	VCP	290	287.3	1_Severe	45	234.5' HSV. Severe Defect Replace Pipe 234.5' to 237.5'	\$105,917	\$142,988
	MAP 3-B3- 1	14				ALLEY E/OF MAIN STREET	8/3/2012	6763	SPP120027	D/S		Clay Tile	663	82.8	1_Severe	46	82.8' MSA (DAZ). 14.8' BVV. Severe Defect No Reversal Video) Replace Pipe 14' to 17'	\$181,611	\$245,174
	May Folder			May Folder	_												Lateral @ 81.5 plugged 50 % .Inspection Completed Replace pipe 19' to 24' & Clean lateral @		
	2 MAP	7	H	2	8	OWEN STREET	5/29/2012	1622	SPF120031	D/S	8	VCP	258	261.3	1_Severe	48	81.5'	\$94,229	\$127,210
	3-B3- 5 MAP	11				BONSER AVE	8/31/2012	3191	SPN100045	U/S	8	VCP	170	183	1_Severe	49	19.5' BSV. Severe Defect Replace Pipe 19.5' to 22.5' 19' BSV, Missing Pipe. There is an another utility pipe inside the	\$62,089	\$83,820
	3-B3- 1	5				GEORGE STREET	8/6/2012	4129	SPQ110005	D/S	8	VCP	340	346.5	1_Severe	50	broken part. Severe Defect Replace Pipe 17' to 20'	\$124,178	\$167,641

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Tape No.	DVD No.	Inspection No.	Reversal Tape No.	Reversal DVD No.	Reversal Inspec. No.	Location Street Name	CCTV Date	Existing Sewer ID	Previous Sewer ID.	Direction of Camera	Size (in)	Material	Length (ft)	CCTV Length (ft)	Priority	Ranking	Comments	Construct Costs (\$)	Total Cost (Const, Engin, Inspection, & Admin) (\$)
	June Map 2					BROOKHURST											55.4' BVV & JOM 55.4' & 58.5. Severe Defect Replace pipe 55.4'		
	B1	59				STREET	6/13/2012	5014	SPM050017	D/S	10	VCP	282	237.4	1_Severe	52	to 58.5'	\$128,744	\$173,804
	MAP 4-B1- 5	1				HARBOR BLVD	9/26/2012	573	SPR160024	D/S	8	VCP	252	288.8	1_Severe	53	235.7' BVV. Severe Defect Replace Pipe 235.7' to 241'	\$92,039	\$124,253
	MAP 4-B2- 1	29				RANCHERO WY	9/4/2012			D/S	6	VCP	277	277.1	1_Severe	54	274.5' BVV. Severe Defect. End of the Sever Lane Replace Pipe 270' to 277'	\$75,904	\$102,470
	MAP 4-B2- 1	18				BARNETT WY	9/7/2012	4825	SPP150009	U/S	8	VCP	380	382	1_Severe	55	2.12' BVV. Severe Defect. Laterals at 186.7', 228.04', 288.10', 352.5', 373.3' over 50 % deposits. Replace Pipe 0 to 3' laterals should be cleaned by Home ow ners	\$138,787	\$187,363
	MAP 3-B2- 1	9				9th STREET	8/7/2012	6323	SPP080005	D/S	8	VCP	380		1_Severe	56	Too Many Fractures & Cracks. Severe Defect. Laterals at 199.6', 272' & 340.8' have over 50% Grease. Reline Pipe & Clean Grease by Home Owner	\$138,787	\$187,363
	MAP 3-B2-	1				OL OTDET	0/7/0040	0000	SPP080004	5	•	1/05	005	205.0	4.0		Too Many Fractures & Cracks. Severe Defect. Laterals at 115.9', 184.5' , 244.7', 313.2' & 385.3' have over 50% Grease. Reline Pipe & Clean Grease by	6444.000	040475
\vdash	1	10				9th STREET	8/7/2012	6322	SPP080004	D/S	8	VCP	395	395.6	1_Severe	57	Home Owner Continuous Cracks & Fractures.	\$144,266	\$194,759
	MAP 1	5				LAURELTON AVENUE	5/11/2012	1061	SPG090013	D/S	8	VCP	371	369.8	1 Severe	58	Severe Defect Replace Pipe or Reline	\$135,500	\$182,925
	MAP 1	10				CHAPMAN AVENUE	5/11/2012	1174	SPG090013	D/S	8	VCP	350	346.3	1 Severe	59	Cracks & too many Fractures . Severe Defect Replace Pipe or Reline	\$135,500	
	MAP 2 July- 1	2				CHAPMAN AVE	6/19/2012	5936	SPK090023	D/S	8	VCP	275		1_Severe	60	Cracks & too many Fractures . Severe Defect Replace Pipe or Reline	\$100,438	\$135,592
	MAP 2 July- 1	1				CHAPMAN AVE	6/19/2012	5929	SPK090003	D/S	8	VCP	275	274.5	1_Severe	61	Cracks & too many Fractures . Severe Defect Replace Pipe or Reline	\$100,438	\$135,592
	MAP 2 July- 1	5				MACNAB STREET	6/19/2012	5927	SPK080024	D/S	8	VCP	295	291.5	1_Severe	62	Cracks & too many Fractures . Severe Defect Replace Pipe or Reline	\$107,743	\$145,453
	Map 1 May MAP	9				LAURELTON AVENUE	5/16/2012	1483	SPG090044	D/S	8	VCP	307	304.5	1_Severe	63	Continuous Fractures & Cracks. Severe Defect Reline Pipe	\$112,078	\$151,305
	3-B3- 4	33				ALLEY	8/28/2012	4460	SPQ130025	U/S	8	VCP	395	389.5	1_Severe	64	Continuous Fractures & Cracks. Severe Defect Reline Pipe	\$144,266	\$194,759
	MAP 3-B3- 7	2				LAMPSON AVE	8/31/2012	6536	SPT100049	D/S	8	VCP	250	243.3	1_Severe	65	Continuous Fractures & Cracks. Severe Defect Should Reline	\$91,307	\$123,265
	Map 1 May	1				LAURELTON AVENUE	5/15/2012	1471	SPG090032	D/S	8	VCP	350	348	1_Severe	66	Continuous Fractures & Cracks. All Joints have DAE. Severe Defect Clean Deposits & Reline Pipe	\$127,830	\$172,571
	MAP 3-1	2				ALLEN DR	7/19/2012	2923	SPN100034	D/S	8	VCP	272	272.8	1_Severe	67	Cracks & Fractures. Severe Defect. Reline Pipe	\$99,343	\$134,112
	MAP 3-2	14				WAKEFIELD AVE	7/24/2012	6605	SPP060006	D/S	8	VCP	327	328.5	1 Severe	68	Cracks & Fractures. Severe Defect Reline Pipe	\$119,430	\$161,231
	Map 1 May	4				BELGRAVE AVENUE	5/15/2012	1172	SPG090052	D/S	8	VCP	368	369	1_Severe	69	Continuous Fractures & Cracks. Severe Defect Reline Pipe	\$119,430	
	MAP 3-2 MAP	7				EUCLID STREET	7/24/2012	6602	SP0060001	D/S	8	VCP	350		1_Severe	70	Cracks & Fractures. Severe Defect. Also 152' Tap Break Defective, Broken Pipe piece in the Lateral Reline Pipe. TBD should be fixed by Home owner	\$127,830	
	4-B1-	١,,				DEADING AVE	0/40/00 10	2000	ODAU POSSO	D/2	_	V/05		244.0	4 0	70	Too Many Crack & Fracture.	#44° 15°	6451.00
\vdash	4 MAP	14	\vdash			READING AVE WESTLAKE	9/13/2012	2023	SPN170038	D/S	8	VCP Clay	307	311.2	1_Severe	72	Severe Defect Reline Pipe Cracks & Fractures. Severe	\$112,126	\$151,370
\sqcup	3-6	16	Щ			STREET	7/26/2012	5398	SPO120007	D/S	8	Tile	314	324.4	1_Severe	73	Defect Should Reline	\$114,682	\$154,821
	MAP 4-B1- 4	12				READING AVE	9/13/2012	2588	SPM170026	D/S	8	VCP	176	176.9	1_Severe	75	Too Many Crack & Fracture. Severe Defect Reline Pipe	\$64,134	\$86,581
	MAP 1	9				LAMPLIGHTER STREET	5/11/2012	2434	SPG090019	D/S	8	VCP	273	271.9	1_Severe	76	Cracks & Fractures . Severer Defect Reline Pipe	\$99,598	\$134,458
	MAP 3-1	3				HACKAMORE RD	7/19/2012	2881	SPN090021	D/S	8	VCP	330		1_Severe	77	Cracks & Fractures. Severe Defect Reline Pipe	\$120,526	

	Structural Replacement/Rehabilitation																		
No.	lo.	Inspection No.	Reversal Tape No.	Reversal DVD No.	Reversal Inspec. No.	Location		Sewer ID	Pipe Sewer S sn	Direction of Camera	(in)	al	Length (ft)	CCTV Length (ft)	'n	ви		Construct	Total Cost (Const, Engin, Inspection,
Tape No.	DVD No	lnspe	Rever	Reven	Rever	Street Name	CCTV Date	Existing	Previous ID.	Direct	Size (i	Materia	Lengí	ссти	Priority	Ranking	Comments	Costs (\$)	& Admin) (\$)
	MAP 3-1	4				HACKAMORE RD	7/19/2012	2882	SPN090022	D/S	8	VCP	330	332.4	1_Severe	78	Cracks & Fractures. Severe Defect Reline Pipe	\$120,526	\$162,710
	Map 1 May	7				VANGUARD AVENUE	5/16/2012	1480	SPG090041	D/S	8	VCP	152	148.4	1_Severe	80	Continuous Fractures & Cracks. Severe Defect Reline Pipe	\$55,369	\$74,748
	MAP 3-1	1				ALLEN DR	7/19/2012	2879	SPN100031	D/S	8	VCP	280	242.7	1_Severe	81	Cracks & Fractures. Severe Defect Reline Pipe	\$102,264	\$138,057
	6	6				HAZARD	4/12/2007	316	SPN190001	D/S	10	VCP	362	359	2_Major	4	Spot repair at 14.30 ft FM and 245.60 ft FM. Clean pipe.	\$165,290	\$223,142
17		3				10930 Grove St.	3/5/2004		SPO120012	DS	8	VCP	500	500	2_Major	6	Replace pipe	\$182,615	\$246,530
44		21				13121 Coast St. 9820 Garden	4/27/2004	772	SPJ130024	DS	10	VCP	191	658	2_Major	7	Replace pipe	\$87,422	\$118,020
45		26				Grove Blvd. 11262 Garden	5/4/2004	2342	SPM130024	DS	6	VCP	299	299	2_Major	8	Replace pipe	\$81,903	\$110,569
45		23	45		33	Grove Blvd.	5/4/2004		SPP130002-B	US	10	VCP	332	332	2_Major	9	Replace pipe	\$151,570	\$204,620
	M011	6				ROBERT LN	8/25/2005	5856	SPQ080056	D/S	8	VCP	157	152.4	2_Major	9	98.1' MINOR BROKEN PIPE (VV)	\$57,341	\$77,410
L						9916 Garden													
45 14		18 18	14		19	Grove Blvd. 10222 Russell	4/30/2004 3/2/2004	2907	SPN140015	DS DS	10 6	VCP	331 365	331 367	2_Major 2_Major	10	Replace pipe Replace pipe	\$151,114 \$99,982	\$204,004 \$134,975
17	G046	10	14		13	VOLKWOOD ST	10/10/2005	2301	SPS100024	D/S	8	VCP	321	320.8	2_Major	11	2 SAGS, HIGH FLOW	\$117,166	\$158,174
						8062 Garden									,-				,,
43		11				Grove Blvd./Motel	4/22/2004	6835	SPJ130027	DS	8	VCP	315	313	2_Major	12	Replace pipe 3 SAGS, 6' (D/SL) JOM, HIGH	\$114,934	\$155,161
L	G046	9				VOLKWOOD ST	10/10/2005	0051	SPS100023	D/S	8	VCP	342	341.8	2_Major	12	FLOW	\$124,836	\$168,528
11		27	12		1	13115 Pleasant St. 10000 Garden	2/26/2004	2351	SPO130019	DS	6	VCP	360	371	2_Major	13	Replace pipe	\$98,612	\$133,126
32		10				Grove Blvd.	4/1/2004		SPM130029	DS	10	VCP	314	314	2_Major	14	Replace pipe	\$143,353	\$193,526
46		6				13371 Cypress St.	5/6/2004		SPO140048	DS	8	VCP	5	5	2_Major	16	Replace pipe	\$1,826	\$2,465
8		20				12635 Main St.	2/18/2004	4791	SPO110004	DS	8	VCP	307	195	2_Major	19	Reline	\$111,980	\$151,172
	G030	5				CHAPMAN AV	8/29/2005	6274	SPQ090059	D/S	12	VCP	265	258.5	2_Major	20	OBZ= OBS, BUILT INTO STRUCTURE POSITION.	\$145,179	\$195,992
	R064 R052	5 1				EASEMENT CHAPMAN AV	12/5/2005 11/3/2005	558 6279	SPS130014 SPQ090008	D/S D/S	8 18	VCP VCP	382 400	383.0 405.1	2_Major 2_Major	22		\$139,520 \$328,707	\$188,352 \$443,754
	RUSZ					CHARWANAV	11/3/2003	02/9	3FQ090006	U/S	10	V CF	400	405.1	Z_IVIAJUI	23	CONTINUOUS FRACTURE	φ326,707	\$443,734
	G027	8				TIMMY LN	8/23/2005	5643	SPR080018	D/S	8	VCP	241	242.1	2_Major	24	MULTIPLE	\$88,020	\$118,828
	G048	6				VOLKWOOD ST	10/17/2005		SPS110009	D/S	8	VCP	335	334.7	2_Major	27	SAG	\$122,242	\$165,027
	MAP 3-B3- 2	13				CENTRAL AVENUE	8/10/2012	2492	SPO140033	D/S	6	VCP	320	328.4	2_Major	82	56.4' Small BVV. Major Defect Patch Repair	\$87,655	\$118,335
		10				OLIVII VIE AVEI VEL	0/10/2012	2402	CI 0140000	D, C	Ü	VOI	020	020.4	Z_IVIGIOI	02	198.1' BVV. Major Defect. Also Laterals @ 61.7' & 139.4' 75%	ψ07,000	ψ110,000
	MAP					ACACIA				l		Clay					full of Grease Patch Repair BVV		
	3-5	19				PARKWAY/ALLEY	7/27/2012	6926	SPO120014	U/S	8	Tile	310	306	2_Major	83	& clean Laterals	\$113,221	\$152,849
	MAP 3-B3-																60.3' BVV. 128.4' MSA (RBJ). No Reversal Video. Major Defect. Patch Repair 184.3', Cut & Clean		
	5	29				PARTRIDGE ST	8/29/2012	524	SPS130009	U/S	8	VCP	128	128.4	2_Major	84	RBJ	\$46,896	\$63,309
	MAP 3-B3-											Clay					80.7' BVV. Major Defect. Ending MH w as 11420. We checked GIS		
	1	30				8TH STREET	8/1/2012	5273	SPP110021	D/S	6	Tile	325	325.2	2_Major	85	& changed it. Patch Repair	\$89,025	\$120,183
	MAP	3				MOEN STREET	7/2/2012	2068	SPJ070008	D/S	8	Clay	111	100 7	2_Major	86	0' Small BVV. Major Defect Patch	\$40,541	\$54.720
-	2-2-2 MAP	3	H			IVIDENSTREET	112/2012	2006	3F3070008	L/S	0	Tile	111	108.7	Z_IVIAJUI	00	Repair	\$40,541	\$54,730
	3-B3- 1	11				STANFORD AVENUE	8/3/2012	5140	SPP120018	D/S	8	VCP	334	329.5	2_Major	87	316' Small BVV. Major Defect Patch Repair	\$122,096	\$164,830
	June Man 4	-				VAIOTT CTDEET	6/7/2012	1000	CDC000000	D/C	10	VCD	400	440.0	O Major	00	327.6' BVV. Major Defect Patch	£406.067	POE4 404
	Map 1 June	5				KNOTT STREET	6/7/2012	1682	SPG090002	D/S	10	VCP Clay	408	412.8	2_Major	88	Repair 336.9' BSV. Major Defect Patch	\$186,267	\$251,461
-	Map 1	22				KNOTT STREET	6/27/2012	918	SPH120008	D/S	8	Tile	427	424.8	2_Major	89	Repair 176.7' Small BVV. Major Defect.	\$155,953	\$210,537
	MAP 4-B1-																Inspection Report shows JOL @ 176.7'. It was JOM & we		
	5 MAP	17	H			11th STREET	9/19/2012	527	SPM180005	D/S	8	VCP	283	282.6	2_Major	90	changed it Patch Repair	\$103,214	\$139,339
	3-B2- 6	10				CHAPMAN AVE	8/30/2012	6027	SPT090020	U/S	10	VCP	320	296.8	2_Major	92	286.1' Small BSV. Major Defect Patch Repair	\$146,092	\$197,224
	Map 1 May	16				FAIRCHILD STREET	5/17/2012	986	SPE080004	D/S	8	VCP	260	257.1	2_Major	93	254.3' BVV. End of the Sew er Lane. Major Defect Patch Repair	\$94,960	\$128,196
	MAP									_							7! Coroll DV// Marieria Defe		
	4-B1- 5	2				HARBOR BLVD	9/26/2012	571	SPR160022	D/S	8	VCP	71	228	2_Major	94	7' Small BVV. Moderate Defect Patch Repair	\$26,065	\$35,188
	June Map 1 Map 1	20				BELGRAVE AVE VANGUARD	6/27/2012	1409	SPE090035	D/S	8	VCP	350	353.3	2_Major	95	253.7' BSV. Major Defect Patch Repair Continuous Fractures & Cracks.	\$127,830	\$172,571
	May	8				AVENUE	5/16/2012	1481	SPG090042	D/S	8	VCP	227	225.7	2_Major	96	Major Defect Reline Pipe	\$82,915	\$111,935

$\overline{}$	Structural Replacement/Rehabilitation							1												
Phase	Tape No.	DVD No.	Inspection No.	Reversal Tape No.	Reversal DVD No.	Reversal Inspec. No.	Location Street Name	CCTV Date	Existing Sewer ID	Previous Sewer BD.	Direction of Camera	Size (in)	Material	Length (ft)	CCTV Length (ft)	Priority	Ranking	Comments	Construct Costs (\$)	Total Cost (Const, Engin, Inspection, & Admin) (\$)
		MAP 3-B2-																Cracks & Fractures. Major Defect		
5		2	3				HOLYOAK LANE	8/16/2012	6562	SPR080005	D/S	8	VCP	345	353.8	2_Major	97	Reline Pipe	\$126,004	\$170,106
		MAP 3-B2-																Cracks & Fractures. Major Defect		
5		2	1				HOLYOAK LANE	8/16/2012	6561	SPR080004	U/S	8	VCP	325	343.9	2_Major	98	Reline Pipe	\$118,554	\$160,047
5		MAP 3-6 MAP	17				WESTLAKE STREET VANGUARD	7/26/2012	5397	SPO120006	D/S	8	Clay Tile	336	336.1	2_Major	101	Inspection Report shows 11' BVV. This is RPP (Patch Repair). Too Many Fractures & Cracks. Major Defect Should Reline Cracks & Fractures . Major	\$122,717	7 \$165,668
5		1	8				AVENUE	5/11/2012	1067	SPG090020	D/S	8	VCP	246	245	2_Major	102	Defect Reline Pipe	\$89,847	\$121,293
5		MAP 3-B3- 4	32				LEMONWOOD LANE	8/28/2012	4461	SPQ130026	D/S	8	VCP	205	201.1	2_Major	103	Inspection Report shows 77.3' & 115.6' BVV. Those are FM and we changed them. Cracks & Fractures, Major Defect Reline Pipe	\$74,872	2 \$101,077
5		MAP 3-5	13				LAW DRIVE	7/24/2012	2922	SPN100033	D/S	8	Clay Tile	280	271.6	2_Major	104	Major Reline Pipe	\$102,264	\$138,057
5		MAP 3-B3-	24				LAMPSON AVENUE	8/2/2012	5087	SPP110012	D/S	6	Clay	130	124.6	2_Major	105	Major Reline Pipe	\$35,610	
5		MAP	24	H			A V ENUE	6/2/2012	5087	SPP110012	D/S	ь	Tile	130	124.6	2_iviajor	105	Ivajor Reline Pipe	\$35,610	\$46,073
5		3-B2- 5	11				FIREBRAND STREET	8/27/2012	6508	SPS090004	D/S	8	VCP	269	273.5	2_Major	106	Cracks & Fractures. Major Defect Reline Pipe	\$98,247	7 \$132,633
Ť		MAP	-	Ħ			O.H.E.I.	GIZITZGIZ	0000	Ci Coccoci i	5,0			200	270.0	Z_Major				ψ10 <u>2</u> ,000
5	ľ	3-B2- 2	2				HOLYOAK LANE	8/16/2012	6563	SPR080006	D/S	8	VCP	265	256.5	2_Major	107	Cracks & Fractures. Major Defect Should Reline	\$96,786	\$130,661
5		MAP 3-B2- 5	10				FIREBRAND STREET	8/27/2012	6509	SPS090005	D/S	8	VCP	270	271.3	2_Major	108	Cracks & Fractures. Major Defect Reline Pipe	\$98,612	2 \$133,126
5	:	MAP 2 July- 1	14				DALE STREET	6/21/2012	1901	SPK070030	D/S	8	VCP	358	367	2_Major	111	Cracks & Fractures. Major Defect Reline Pipe	\$130,909	\$176,728
5		MAP 3-1	5				HACKAMORE RD	7/20/2012	2880	SPN090020	D/S	8	VCP	350	355.4	2_Major	112	Cracks & Fractures. Major Defect Reline Pipe	\$127,830	\$172,571
5	ľ	June Map 2 B1	68				KATELLA AVE	6/14/2012	1839	SPK050026	D/S	8	VCP	225	228.4	2_Major	113	Too many Cracks . Major Defect Should Reline	\$82,177	
5	·	MAP 4-B2- 2	22				ALLEY	9/12/2012	334	SPK160028	D/S	8	VCP	264	262.5	2_Major	114	Fractures & Cracks. Major Defects. Should Reline	\$96,423	\$130,171
5		MAP 3-B5	22				NELSON STREET	9/6/2012	3024	SPO120017	D/S	6	VCP	150	200	2 Major	115	Too Many Crack. Major Defect Reline Pipe	\$41,088	\$55,469
5		MAP 2-1-2 MAP	7				LANAKILA LN	7/10/2012	2670	SPM110026	D/S	8	VCP	240	241.6	2_Major	116	Cracks & Fractures. Major Defect Reline Pipe Cracks & Fractures. Major Defect	\$87,655	
5		2-1-4	17				FAYEAVE	7/18/2012	2876	SPN090017	D/S	8	VCP	270	272.3	2_Major	117	Reline Pipe	\$98,612	\$133,126
5		MAP 3-B3- 1	26				8TH STREET	8/2/2012	5278	SPP120007	D/S	8	Clay Tile	331	328	2_Major	118	Cracks & Fractures. Major Defect Should Reline	\$120,745	\$163,006
5		MAP 3-B5	29	П			GARDEN GROVE	9/5/2012	4449	SPP130031	D/S	10	VCP	50	330.1	2 Mais-	119	Too Many Crack. Major Defect	\$22,827	7 \$30,816
5		June Map 2 B1	29				PARADE STREET	6/4/2012	3447	SPM990025	D/S	8	VCP	300	303.2	2_Major 2_Major	120	Reline Pipe 300.7' Small BVV, end of the Sew er Lane. Major Defect Patch Repair	\$109,569	\$147,918
П							Totals							39,468	39,560				\$14,603,472	\$19,714,688

Reaches that require extensive improvements that cannot be completed by the District (such as removal and replacement and/or lining) will be addressed by the District after the sewer capacity improvement projects have been implemented.

The District implements the capacity improvement projects at approximately \$4 million per year (June 2005 dollars), and the rehabilitation/replacement projects at approximately \$1 million per year. Once the system capacity improvements have been completed, the District will implement rehabilitation and replacement projects at approximately \$5 million per year." The District will generally address the rehabilitation projects by the rankings included in Table 5-5 and Appendix D-3.

Follow-up CCTV Inspection and Condition Assessment Program

The Sewer System Rehabilitation Plan states that the follow-up CCTV Inspection and Condition Assessment adhere to the following schedule:

- Severe Condition Annually
- Major Condition Every three (3) years
- Moderate Condition Every five (5) years
- Minor Condition or No Deficiency Every ten (10) years
- Operation and Maintenance Condition (except hot spots) every four (4) years
- ➤ No Deficiency Every ten (10) years
- ➤ Hot Spots After every cleaning

D. STAFF TRAINING

Order 2006-0003-DWQ requires that the District "provide training on a regular basis for staff in sanitary sewer system operations and maintenance, and require contractors to be appropriately trained."

The District's Preventative Maintenance Program details the training program and the certification requirements.

The District requires its staff members to obtain/maintain California Water Environment Association's (CWEA) certification, which is the current industry standard for training and certifying sewer collection system maintenance staff. Failure to meet these requirements may ultimately be a cause for termination or reassignment. Currently, the District staff members hold the following CWEA certification (shown in Table 5-6).

The District utilizes the following options to meet the requirements of its validated training program:

- Bi-weekly all hands safety training
- Annual confined space training
- > Attendance of training sessions for new equipment and on the latest technologies
- Attendance of seminars and conferences on areas concerning sanitary sewer systems
- Attendance of classes on sanitary sewer systems

Page 61 of 614

Table 5-6
District CWEA Certification

				CWEA Certification
Sanitation Staff	Title	Email	CWEA Grade	No.
Brent Hayes	Sanitation Supervisor	brenth@ci.garden-grove.ca.us	4	60124009
Frank Howenstein	Repair/Construction Foreman	frankh@ci.garden	3	90623004
John Zavala	Heavy Equipment Operator	johnz@ci.garden-grove.ca.us	1	80721004
Stephen Porras	Sanitation Foreman	Stevepoci.garden-grove.ca.us	3	60723037
Jose Gomez	Senior Sewer Maintenance Worker	joseg@ci.garden-grove.ca.us	2	80722112
Alex Valenzuela	Senior Sewer Maintenance Worker	alejandrov@ci.garden-grove.ca.us	2	120622002
Jesse Viramontes	Senior Sewer Maintenance Worker	jessev@ci.garden-grove.ca.us	2	80122007
Ervin Dubrul	Sewer Maintenance Worker	ervind@ci.garden-grove.ca.us	1	80721002
Allen Kirzhner	Sewer Maintenance Worker	allenk@ci.garden-grove.ca.us	2	100522003
Victor Blas	Sewer Maintenance Worker	victorb@ci.garden-grove.ca.us	1	80721005
		frankd@ci.garden-grove.ca.us		
Frank De La Rosa	Sewer Maintenance Worker		1	100121007
Keon Nelson	Sewer Maintenance Worker	keonn@ci.garden-grove.ca.u	1	80721160
Robert Haendiges	Sewer Maintenance Worker	roberth@ci.garden-grove.ca.us	-	-

Training documentation includes date and time of training, agenda, the instructor, and the list of attendees.

The District bi-weekly internal training program includes topics that range from sanitary sewer overflow response to general health and safety to proper maintenance techniques.

The District requires its contractors who will perform flow monitoring, CCTV inspection, maintenance, repair, or replacement on the gravity system, as well as pump stations and force mains to possess the level of training and certifications appropriate for their duties. Determination of the appropriate training certification may be the responsibility of the contractor; however the District staff may require additional certification.

E. EQUIPMENT INVENTORY

Order 2006-0003-DWQ requires that the District must, "provide equipment and replacement part inventories, including identification of critical replacement parts."

The current equipment inventory is included in the Preventative Maintenance Program and detailed in Appendix D-5. The equipment inventory is updated as equipment and materials are added or removed.

SECTION 6 DESIGN AND PERFORMANCE PROVISIONS

The Order requires that the District:

- (a) Design and construction standards and specifications for the installation of new sanitary sewer systems, pump stations and other appurtenances; and for rehabilitation and repair of existing sewer systems; and
- (b) Procedures and standards for inspecting and testing the installation of new sewers, pump stations, and other appurtenances and for rehabilitation and repair projects.

6-1 COMPLIANCE:

The documents used for design and performance evaluations include the following:

- Design Criteria for Sewer Facilities (Appendix D-1)
- Sewer Standard Drawings (Appendix D-2)
- Standards Specifications for Public Works Construction (Green Book)

The Design Criteria for Sewer Facilities document and standard plans that are on file at the Municipal Service Center and can be downloaded from the City of Garden Grove's official website:

http://www.ci.garden-grove.ca.us/internet/pdf/pw/landdev/2007-ggpw-standardplans.pdf

The Sewer Standard Drawings are on file at the Municipal Service Center and can be downloaded from the City of Garden Grove's official website:

http://www.ci.garden-grove.ca.us/pdf/pw/landdev/Series%20S.pdf

A. STANDARDS FOR INSTALLATION, REHABILITATION, AND REPAIR

Order 2006-0003-DWQ requires that the District possess, "Design and construction standards and specifications for the installation of new sanitary sewer systems, pump stations and other appurtenances; and for rehabilitation and repair of existing sewer systems."

Design Criteria for Sewer Facilities

Standards for design and construction of sewer facilities are included in the District's Design Criteria for Sewer Facilities document. Topics covered in this document include, but are not limited to the following:

Minimum Pipe Size
Pipe Depth to Diameter Ratio
Design Flow Criteria
Stationing Procedure
Sewer Pipe Material

Clean-Outs

Minimum Velocity

Minimum and Maximum Slope Standard Location and Alignment

Minimum Depth

Manhole Design Requirements

Separation Requirements between Utilities

House Laterals Sewer Pump Station Design Requirements Private Sewer System Standard Sewer Notes

Sewer Standard Drawings

The District's Sewer Standard Drawings include details for manholes, laterals, joints, cleanouts, bedding, concrete encasements, concrete slope anchors, steel casing pipes, wye connections, PVC liner, gas flap installation, grease interceptors, and criteria for separation of water and sewer mains.

As part of this SSMP update, the District has updated its Sewer Standard Drawings.

B. STANDARDS FOR INSPECTION AND TESTING OF NEW, REHABILITATED AND REPAIRED FACILITIES

Order 2006-0003-DWQ requires that the District possess, "Procedures and standards for inspecting and testing the installation of new sewers, pump stations, and other appurtenances and for rehabilitation and repair projects."

Standards for the inspection and testing of the District's sewer facilities are included in the Design Criteria for Sewer Facilities document and the American Public Works Association Standard Specification and Drawings for Public Works Construction ("The Greenbook"). The inspection and testing procedures shall adhere to the following:

- CCTV Inspection (Greenbook 306-1.4.1)
- Water Exfiltration Testing (Greenbook 306-1.4.2)
- Water Infiltration Testing (Greenbook 306-1.4.3)
- > Air Pressure Test (Greenbook 306-1.4.4)
- Water Pressure Test (Greenbook 306-1.4.5)
- Equipment Installation and Testing (Design Criteria for Sewer Facilities 17.28)

SECTION 7 OVERFLOW EMERGENCY RESPONSE PLAN

The Order requires that at a minimum Overflow Response Plan must include:

- (a) Proper notification procedures so that the primary responders and regulatory agencies are informed of all SSOs in a timely manner;
- (b) A program to ensure appropriate response to all overflows;
- (c) Procedures to ensure prompt notification to appropriate regulatory agencies and other potentially effected entities (e.g. health agencies, Regional Water Boards, water suppliers, etc.) of all SSOs that potentially affect public health or reach the waters of the State in accordance with the MRP (Monitoring and Reporting Program). All SSOs shall be reported in accordance with this MRP, the California Water Code, other State Law, and other applicable Regional Water Board WDRs or NPDES permit requirements. The SSMP should identify the officials who will receive immediate notification;
- (d) Procedures to ensure that appropriate staff and contractor personnel are aware of and follow the Emergency Response Plan and are appropriately trained;
- (e) Procedures to address emergency operations, such as traffic and crowd control and other necessary response activities: and
- (f) A program to ensure that all reasonable steps are taken to contain and prevent the discharge of untreated and partially treated wastewaters to waters of the United States and to minimize or correct any adverse impact on the environment resulting from the SSOs, including such accelerated or additional monitoring as may be necessary to determine the nature and the impact of the discharge.

7-1 COMPLIANCE

The District has developed a stand-alone Overflow Emergency Response Plan to comply with the aforementioned Waste Discharge Requirements. The District's Overflow Emergency Response Plan was completed by AKM Consulting Engineers in August 2016.

A. INITIAL NOTIFICATION PROCEDURES

Order 2006-0003-DWQ requires that at a minimum, the OERP must include "proper notification procedures so that the primary responders and regulatory agencies are informed of all SSOs in a timely manner;" An overflow may be detected by District employees or by others. To report a spill the public can call the following:

Garden Grove Municipal Services Center (714) 741 – 5395 (Business hours)
Police Dispatch 9 – 1 – 1 (After Hours)

The City of Garden Grove's website include the telephone number to call in the event of a sewer overflow:

http://www.ci.garden-grove.ca.us/pw/sewers

B. SSO RESPONSE

Order 2006-0003-DWQ requires that at a minimum, the SSOERP must include, "A program to ensure appropriate response to all overflows."

The Overflow Emergency Response Plan document includes a step-by-step procedure to respond to all types of sanitary sewer overflows. The report details the response procedure for the following spill events:

- Gravity sewer spills
- Pump station failure
- Force main leak
- Spills from District's sewer system that terminate in Orange County Public Works storm drain facilities
- Private Spill
- Spills originating from OCSD sewers
- Spills originating from the Cities of Anaheim, Orange, Stanton, Westminster, Santa Ana, and Midway Sanitary District sewers

C. NOTIFYING THE APPROPRIATE REGULATORY AGENCIES

Order 2006-0003-DWQ requires that at a minimum, the OERP must include "procedures to ensure prompt notification to appropriate regulatory agencies and other potentially effected entities (e.g. health agencies, Regional Water Boards, water suppliers, etc.) of all SSOs that potentially affect public health or reach the waters of the State in accordance with the MRP (Monitoring and Reporting Program). All SSOs shall be reported in accordance with this MRP, the California Water Code, other State Law, and other applicable Regional Water Board WDRs or NPDES permit requirements. The SSMP should identify the officials who will receive immediate notification;"

Spill report receipts from the public during business hours are directed to the City's Water Services Division main office and then forwarded to the Sanitation Supervisor, Foreman, and other key staff. The District's Overflow Emergency Response Plan includes a comprehensive contact list, including the telephone numbers of individuals that may need to be reached in the event of a sanitary sewer spill. This list includes, but is not limited to the following:

- State Office of Emergency Services (Current SSOERP identifies the agency as California Emergency Management Agency)
- Orange County Public Works (Orange County Flood Control District)
- Regional Water Quality Control Board
- Orange County Health Care Agency
- Nearby Sewer Agencies
- On-Call Contractors
- Orange County Sanitation District
- Garden Grove Fire Department
- > Garden Grove Police Department
- Environmental Consultant

The Overflow Emergency Response Plan includes procedures for reporting all spills electronically, to the State Water Resources Control Board (SWRCB) California Integrated Water Quality System (CIWQS) website, (http://ciwqs.waterboards.ca.gov/). In doing so, District's spills are automatically added to the Statewide Sanitary Sewer Overflow Database. The Water Services Manager, Sanitation Supervisor, and Sanitation Foreman are registered to submit draft and certified reports on the CIWQS website.

D. TRAINING

Order 2006-0003-DWQ requires that at a minimum, the OERP must include "procedures to ensure that appropriate staff and contractor personnel are aware of and follow the Emergency Response Plan and are appropriately trained."

The District's Overflow Emergency Response Plan includes the requirement to ensure its staff is properly trained on the overflow emergency response procedures. Training consists of annual office and annual in-the field training.

E. ADDITIONAL RESPONSE ACTIVITIES

Order 2006-0003-DWQ requires that at a minimum, the OERP must include "procedures to address emergency operations, such as traffic and crowd control and other necessary response activities."

The Overflow Emergency Response Plan document includes the procedures to address emergency operations which include traffic control, crowd control, and public notification:

F. PREVENTION OF DISCHARGE OF WASTEWATERS TO SURFACE WATERS AND IMPACT ON ENVIRONMENT

Order 2006-0003-DWQ requires that at a minimum, the OERP must include "a program to ensure that all reasonable steps are taken to contain and prevent the discharge of untreated and partially treated wastewaters to waters of the United States and to minimize or correct any adverse impact on the environment resulting from the SSOs, including such accelerated or additional monitoring as may be necessary to determine the nature and the impact of the discharge."

The SSOERP includes the procedures to minimize the impact of a sanitary sewer overflow. In the event that a sewer overflow reaches waters of the State, the District shall adhere to the monitoring requirements of Orange County Health Care Agency. The District's Environmental Consultant will also be contacted to assess the sewer overflow.

SECTION 8 FATS, OILS, AND GREASE CONTROL PROGRAM

The Order requires:

The District shall evaluate its service area to determine whether a FOG control program is needed. If the District determines that a FOG program is not needed, the District must provide justification for why it is not needed. If FOG is found to be a problem, the District must prepare and implement a FOG source control program to reduce the amount of these substances discharged to the sanitary sewer system. This plan shall include the following as appropriate:

- (a) An implementation program and schedule for a public education outreach program that promotes proper disposal of FOG;
- (b) A plan and a schedule for the disposal of FOG generated within the sanitary sewer system service area. This may include a list of acceptable disposal facilities and/or additional facilities needed to adequately dispose of FOG generated within a sanitary sewer system service area;
- (c) The legal authority to prohibit discharges to the system and identify measures to prevent SSOs and blockages caused by FOG;
- (d) Requirements to install grease removal devices (such as traps or interceptors), design standards for the removal devices, maintenance requirements, Best Management Practices (BMP) requirements, record keeping and reporting requirements;
- (e) Authority to inspect grease producing facilities, enforcement authorities, and whether the enrollee has sufficient staff to inspect and enforce the FOG ordinance;
- (f) An identification of sanitary sewer system sections subject to FOG blockages and establishment of a cleaning maintenance schedule for each section; and
- (g) Development and implementation of source control measures for all sources of FOG discharged to the sanitary sewer system for each section identified in (F) above.

8-1 COMPLIANCE

The District initially completed and certified its FOG Control Program on May 1, 2009. As part of this SSMP report document, the District has provided an updated and expanded FOG Control Program that complies with the aforementioned Waste Discharge Requirements.

A. EDUCATION AND OUTREACH

Order 2006-0003-DWQ requires the District to manage "an implementation program and schedule for a public education outreach program that promotes proper disposal of FOG".

The District's public education and outreach program includes topics such as proper Fats, Oils, and Grease (FOG) disposal procedures, kitchen best management practices, grease control device maintenance, etc. The District's outreach consists of the following:

FOG Control Program for FSEs document provided to Food Service Establishments (FSEs)
 (Appendix F-1)

- FOG control and Sanitary Sewer Overflow (SSO) prevention brochures (Appendix F-2)
- Water utility bill inserts
- Grease lids and information for proper disposal for residents that have had a FOG induced spill.
- Public awareness at school outreach events and municipal events
- ➤ Outreach media i.e. rulers, notepads, bracelets, pens and pencils
- Sewer saver display
- Knock the Grease Goblin out of the Sewer game

The public informational material regarding proper FOG disposal is provided in the following languages: English, Spanish, Korean, and Vietnamese. The District also posts educational information on the City of Garden Grove's website:

http://www.ci.garden-grove.ca.us/?q=pw/fatfreesewers http://www.ci.garden-grove.ca.us/pw/business

B. FOG DISPOSAL

Order 2006-0003-DWQ requires the District to implement "a plan and a schedule for the disposal of FOG generated within the sanitary sewer system service area. This may include a list of acceptable disposal facilities and/or additional facilities needed to adequately dispose of FOG generated within a sanitary sewer system service area.

A list of liquid waste haulers that are registered with the County of Orange Health Care Agency is provided to the FSEs, and included in Appendix F-3. The list details waste haulers that are capable of servicing grease interceptors and grease traps.

Orange County Sanitation District (OCSD) treatment facilities are the approved locations for disposal of FOG and wash water disposal.

C. LEGAL AUTHORITY

Order 2006-0003-DWQ requires the District to possess "the legal authority to prohibit discharges to the system and identify measures to prevent SSOs and blockages caused by FOG"

The District's Code of Regulations (Appendix C-1) and Ordinance No. 6 (Appendix C-3), FOG Control Regulations Applicable to FSEs, provide the legal authority to regulate the FOG discharges and identify measures to prevent SSOs and blockages caused by FOG. It prohibits FSEs from the following activities:

- Disposing wastewater with FOG concentrations of more than 200 ppm, into the sewer collection system (Code of Regulations, Section 4.10.050)
- Using food grinders (Ordinance No. 6, Section 4.30.030A)
- Adding FOG emulsifying agents or biological additives to the system (Ordinance No. 6, Section 4.30.030B)
- Discharging cooking wastes to the system (Ordinance No. 6, Section 4.30.030C)
- Discharging wastewater from dishwashers to grease control devices (Ordinance No. 6, Section 4.30.030D)
- Discharging wastewater with temperatures greater than 140°F into a grease control device (GCD).

(Ordinance No. 6, Section 4.30.030E)

- ➤ Introducing biological additives for grease remediation, without FOG Control Program Manager's approval (Ordinance No. 6, Section 4.30.030F)
- Discharging waste from toilets, urinals, washbasins, and other fixtures that handle fecal material to the sewer system that is attached to the GCD (Ordinance No. 6, Section 4.30.030G)
- Discharging wastes from Grease Control Devices (GCD) into the sewer system (Ordinance No. 6, Section 4.30.030H)

Ordinance No. 6 also provides the District the authority for the following:

- The District may require the installation of a grease interceptor (Ordinance No. 6, Section 4.30.050A&B).
- The District requires the food service establishments to comply with Best Management Practices including the removal of food grinders, proper employee training, installation of grease traps, use of grease rendering containers, and proper documentation (Ordinance No. 6, Section 4.30.050C)
- Commercial property owners are responsible for the installation of grease interceptors when multiple food service establishments are located on a single parcel. (Ordinance No. 6, Section 4.30.070)
- ➢ If the District must respond to a sanitary sewer overflow that originates from FSEs, the property owner will be responsible to pay the cost for the District's containment and clean up effort. (Ordinance No. 6, Section 4.30.080)
- FSEs are required to submit two (2) copies of site, mechanical, and plumbing plans regarding new or existing grease interceptors, grease traps, monitoring facility, and/or metering facility. These drawings may require signature by a civil, chemical, mechanical, or electrical engineer. (Ordinance No. 6, Section 4.30.090A&B)
- FSEs with grease interceptors must comply with the District's requirements for sizing, installation, access, and maintenance. (Ordinance No. 6, Section 4.30.100)
- ➢ Grease traps may be required when excess grease may be introduced into the District's sewer system. FSEs must comply will the District's requirements which include but are not limited to permitting, equipment sizing, maintenance, inspection, and prohibitions. (Ordinance No. 6, Section 4.30.110)
- As necessary, the District may require FSEs to construct any monitoring and sampling facilities to inspect the efficiency of the FSEs' grease interceptors or grease traps. (Ordinance No. 6, Section 4.30.120)
- The District has the legal authority to inspect all FSEs to ensure that they are in compliance with the District's Code of Regulations and Ordinance 6. (Ordinance No. 6, Section 4.30.130)
- The District requires FSEs to report the discharge of any material, including FOG, to the sewer system since it may lead to sewer blockages and/or spills. FSEs are required to contact the appropriate local Health Department, City, District, and the FOG Control Program Manager. (Ordinance No. 6, Section 4.30.140)
- The District has the legal authority to enforce the requirements included in the District's Code of Regulations and Ordinance 6. (Ordinance No. 6, Section 4.30.150)

The terms used throughout Ordinance No. 6 and throughout this document have been defined as the following:

Best Management	Schedules of activities, prohibitions of practices, maintenance
Practices(Structural and	procedures, installation of equipment, and other management
Non-Structural)	practices to control and limit the introduction of FOG to sewer
,	facilities.
Board	The Board of Directors of the District.
Change in Operations	Any change in the ownership, food types, or operational
	procedures that have the potential to increase the amount of FOG
	generated and/or discharged by Food Service Establishments in
	an amount that alone or collectively causes or creates a potential
	for SSOs to occur.
Composite Sample	A collection of individual samples obtained at selected intervals
	based on an increment of either flow or time. The resulting mixture
	(composite sample) forms a representative sample of the waste
	stream discharged during the sample period. Samples will be
D'a di anno	collected when a wastewater discharge occurs.
Discharger	Any person who discharges or causes a discharge of wastewater directly or indirectly to a public sewer and/or stormwater drain
	system. Discharger shall mean the same as User.
District	The Garden Grove Sanitary District.
Sewer Facility or System	Any property belonging to the District used in the treatment,
, ,	reclamation, reuse, transportation, or disposal of wastewater.
Effluent	Any liquid outflow from the Food Service Establishment that is
F 1 0" 10	discharged.
Fats, Oils, and Grease	Any substance such as a vegetable or animal product that is used
("FOG")	in, or is a by product of, the cooking or food preparation process,
	and that turns or may turn viscous or solidifies with a change in temperature or other conditions.
FOG Control Program	The FOG Control Program required by and developed pursuant to
1 00 control i logiam	RWQCB Order No. RS- 2002-0014, Section (c)(12)(viii).
FOG Control Program	The individual designated by the District to administer the FOG
Manager	Control Program. The FOG Control Program Manager is
	responsible for all determinations of compliance with the program.
Food Service Establishment	Facilities defined in California Uniform Retail Food Service
	Establishments Law (CURFFL) Section 113785, and any
	commercial entity within the boundaries of the District, operating in
	a permanently constructed structure such as a room, building, or
	place, or portion thereof, maintained, used, or operated for the
	purpose of storing, preparing, serving, or manufacturing,
	packaging, or otherwise handling food for sale to other entities, or for consumption by the public, its members or employees, and
	which has any process or device that uses or produces FOG, or
	grease vapors, steam, fumes, smoke or odors that are required to
	groupe vapore, steam, rames, smoke or buors that are required to

	be removed by a Type I or Type II hood, as defined in CURFFL Section 113785. A limited food preparation establishment is not considered a Food Service Establishment when engaged only in reheating, hot holding or assembly of ready to eat food products and as a result, there is no wastewater discharge containing a significant amount of FOG. A limited food preparation establishment does not include any operation that changes the form, flavor, or consistency of food.
Food Grinder	Any device installed in the plumbing or sewage system for the purpose of grinding food waste or food preparation by-products for the purpose of discharging it into the sanitary sewer collection system
Grease Control Device	Any grease interceptor, grease trap or other mechanism, device, or process, which attaches to, or is applied to, wastewater plumbing fixtures and lines, the purpose of which is to trap or collect or treat FOG prior to it being discharged into the sewer system. "Grease control device" may also include any other proven method to reduce FOG subject to the approval of the District.
Grease Interceptor	A multi-compartment device that is constructed in different sizes and is generally required to be located, according to the California Plumbing Code, underground between a Food Service Establishment and the connection to the sewer system. These devices primarily use gravity to separate FOG from the wastewater as it moves from one compartment to the next. These devices must be cleaned, maintained, and have the FOG removed and disposed of in a proper manner on regular intervals to be effective.
Grease Trap	A grease control device that is used to serve individual fixtures and have limited effect and should only be used in those cases where the use of a grease interceptor or other grease control device is determined to be impossible or impracticable.
General Manager	The individual duly designated by the Board of Directors of the District to administer this Ordinance.
Grab Sample	A sample taken from a waste stream on a onetime basis without regard to the flow in the waste stream and without consideration of time.
Hot Spots	Areas in sewer lines that have experienced sanitary sewer overflows resulting in the need for frequent maintenance and cleaning.
Inflow	Water entering a sewer system through a direct stormwater runoff connection to the sanitary sewer, which may cause an almost immediate increase in wastewater flows.
Infiltration	Water entering a sewer system, including sewer service connections, from the ground through such means as defective pipes, pipe joints, connections, or manhole walls.

Page 72 of 614

Inspector	A person authorized by the District to inspect any existing or proposed wastewater generation, conveyance, processing, and
	disposal facilities
Interceptor	A grease interceptor.
Interference	Any discharge which, alone or in conjunction with discharges from other sources, inhibits or disrupts the District's sewer system, treatment processes or operations; or is a cause of violation of the
	District's NPDES or Waste Discharge Requirements or prevents lawful sludge use or disposal.
Local Sewering Agency	Any public agency or private entity responsible for the collection and disposal of wastewater to the District's sewer facilities duly authorized under the laws of the State of California to construct and/or maintain public sewers.
NPDES	The National Pollutant Discharge Elimination System; the permit issued to control the discharge of liquids or other substances or solids to surface waters of the United States as detailed in Public Law 92-500, Section 402.
New Construction	Any structure planned or under construction for which a sewer connection permit has not been issued.
Person	Any individual, partnership, firm, association, corporation or public agency, including the State of California and the United States of America.
Prohibited Discharge	Any discharge which contains any pollutant, from public or private property to (i) the stormwater drainage system; (II) any upstream flow, which is tributary to the stormwater drain system; (III) any groundwater, river, stream, creek, wash or dry weather arroyo, wetlands area, march, coastal slough, or (iv) any coastal harbor, bay or the pacific Ocean.
Public Agency	The State of California and/or any city, county, special district, other local governmental authority or public body of or within this State.
Public Sewer	A sewer owned and operated by the District, or other local Public Agency, which is tributary to the District's sewer facilities.
Regulatory Agencies	Regulatory Agencies shall mean those agencies having regulatory jurisdiction over the operations of the District, including, but not limited to: a) United States Environmental Protection Agency, Region IX, San Francisco and Washington, DC (EPA). b) California State Water Resources Control Board (SWRCB). c) California Regional Water Quality Control Board, Santa Ana Region (RWQCB). d) South Coast Air Quality Management District (SCAQMD). e) California Department of Health Services (DOHS).

Remodeling	A physical change or operational change causing generation of the amount of FOG that exceed the current amount of FOG discharge to the sewer system by the Food Service Establishment in an amount that alone or collectively causes or create a potential for SSOs to occur; or exceeding a cost of \$50,000 to a Food Service Establishment that requires a building permit, and involves anyone or combination of the following: (1) Under slab plumbing in the food processing area, (2) a 30% increase in the net public seating area, (3) a 30% increase in the size of the kitchen area, or (4) any change in the size or type of food preparation equipment.
Sample Point	A location approved by the District, from which wastewater can be collected that is representative in content and consistency of the entire flow of wastewater being sampled.
Sampling Facilities	Structure(s) provided at the user's expense for the District or user to measure and record wastewater constituent mass, concentrations, collect a representative sample, or provide access to plug or terminate the discharge.
Sewer System Overflow	A sanitary sewer system overflow (SSO), or sewage spill, is each
(SSO) Sewage	instance of a discharge of sewage from a sanitary sewer system. Wastewater
Sewer Facilities or System	Any and all facilities used for collecting, conveying, pumping,
Sewer radinites or Gystern	treating, and disposing of wastewater and sludge.
Sewer Lateral	A building sewer as defined in the latest edition of the California Plumbing Code. It is the wastewater connection between the building's wastewater facilities and a public sewer system.
Sludge	Any solid, semi-solid or liquid decant, subnate or supernate from a manufacturing process, utility service, or pretreatment facility.
Stormwater Drainage System	Street gutter, channel, storm drain, constructed drain, lined diversion structure, wash area, inlet, outlet or other facility, which is part of or tributary to the county-wide stormwater runoff system and owned, operated, maintained or controlled by County of Orange, the Orange County Flood Control District or any city, and used for the purpose of collecting, storing, transporting or disposing of stormwater.
User	Any person who discharges or causes a discharge of wastewater directly or indirectly to a public sewer system. User shall mean the same as Discharger.
Waste	Sewage and any and all other waste substances, liquid, solid, gaseous or radioactive, associated with human habitation or of human or animal nature, including such wastes placed within containers of whatever nature prior to and for the purpose of disposal.
Manifest	That receipt which is retained by the generator of wastes for disposing recyclable wastes or liquid wastes as required by the District.

Page 74 of 614

Waste Minimization Practices	Plans or programs intended to reduce or eliminate discharges to the sewer system or to conserve water, including, but not limited to, product substitutions, housekeeping practices, inventory control, employee education, and other steps as necessary to minimize wastewater produced.
Waste hauler	Any person carrying on or engaging in vehicular transport of waste as part of, or incidental to, any business for that purpose.
Wastewater	The liquid and water-carried wastes of the community and all constituents thereof, whether treated or untreated, discharged into or permitted to enter a public sewer.
Wastewater Constituents and Characteristics	The individual chemical, physical, bacteriological, and other parameters, including volume and flow rate and such other parameters that serve to define, classify or measure the quality and quantity of wastewater.

D. GREASE REMOVAL DEVICES

Order 2006-0003-DWQ requires the District to possess "requirements to install grease removal devices (such as traps or interceptors), design standards for the removal devices, maintenance requirements, Best Management Practices (BMP) requirements, record keeping and reporting requirements."

Ordinance No. 6, FOG Control Regulations Applicable to FSEs, describe the FOG control regulations and requirements regarding installation, maintenance, best management practices, record keeping, and reporting for grease removal devices.

Grease Interceptors

<u>Installation Requirement</u> – Grease interceptors are required during the construction of new FSEs. The FOG Program Manager also has the authority to require the installation of grease control devices at FSEs that are responsible or that have contributed to an SSO.

<u>Design Standards</u>— Ordinance No.6, states that "Grease interceptor sizing shall conform to the current edition of the California Plumbing code. Grease interceptors shall be constructed in accordance with the design approved by the FOG Control Program Manager and shall have a minimum of two compartments with fittings designed for grease retention."

The District has prepared a standard plan for grease interceptors, which is included in Appendix E-2. All new grease interceptors shall be designed and constructed to these standards.

<u>Maintenance Requirements</u> – FSE's are required to fully pump out and clean their grease interceptors on a schedule approved by the District's FOG Control Manager. Generally the grease interceptor cleaning should be performed before the FOG and solids exceed 25% of the interceptor capacity. Historical data regarding the grease accumulation time and solids level are used to create the inspection schedule. Interceptors are required to be cleaned every six (6) months, at minimum. Currently, the District monitors the FSE's cleaning logs to verify that the cleaning is performed as scheduled and to make any changes to the cleaning frequency

as the District determines is necessary.

If at any time the FOG and solid accumulation within a grease interceptor is greater than 25%, FSEs shall fully pump out and clean the grease interceptor.

Grease Traps

<u>Installation Requirement</u> – Where FOG may be introduced into a system, FSEs may be required to install grease traps on fixtures prior to receiving a Garden Grove Plumber's permit.

<u>Design Standards</u>— Ordinance No.6, states that "Sizing and installation of grease traps shall conform to the current edition of the California Plumbing Code."

<u>Maintenance Requirements</u> – FSEs are required to maintain their grease traps per a schedule approved by the District's FOG Control Program Manager. Accumulated grease will be removed as part of the maintenance procedures.

Grease Removal Device Requirements

<u>Best Management Practices</u> - Best Management Practices (BMPs(must be implemented to limit the discharge of FOG to the sewer collection system. Kitchen BMPs are detailed in the FOG Control Program for FSEs document, which is included in Appendix F-1. The kitchen BMPs include the requirements regarding drain screens, grease containers, dishwashing, spill prevention, usage of absorbent materials and towels, and food waste disposal.

<u>Record Keeping and Reporting</u> – The District requires all documents be retained for a minimum of 5 years. This includes training records, grease control device maintenance and cleaning records, private spill records, plumbing maintenance records, grease hauling records, and any other information regarding the District's FOG Control Program.

FSEs are required to keep records of all maintenance inspections. At minimum, the District requires the FSE's to log the following information on its maintenance logs:

- Date of Inspection
- Company and Person performing inspection
- Type of Service (Pumping/hauling, repairs, etc)
- Disposal Site
- > Estimated Volume Pumped
- Service Comments
- > For grease interceptors, the FOG and solid accumulation level shall also be tracked.

E. FSE INSPECTIONS

Order 2006-0003-DWQ requires the District to possess the "authority to inspect grease producing facilities, enforcement authorities, and whether the enrollee has sufficient staff to inspect and enforce the FOG ordinance."

For new FSEs, the District performs a one-time comprehensive inspection, consisting of an evaluation of the FSE's operations, wastes produced, process conducted, FOG sources, kitchen equipment, grease control devices, waste hauling activities, BMPs, and lateral maintenance.

In addition to the comprehensive initial inspection, the District conducts annual inspections at each FSE. The inspections may be conducted during normal business hours at the consent of the owner or with an administrative inspection warrant. Ordinance No. 6 provides the District the necessary legal authority to inspect FSEs and to enforce any non-compliance to the District's FOG Control Program. FSEs shall provide the District access to all grease control devices, monitoring or metering facilities, and the local stormwater system. The FOG Control Program Manager may require FSEs to construct monitoring or metering facilities, as needed for proper maintenance and inspection.

Authorized inspectors also have complete access to all training records, grease hauler manifests, maintenance records, and any other information relating to the FOG Control Program. The authorized inspector may sample and test any area runoff, groundwater, process discharge, and/or treatment system discharge. The authorized inspector may perform smoke and dye tests or require closed circuit television inspections of the private sewers. Photographs and videos may also be taken during the inspection.

During each annual inspection, the authorized inspector will review all maintenance records, conduct visual inspections, and perform any other tests as needed to evaluate the FSEs compliance with the requirements of Ordinance No. 6 and any permits issued to the FSEs. The requirements include but are not limited to:

- Product waste produced by the FSEs meet the current permitting requirements
- > Processes conducted by the FSEs meet the current permitting requirements
- > Chemicals used and stored on the property meet the current permitting requirements
- > Illicit connections to the sewer system and/or grease control devices are prohibited
- Restriction of wastewater with FOG concentrations of more than 200 ppm, into the sewer collection system. Prohibition of cooking waste or wastes from grease control devices to be discharged to the sewer system.
- Prohibition of food grinders
- Restrictions of adding FOG emulsifying agents or biological additives to the system. Prohibition of biological additives added to system for grease remediation, without FOG Control Program Manager's approval.
- Prohibiting the discharge of wastewater from dishwashers to grease control devices and restrictions of wastewaters with temperatures greater than 140°F
- Prohibition of discharging waste from toilets, urinals, washbasins, and other fixtures that handle fecal material to the sewer system that is attached to the grease control devices.
- FSEs do not meet the minimum requirements for proper Kitchen Best Management Practices, as detailed in the FOG Control Program for FSEs (Appendix F-1)

Follow-up inspections may be required when a violation has the potential of resulting in a SSO, such as when a FSE has a history of multiple spills or if a grease control device is in urgent need of cleaning and/or maintenance. The District will notify the FSE in writing, of any violation to Ordinance No. 6 or any permit, and it will include the corrective action to bring the FSE into compliance. Corrective actions typically consist of repairing broken facilities or installing grease control devices. For lesser infractions, such as incomplete maintenance records and logs, the FSEs may be required to fax additional information to the District.

The District performs annual inspections at the FSEs to ensure that they are complying with the regulations of Ordinance No. 6. The District has the power to enforce fines or imprisonment for violations of severe nature.

F. FOG CLEANING AND MAINTENANCE SCHEDULE

Order 2006-0003-DWQ requires the District to plan "an identification of sanitary sewer system sections subject to FOG blockages and establishment of a cleaning maintenance schedule for each section."

Reaches that require additional cleaning have been identified from CCTV inspections, cleaning records, manhole inspections, spill history. Additional cleaning may be necessary to prevent spills caused by FOG, roots, clogged siphons, and undersized pipes.

The District provides additional cleaning for the hot spot reaches on the following interval:

- Monthly (77 Reaches)
- Quarterly (62 Reaches)
- Semiannually (48 Reaches)
- Monthly Inspection Only (53 Reaches)
- Quarterly Inspection Only (12 Reaches)
- Semiannually Inspection Only (11 Reaches)

The District evaluates the inspection reports and SSO history annually to determine if additional FSEs need to install grease control devices, if the Hot Spot cleaning list needs to be updated, or if additional requirements need to be added to the District's FOG Control Program.

G. SOURCE CONTROL MEASURES

Order 2006-0003-DWQ requires the District's plan to include "development and implementation of source control measures for all sources of FOG discharged to the sanitary sewer system for each section identified in (f) above."

The District has complied with this requirement by:

- Providing public education and outreach programs with regards to FOG control
- > Adopting Ordinance No. 6
- Developing and distributing a FOG Control for FSEs document
- Requiring grease interceptors at FSEs
- Inspecting FSEs BMPs and grease interceptors

- > Identifying sewer Hot Spots, including those due to FOG
- > Providing frequent cleaning of sewer Hot Spots related to FOG

SECTION 9 SYSTEM EVALUATION AND CAPACITY ASSURANCE PLAN

The Order requires:

The District shall prepare and implement a CIP that will provide hydraulic capacity of key sanitary sewer system elements for dry weather peak flow conditions, as well as the appropriate design storm or wet weather event. At a minimum, the plan must include:

- (a) Evaluation: Actions needed to evaluate those portions of the sanitary sewer system that are experiencing or contributing to an SSO discharge caused by hydraulic deficiency. The evaluation must provide estimates of peak flows (including flows from the SSOs that escape from the system) associated with conditions similar to those causing overflow events, estimates of the capacity of key system components, hydraulic deficiencies (including components of the system with limiting capacity) and the major sources that contribute to the peak flows associated with overflow events;
- **(b) Design Criteria:** Where design criteria do not exist or are deficient, under take the evaluation identified in (a) above to establish appropriate design criteria; and
- (c) Capacity Enhancement Measures: The steps needed to establish a short- and long-term CIP to address identified hydraulic deficiencies, including prioritization, alternatives analysis, and schedules. The CIP may include increases in pipe size, I/I reduction programs, increases and redundancy in pumping capacity, and storage facilities. The CIP shall include an implementation schedule and shall identify sources of funding.
- (d) Schedule: The enrollee shall develop a schedule of completion dates for all portions of the capital improvement program developed in (A)-(C) above. This schedule shall be reviewed and updated consistent with the SSMP review and update requirements as described in Section D.14.

9-1 COMPLIANCE

The SECAP was initially developed in 2005. A hydraulic model of the District's sewer system was developed utilizing the information contained in the District's wastewater collection system GIS, "As constructed" plans, and field surveying.

The District updated its SECAP in July 2006, November 2007, April 2009, and April 2012. As part of this SSMP report, the District has updated its hydraulic model to include all completed improvement projects. All updates since the previous 2012 SECAP was completed are detailed within this report.

A. EVALUATION

Order 2006-03-DWQ requires the SECAP to include "Evaluation: Actions needed to evaluate those portions of the sanitary sewer system that are experiencing or contributing to an SSO discharge caused by hydraulic deficiency. The evaluation must provide estimates of peak flows (including flows from the SSOs that escape from the system) associated with conditions similar to those causing overflow events, estimates of the capacity of key system components, hydraulic deficiencies (including components of the system with limiting capacity) and the major sources that contribute to the peak flows associated with overflow events;

The System Evaluation and Capacity Assurance Plan (SECAP) document was developed and is kept up-to-date using a calibrated hydraulic model of the District's sewer system.

Model Geometry

All pipes are included in the model except for laterals and private sewer lines. Pipe diameters, lengths, slopes, and roughness coefficients are entered in the model. "As Constructed" plans were used to update the existing model geometry.

Unit Flow Factors

Initially, the system-wide unit flow factors developed for the District's 2001 Sewer Master Plan were used to estimate the average dry weather flows. They were then refined with the extensive flow monitoring data developed by the District staff. The existing development unit flow factors used in the current hydraulic model are illustrated in Table 9-1. For future developments with detailed planning information, the factors provided in Table 9-2 were implemented.

Table 9-1
Unit Wastewater Flow Factors

Land Use		Unit	
Designation	Land Uses	Flow Factor	Units
R-1	Low Density Residential	1,450	GPD/AC
R-2	Medium Density Residential	2,750	GPD/AC
R-3	High Density Residential	3,000	GPD/AC
C-1	Neighborhood Commercial	1,500	GPD/AC
C-2	Community Commercial	1,500	GPD/AC
M-1	Light Industrial	2,000	GPD/AC
O-P	Office/Professional	1,500	GPD/AC
O-S	Open Space	10	GPD/AC
PUD	Planned Unit Development	1,000	GPD/AC
BCSP, CCSP, HCSP	Specific Plans	1,000	GPD/AC

Table 9-2
Unit Wastewater Flow Factors – Future Developments

Unit	
Flow Factor	Units
300	GPD/DU
275	GPD/DU
225	GPD/DU
125	GPD/TSF
100	GPD/TSF
150	GPD/Room
1,000	GPD/TSF
1,000	GPD/TSF
	Flow Factor 300 275 225 125 100 150 1,000

Neighboring Agencies

Wastewater flows from several neighboring jurisdictional agency territories enter the Garden Grove Sanitary District's collection system. The average dry weather flows for these agencies were estimated based upon the tributary area land uses and the unit flow factors listed in Table 9-1, and input into the model.

Future Developments

Since the District's service area is mostly developed, the hydraulic analyses were conducted utilizing fully developed and occupied tributary areas with peak dry weather flows. This included future flows from identified projects, which will increase the wastewater flows above the levels estimated by the unit flow factors. Future Development loads are included in Table 9-3.

Peaking Dry Weather Flow Factor

Peak dry weather flow is calculated from average dry weather flow utilizing the following formula:

Qpdw= 2.0 x Qadw ^{0.92} (cfs) or Qpdw= 1.9313 x Qadw ^{0.92} (mgd) Qadw = average dry weather flow Qpdw = peak dry weather flow

This formula was developed from an extensive flow monitoring effort throughout the District's service area. It may be modified in the future for specific large single land use areas, such as resort hotels and industrial, based upon additional flow monitoring results.

Peak Wet Weather Flow Factor

Peak wet weather flow (Qpww) is calculated from peak dry weather flow utilizing the following formula:

Qpww= 1.4 x Qpdw

This relationship was developed from the data collected in 2003 during the preparation of Garden Grove Sanitary District's Inflow and Infiltration Reduction Plan.

B. DESIGN CRITERIA

Order 2006-0003-DWQ requires that the SECAP include "Design Criteria: where design criteria do not exist or are deficient, under take the evaluation identified in (a) above to establish appropriate design criteria."

The District maintains design criteria in the Garden Grove Sanitary District Design Criteria and Standards for Sewer Facilities document which meet the requirements of Order 2006-0003-DWQ. The standards can be found on the City of Garden Grove's website listed below and at the Municipal Service Center.

http://www.ci.garden-grove.ca.us/internet/pdf/pw/2007-ggpw-standardplans.pdf

Table 9-3 Future Developments

Area	Location	Land Use	No. Units	Unit Type	Area (ac)	Density (du/ac)	Factor	Total Ave Load (gpd)
1	Construction Completed					1		
2	East side of Gilbert Avenue, north of Chapman Ave (Old Costco Site)	Low Density Residential	75	DU	9.1	8.3	300	22,500
3	SE corner of Chapman Ave and Brookhurst St	High Density Residential	250	DU	8.3	30.1	225	56,250
	NW corner of Brookhurst and Garden Grove	High Density Residential	550-750		16.6	33-45	225	168,750
4	Blvd (Brookhurst Traingle)	General Commercial/Retail	200	TSF			125	25,000
	CIM corner of Dreekhurst Ct and Corden Crays			ı	T	Subtotal	for Area 4	193,750
5	SW corner of Brookhurst St and Garden Grove Blvd (Meridith)	Offices	41	TSF	0.6		100	4,100
6	SW corner of Katella Ave and Euclid St (K-Mart)	High Density Residential	300	DU	8.3	36.1	225	67,500
7	SE corner of Century Blvd and Garden Grove Blvd (Century Triangle)	High Density Residential	75	DU	6.0	12.6	225	16,875
8	West side of Main St, north of Garden Grove Blvd	High Density Residential	99	DU	1.6	63.9	225	22,275
9	South of Garden Grove Blvd at West St (Olson II)	Low Density Residential	10-30	DU	0.4	25-75	300	9,000
10	NE corner of Garden Grove Blvd and West St	High Density Residential	200	DU	2.3	86.2	225	45,000
11	Eliminated							
12	East side of Palm St, south of Aspenwood Ave (Palm/Olson)	High Density Residential	159	DU	4.8	33.0	225	35,775
	NA act aids of However Dlawl months of Associated	Hotel	605	Rooms			150	90,750
13	West side of Harbor Blvd, north of Aspenwood Ave (Site "D") Water Park	Restaurant	10	TSF	8.1		1000	10,000
13	Ave (Site D) Water Falk	Indoor/Outdoor Water Park1	100	TSF				10,600
						Subtotal f	or Area 13	111,350
		Hotel	800	Rooms			150	120,000
	Northwest corner of Harbor Blvd and Twintree Ln	Restaurant	10	TSF	3.9		1000	10,000
14		Indoor/Outdoor Water Park1	100	TSF	1			10,600
		macon catagor viator i ant				Subtotal f	or Area 14	140,600
	North of Chapman Ave and west of Harbor Blvd	Hotel	238	Rooms			150	35,700
15	(Langsdon Pit)	Restaurant	5	TSF	9.4		1,000	5,000
						Subtotal f	or Area 15	40,700
	Northeast corner of Harbor Blvd and Twintree Ln	Hotel		Rooms	5.2		150	105,000
16	Trombact comor of Flancer Biva and Twinties En	Restaurant	15	TSF			1,000	15,000
47	On a few attions On works to					Subtotal f	or Area 16	120,000
17 18	Construction Completed	High Donaity Booldontial	2-2	5	6.0		222	70 750
	11031 Cynthia Cir (Olson II) (to OCSD)	High Density Residential	350		6.8	51.5		78,750
19	NE corner of Haster St and Lampson Ave	High Density Residential	441	DU	9.4	46.9	225	99,225
20	West side of Haster St btw Lampson Ave and Blue Spruce Ave (Olson)	High Density Residential	28	DU	0.8	36.2	225	6,300

Table 9-3 (Continued) Future Developments

Land Use			r ataro Borolopinoni						
North of Garden Grove Blvd btw Partridge St and Sungrove St High Density Residential 93 DU 1.0 90.5 225							,	Factor	Load
Proceedings	21	North of Garden Grove Blvd at Partridge St	High Density Residential	93	DU	1.6	56.4	225	20,925
Ave (Sheraton Hotel)	22	and Sungrove St	High Density Residential	93	DU	1.0	90.5	225	20,925
Ave	23	Ave (Sheraton Hotel)	Hotel	475	Rooms	1.5		150	71,250
West side of Harbor Blvd, south of Chapman Ave East side of Palm St, north of Garden Grove Blvd East side of Palm St, north of Garden Grove Blvd East side of Palm St, north of Garden Grove Blvd East side of Palm St, north of Garden Grove Blvd East side of Garden Grove Blvd East side of Garden Grove Blvd, west of Brookhurst St (Galleria Project) East side of Garden Grove Blvd, east of Fern St East side of Dale St, south of Lampson Ave East of Loraleen St High Density Residential East Side of Chapman Ave, east of Loraleen St High Density Residential East Subtotal For Area 29 East Subtotal East Side of Chapman Ave, east of Loraleen St High Density Residential East Subtotal For Area 29 East Subtotal East Su	24	Ave	High Density Residential			1.1	16.5	225	4,050
Ave Restaurant 5 ISF 0.8 1,000 27 East side of Palm St, north of Garden Grove Blvd Palm St, north of Garden Grove Blvd, west of Brookhurst St (Galleria Project) Part of General Commercial/Retail Palm St 125 Pa	25	SE corner of Adelle St and Stanford Ave	Low Density Residential	12	DU	0.8	15.5	300	3,600
Blvd High Density Residential 52 DU 2.9 18.0 225	26	Ave	Restaurant	5	TSF	0.8		1,000	5,000
Blvd Medical Facility 40 ISF 2.1 1,000 South side of Garden Grove Blvd, west of Brookhurst St (Galleria Project) General Commercial/Retail 126 TSF 2.2 30.4 225 South side of Garden Grove Blvd, east of Fern St 125 Total Facility 40 ISF 2.1 1,000 South side of Garden Grove Blvd, east of Fern St 125 Subtotal for Area 29 125 Total Facility Residential 126 TSF 125 Subtotal for Area 29 125 Subtotal for Area 32 125 Subtotal for	27	Blvd	High Density Residential	52	DU	2.9	18.0	225	11,700
Brookhurst St (Galleria Project) General Commercial/Retail Subtotal for Area 29 South side of Garden Grove Blvd, east of Fern St Subtotal for Area 29 High Density Residential North side of Chapman Ave, east of Loraleen St High Density Residential North side of Chapman Ave, east of Loraleen St High Density Residential North side of Garden Grove Blvd, east of Galway St Subtotal for Area 32 General Commercial/Retail Subtotal for Area 32 General Commercial/Retail Subtotal for Area 32 Subtotal for Area 32 General Commercial/Retail Subtotal for Area 32 Su	28	Blvd	,			2.1		ŕ	,
South side of Garden Grove Blvd, east of Fern St High Density Residential South Side of Chapman Ave, east of Loraleen St High Density Residential South Side of Chapman Ave, east of Loraleen St High Density Residential South Side of Chapman Ave, east of Loraleen St High Density Residential South Side of Chapman Ave, east of Loraleen St High Density Residential South Side of Chapman Ave, east of Loraleen St High Density Residential South Side of Chapman Ave and Brookhurst St Restaurant South Side of Garden Grove Blvd, east of Galway St General Commercial/Retail South Side of Garden Grove Blvd at Village Rd General Commercial/Retail South Side of Garden Grove Blvd at Village Rd General Commercial/Retail South Side of Sarden Grove Blvd and Euclid St General Commercial/Retail South Side of Garden Grove Blvd and Euclid St General Commercial/Retail South Side of Hazard Ave, west of Euclid St High Density Residential South Side of Hazard Ave, west of Euclid St High Density Residential South Side of Hazard Ave, west of Euclid St High Density Residential South Side of Hazard Ave, west of Euclid St High Density Residential South Side of Hazard Ave, west of Euclid St High Density Residential South Side of Hazard Ave, west of Euclid St High Density Residential South Side of Hazard Ave, west of Euclid St High Density Residential South Side of Hazard Ave, west of Euclid St High Density Residential South Side of Hazard Ave, west of Euclid St High Density Residential South Side of Hazard Ave, west of Euclid St High Density Residential South Side of Hazard Ave, west of Euclid St High Density Residential South Side of Hazard Ave, west of Euclid St High Density Residential South Side of Hazard Ave, west of Euclid St High Density Residential South Side of Hazard Ave, west of Euclid St High Density Residential South Side of Hazard Ave, west of Euclid St High Density Residential South Side of Hazard Ave, west of Euclid St H		·				22	30.4		14,850
30 South side of Garden Grove Blvd, east of Fern St St 31 East side of Dale St, south of Lampson Ave High Density Residential 30 DU 0.9 31.7 225 31 High Density Residential 30 DU 0.9 31.7 225 32 North side of Chapman Ave, east of Loraleen St High Density Residential 4 DU 1.1 3.8 225 High Density Residential 11 DU 1.1 3.8 225 32 Subtotal for Area 32 33 SW Corner of Chapman Ave and Brookhurst St Subtotal for Area 32 34 North side of Garden Grove Blvd, east of Galway St 35 South side of Garden Grove Blvd at Village Rd 36 West side of Nelson St, north of Stanford Ave 36 Low Density Residential 37 SW corner of Garden Grove Blvd and Euclid St 38 North side of Hazard Ave, west of Euclid St 4 High Density Residential 50 DU 4.1 12.3 225 50 DU 0.9 31.7 225	29	Brookhurst St (Galleria Project)	General Commercial/Retail	126	TSF			-	15,750
St High Density Residential 50 DU 4.1 12.3 225 31 East side of Dale St, south of Lampson Ave High Density Residential 30 DU 0.9 31.7 225 High Density Residential 4 DU 1.1 3.8 225 High Density Residential 11 DU 1.1 3.8 225 High Density Residential 11 DU 1.1 3.8 225 Subtotal for Area 32 33 SW Corner of Chapman Ave and Brookhurst St Restaurant 11 TSF 25.9 1000 34 North side of Garden Grove Blvd, east of Galway St 35 South side of Garden Grove Blvd at Village Rd General Commercial/Retail 60 TSF 3.1 125 36 West side of Nelson St, north of Stanford Ave Low Density Residential 12 DU 1.3 9.4 300 37 SW corner of Garden Grove Blvd and Euclid St General Commercial/Retail 90 DU 6.0 15.0 225					,		Subtotal f	or Area 29	30,600
North side of Chapman Ave, east of Loraleen St High Density Residential 4 DU 1.1 3.8 225 High Density Residential 11 DU 1.1 3.8 225 Subtotal for Area 32 Sub	30	St	,						11,250
North side of Chapman Ave, east of Loraleen St High Density Residential 11 DU 1.1 225 High Density Residential 11 DU 1.1 225	31	East side of Dale St, south of Lampson Ave	,			0.9		-	6,750
32 High Density Residential 11 DU 225 33 SW Corner of Chapman Ave and Brookhurst St Restaurant 11 TSF 25.9 1000 34 North side of Garden Grove Blvd, east of Galway St General Commercial/Retail 30 TSF 1.0 125 35 South side of Garden Grove Blvd at Village Rd General Commercial/Retail 60 TSF 3.1 125 36 West side of Nelson St, north of Stanford Ave Low Density Residential 12 DU 1.3 9.4 300 37 SW corner of Garden Grove Blvd and Euclid St General Commercial/Retail 15 TSF 0.5 125 38 North side of Hazard Ave, west of Euclid St High Density Residential 90 DU 6.0 15.0 225		North side of Chapman Ave. east of Loraleen St	,		_	1.1	3.8		900
33 SW Corner of Chapman Ave and Brookhurst St Restaurant 11 TSF 25.9 1000 34 North side of Garden Grove Blvd, east of Galway St 35 South side of Garden Grove Blvd at Village Rd General Commercial/Retail 30 TSF 1.0 125 35 South side of Garden Grove Blvd at Village Rd General Commercial/Retail 30 TSF 1.0 125 36 West side of Nelson St, north of Stanford Ave Low Density Residential 30 TSF 1.0 125 31 DU 1.3 9.4 300 37 SW corner of Garden Grove Blvd and Euclid St General Commercial/Retail 38 North side of Hazard Ave, west of Euclid St High Density Residential 39 DU 6.0 15.0 225	32		High Density Residential	11	DU				2,475
North side of Garden Grove Blvd, east of Galway St 35 South side of Garden Grove Blvd at Village Rd General Commercial/Retail 60 TSF 3.1 125 36 West side of Nelson St, north of Stanford Ave Low Density Residential 12 DU 1.3 9.4 300 37 SW corner of Garden Grove Blvd and Euclid St General Commercial/Retail 15 TSF 0.5 125 38 North side of Hazard Ave, west of Euclid St High Density Residential 90 DU 6.0 15.0 225					ı		Subtotal f	or Area 32	3,375
34 Galway St General Commercial/Retail 30 ISF 1.0 125 35 South side of Garden Grove Blvd at Village Rd General Commercial/Retail 60 TSF 3.1 125 36 West side of Nelson St, north of Stanford Ave Low Density Residential 12 DU 1.3 9.4 300 37 SW corner of Garden Grove Blvd and Euclid St General Commercial/Retail 15 TSF 0.5 125 38 North side of Hazard Ave, west of Euclid St High Density Residential 90 DU 6.0 15.0 225		•	Restaurant	11	TSF	25.9		1000	11,000
36West side of Nelson St, north of Stanford AveLow Density Residential12DU1.39.430037SW corner of Garden Grove Blvd and Euclid StGeneral Commercial/Retail15TSF0.512538North side of Hazard Ave, west of Euclid StHigh Density Residential90DU6.015.0225	34	Galway St		30		1.0		125	-,
37 SW corner of Garden Grove Blvd and Euclid St General Commercial/Retail 15 TSF 0.5 125 38 North side of Hazard Ave, west of Euclid St High Density Residential 90 DU 6.0 15.0 225									7,500
38 North side of Hazard Ave, west of Euclid St High Density Residential 90 DU 6.0 15.0 225	36	West side of Nelson St, north of Stanford Ave	Low Density Residential	12	DU	1.3	9.4	300	3,600
3 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	37	SW corner of Garden Grove Blvd and Euclid St	General Commercial/Retail			0.5		125	1,875
39 Between Harbor Blvd and Buaro St General Commercial/Retail 12 TSF 0.6 125		•	,		_		15.0		20,250
			General Commercial/Retail	12	TSF	0.6		125	1,500
40 Southwest corner of Harbor Blvd and Twintree Ln Hotel 400 Rooms 3.74 150	40		Hotel	400	Rooms	3.74		150	60,000

¹ It is estimated that a maximum of 10,000 gpd of the carry off will enter the sewer system. Each filtration system will use 600 gpd per backwash and the backwash of the systems will be time staggered to flush only one of the systems per day. The indoor/outdoor water park load is not peaked in the model.

Existing Collection System

The existing collection system pipes are considered capacity deficient when the calculated peak dry weather depth to diameter ratio is above 0.62. The capacity available between depth to diameter ratios of 0.62 and 0.82 is reserved for wet weather flows.

New Collection System Pipes

All collection system pipes 15 inches in diameter and smaller will be designed to flow at or below a depth to diameter ratio of 0.50 with peak dry weather flows. The capacity available between depth to diameter ratios of 0.50 and 0.82 is reserved for wet weather flows.

New pipes 18 inches in diameter and larger will be designed to flow at or below a depth to diameter ratio of 0.62. The capacity available between depth to diameter ratios of 0.62 and 0.82 is reserved for wet weather flows.

Where possible, a minimum velocity of 2.0 feet per second will be provided with average dry weather flows.

C. CAPACITY ENHANCEMENT MEASURES

Order 2006-0003-DWQ requires that the SECAP include "Capacity Enhancement Measures: The steps needed to establish a short- and long-term CIP to address identified hydraulic deficiencies, including prioritization, alternatives analysis, and schedules. The CIP may include increases in pipe size, I/I reduction programs, increases and redundancy in pumping capacity, and storage facilities. The CIP shall include an implementation schedule and shall identify sources of funding."

Model Results

The capacity deficiencies identified through hydraulic analysis are illustrated on Figure 9-1. Summary of the results for the model calculated capacity deficient reaches is provided in Table 9-4.

Deficiency Verification

Most of the sewers identified as deficient by the model were flow monitored to determine the level of deficiency since the model average and peak dry weather flows are typically higher than the actual flows.

Based on the flow monitoring results, the sewers identified as deficient per the hydraulic model were categorized into three categories: verified deficiency (PDWF d/D >0.62), minimal capacity (PDWF d/D between 0.50 and 0.62), calculated deficiency (PDWF d/D <0.50). The associated tributary areas are colored accordingly in Figure 9-1. The category for the associated recommended improvement project is noted in Table 9-5, Recommended Capacity Improvement Projects, under the "Comments" column.

The sewers categorized as "calculated deficiency" are possible future deficiencies, and will be monitored as new development that may increase the wastewater flows are proposed within their tributary areas. Additionally, some of the sewers will be flow monitored again following the implementation of the diversion projects in order to verify the adequacy of the relief provided.

Capital Improvement Program

The Capital Improvement Program for capacity improvements is formulated to eliminate the deficiencies in accordance with Garden Grove Sanitary District's criteria. It consists of replacement with larger pipes, diversions to adjacent or nearby Orange County Sanitation District facilities, diversions to Garden Grove Sanitary District facilities with adequate capacity, or combinations of these.

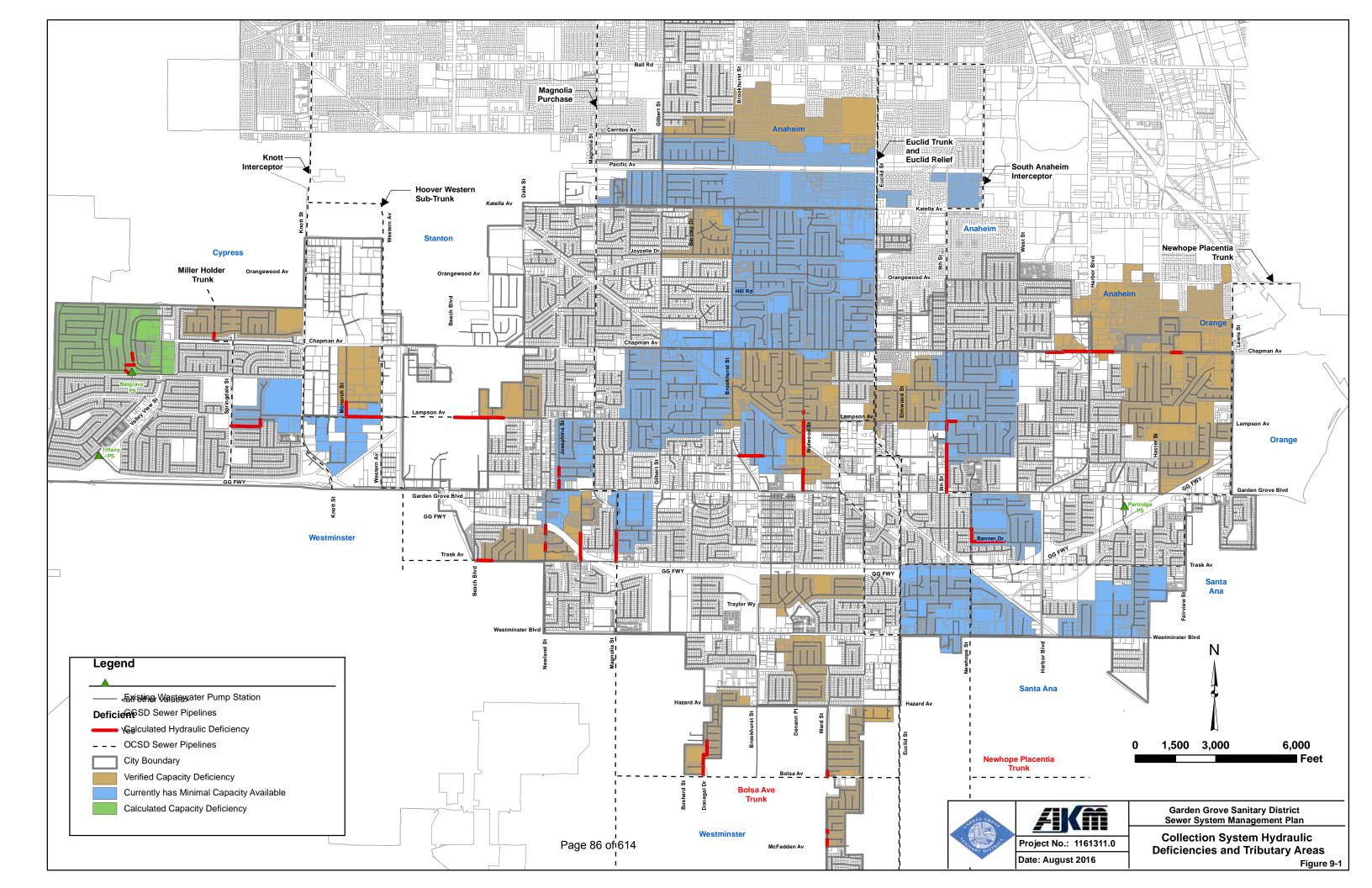


Table 9-4
Pipes with Model Calculated Capacity Deficiencies

			Pipes	with Mo	del Calcu	lated Cap	pacity De	ficienci	es		
Pipe	U/S		Dia	Length		PDWF	ADWF	PDWF Vel	PDWF	PDWF Depth	Full Flow
ID	MH	D/S MH	(in)	(ft)	Slope	(mgd)	(mgd)	(ft/s)	d/D	(ft)	(mgd)
159	7316	7318	8	262	0.0020	0.3503	0.1563	1.55	1.00	0.67	0.3491
222	6929	6932	8	262	0.0028	0.3122	0.1379	2.01	0.65	0.43	0.4133
225	6932	6933	8	130	0.0021	0.3722	0.1670	1.65	1.00	0.67	0.3569
226	6933	6934	8	380	0.0020	0.3890	0.1752	1.72	1.00	0.67	0.3502
227	6934	6935	8	90	0.0020	0.4203	0.1906	1.86	1.00	0.67	0.3502
228	6935	6936	8	300	0.0022	0.4922	0.2263	2.18	1.00	0.67	0.3701
230	6938	6929	8	266	0.0016	0.3008	0.1325	1.59	0.78	0.52	0.3148
391	7301	7302	8	200	0.0026	0.3203	0.1419	1.97	0.68	0.45	0.3993
401	7312	7313	8	194	0.0014	0.3385	0.1507	1.50	1.00	0.67	0.2918
698	7660	7661	8	296	0.0015	0.2244	0.0963	1.48	0.64	0.42	0.3056
699	7661	7662	8	30	0.0017	0.2450	0.1060	1.56	0.66	0.44	0.3198
701	7663	7664	8	330	0.0020	0.2913	0.1280	1.74	0.70	0.46	0.3502
770	7076	7079	10	265	0.0020	0.6412	0.3017	1.82	1.00	0.83	0.6289
777	7079	7115	10	260	0.0024	0.6524	0.3074	2.24	0.77	0.64	0.6933
890	8104	8098	8	540	0.0022	0.3619	0.1620	1.85	0.81	0.54	0.3661
1132	7729	7732	8	258	0.0020	0.2780	0.1216	1.73	0.67	0.45	0.3516
1133	7731	7730	8	362	0.0020	0.2878	0.1263	1.73	0.69	0.46	0.3494
1134	7732	7731	8	362	0.0020	0.2818	0.1234	1.72	0.68	0.45	0.3494
1202	7384	7386	8	253	0.0026	0.3344	0.1487	2.00	0.70	0.46	0.4030
1306	7730	7405	8	367	0.0020	0.2953	0.1299	1.74	0.71	0.47	0.3494
1341	8909	8910	8	320	0.0020	0.2560	0.1112	1.69	0.63	0.42	0.3502
1393	7780	8652	8	325	0.0020	0.3431	0.1529	1.77	0.80	0.53	0.3502
1770	8098	8099	12	660	0.0015	0.6420	0.3021	1.92	0.63	0.63	0.8942
1772	8099	7189	12	660	0.0011	0.6820	0.3225	1.68	0.75	0.75	0.7519
1815	8695	8696	8	250	0.0016	0.2538	0.1101	1.55	0.68	0.46	0.3132
1816	8696	8697	8	167	0.0016	0.2538	0.1101	1.55	0.68	0.45	0.3149
1817	8697	8698	8	299	0.0024	0.3390	0.1509	1.92	0.73	0.49	0.3843
1821	8701	8702	8	360	0.0020	0.5148	0.2376	2.28	1.00	0.67	0.3502
1822	8702	8703	8	361	0.0020	0.5148	0.2376	2.28	1.00	0.67	0.3499
1823	8698	8701	8	338	0.0021	0.3917	0.1766	1.74	1.00	0.67	0.3614
		BELGR									
2097	8918	AVE1	12	90	0.0004	0.8337	0.4013	1.64	1.00	1.00	0.4867
2098	8653	8918	12	200	0.0012	0.8309	0.3998	1.64	1.00	1.00	0.8114
2374	11137	11141	8	295	0.0024	0.3415	0.1521	1.94	0.73	0.49	0.3869
2379	11142	11143	8	100	0.0028	0.3668	0.1644	2.07	0.73	0.49	0.4144
2380	11143	11144	8	95	0.0021	0.4526	0.2066	2.01	1.00	0.67	0.3593
2381	11144	11145	8	130	0.0027	0.4526	0.2066	2.01	1.00	0.67	0.4063
2382	11145	11146	8	330	0.0025	0.4848	0.2226	2.15	1.00	0.67	0.3904
2383	11146	11120	8	322	0.0025	0.4904	0.2254	2.17	1.00	0.67	0.3950
2564	11229	11231	8	69	0.0019	0.2637	0.1148	1.67	0.66	0.44	0.3406
2788	11612	11613	8	250	0.0020	0.3009	0.1325	1.75	0.71	0.48	0.3502
2789	11613	11614	8	296	0.0020	0.3068	0.1354	1.75	0.73	0.48	0.3496
2790	11614	11615	8	226	0.0020	0.3068	0.1354	1.75	0.73	0.48	0.3494
2791	11615	11611	8	241	0.0020	0.3096	0.1367	1.77	0.73	0.48	0.3531

Table 9-4 (Continued)

Pipes with Model Calculated Capacity Deficiencies

			Fipe	S WILLI IV	ouel Call	culated C	apacity L	PDWF	les	PDWF	Full
Pipe	U/S		Dia	Length		PDWF	ADWF	Vel	PDWF	Depth	Flow
ID	MH	D/S MH	(in)	(ft)	Slope	(mgd)	(mgd)	(ft/s)	d/D	(ft)	(mgd)
2809	11129	11127	10	456	0.0017	0.6093	0.2854	1.73	1.00	0.83	0.5796
2810	11122	11129	10	210	0.0021	0.6093	0.2854	2.12	0.76	0.63	0.6573
2813	11324	11325	8	345	0.0020	0.3542	0.1582	1.57	1.00	0.67	0.3527
2930	11322	11324	8	338	0.0020	0.2703	0.1180	1.71	0.66	0.44	0.3486
2931	11325	11326	8	80	0.0020	0.3952	0.1782	1.75	1.00	0.67	0.3502
2932	11326	11327	8	76	0.0020	0.3952	0.1782	1.75	1.00	0.67	0.3479
2960	11587	11588	8	368	0.0020	0.3379	0.1503	1.77	0.79	0.52	0.3514
2961	11588	11589	8	157	0.0020	0.3638	0.1629	1.61	1.00	0.67	0.3475
2962	11589	11590	8	300	0.0020	0.3767	0.1692	1.67	1.00	0.67	0.3502
2963	11590	11591	8	325	0.0020	0.3875	0.1745	1.72	1.00	0.67	0.3502
3367	8393	8399	8	325	0.0013	0.2116	0.0904	1.38	0.64	0.43	0.2848
3374	8400	8402	8	317	0.0017	0.2606	0.1134	1.59	0.68	0.45	0.3232
3706	10895	11440	8	345	0.0020	0.3368	0.1498	1.76	0.79	0.53	0.3477
3848	11440	10866	8	340	0.0020	0.3428	0.1527	1.77	0.80	0.53	0.3502
4360	10893	10894	8	260	0.0020	0.3236	0.1434	1.76	0.76	0.51	0.3502
4361	10894	10895	8	240	0.0021	0.3288	0.1460	1.80	0.76	0.50	0.3574
4804	10866	10867	8	330	0.0022	0.3434	0.1530	1.83	0.77	0.52	0.3632
4805	10867	13176	8	175	0.0030	0.3737	0.1678	2.15	0.72	0.48	0.4309
5624	13176	13175	8	12	0.0100	0.5934	0.2773	3.82	0.65	0.43	0.7831
6028	12252	12253	10	155	0.0011	0.5010	0.2307	1.42	1.00	0.83	0.4702
6029	12253	12254	10	240	0.0011	0.5023	0.2314	1.43	1.00	0.83	0.4762
6050	12526	12533	8	360	0.0021	0.2609	0.1135	1.72	0.64	0.42	0.3549
6154	13023	13054	12	225	0.0022	1.2801	0.6395	2.52	1.00	1.00	1.0884
6219	13025	13026	12	180	0.0020	0.7997	0.3835	2.25	0.66	0.66	1.0325
6220	13026	13027	12	300	0.0022	0.8201	0.3941	2.35	0.65	0.65	1.0829
6221	13028	13023	12	30	0.0017	0.8333	0.4010	2.10	0.73	0.73	0.9426
6225	13031	13032	15	268	0.0017	1.3219	0.6623	2.39	0.66	0.82	1.7160
6226	13050	13051	12	320	0.0022	1.2943	0.6473	2.55	1.00	1.00	1.0798
6227	13051	13052	12	320	0.0022	1.3082	0.6548	2.58	1.00	1.00	1.0798
6230	13054	13050	12	150	0.0023	1.2801	0.6395	2.52	1.00	1.00	1.0992
6276	13032	13057	15	353	0.0019	1.3219	0.6623	2.51	0.63	0.79	1.8235
6541	12476	12477	10	258	0.0043	0.7896	0.3783	2.98	0.70	0.59	0.9355
6542	12477	12478	10	260	0.0044	0.8014	0.3844	3.01	0.71	0.59	0.9443
6543	12478	12479	10	316	0.0042	0.8044	0.3859	2.95	0.72	0.60	0.9246
6544	12479	12480	10	348	0.0039	0.8103	0.3890	2.84	0.76	0.63	0.8816
6545	12533	12534	10	325	0.0013	0.4188	0.1899	1.60	0.70	0.58	0.5043
6560	13027	13028	12	325	0.0018	0.8333	0.4010	2.14	0.72	0.72	0.9669
6579	12536	12537	10	165	0.0040	0.7677	0.3668	2.86	0.71	0.59	0.8980
6580	12537	12476	10	472	0.0042	0.7766	0.3715	2.94	0.70	0.58	0.9242
6739	11327	13323	8	75	0.0020	0.3964	0.1789	1.76	1.00	0.67	0.3502
6783	11127	13361	10	300	0.0022	0.6283	0.2951	2.16	0.77	0.64	0.6710

In prioritizing the capacity improvement projects, the highest ranking was given to the verified deficiencies with the larger tributary areas and flows. Pipes with calculated deficiencies from the hydraulic model but flow monitoring depth to diameter ratios lower than 0.62 were ranked based upon the flow monitoring depth to diameter ratios. When the depth to diameter ratios were the same, the pipes with the larger flows were ranked higher. These pipes will be monitored in the future as additional development proposals are made in their tributary areas. When the actual peak dry weather depth to diameter ratio exceed the District criteria, these improvements will be implemented.

Sometimes when segments of sewers with lower priorities are located in the same vicinity as a higher priority project, an exception is made to include these lower priority sewers in that project to provide a more economically feasible Capital Improvement Program.

The recommended capacity improvement projects are included in Appendix G-1. Table 9-5 provides a prioritized listing of the recommended projects, as well as their implementation costs. The cost estimates provided in Table 8-5 are based upon June 2016 dollars (Engineering News Record Index of 11,148.28 for the Los Angeles Area). Implementation cost is determined by adding 35 percent of construction cost to cover engineering, inspection, and administration. Future costs will have to be adjusted based upon changes in the engineering and construction costs. The total cost of the remaining capacity improvement projects is \$23.7M (\$22.5 for Future projects and \$1.2M for In Design Projects).

The collection system capacity improvement projects recommended are based upon the best information currently available. Detailed studies will be necessary to formulate the precise scope of each project.

Budget

The District's Sewer CIP budget is set at: approximately \$5 million annually (2005 dollars). The rate ordinance has built in escalation for annual adjustments for increases in construction costs. The District maintains a CIP for both the system capacity improvements and rehabilitation and replacement projects.

The District implements the capacity improvement projects at approximately \$4 million per year (June 2005 dollars), and the rehabilitation/replacement projects at approximately \$1 million per year. Once the system capacity improvements have been completed, the District will implement rehabilitation and replacement projects at approximately \$5 million per year."

Project Descriptions

The following includes brief descriptions of the recommended capacity improvement projects, along with an implementation schedule and estimated costs based upon planning level information available at the present. It is pointed out again that the estimated costs are based on June 2016 dollars reflecting Engineering News Record Index for the Los Angeles Area (ENRLA) of 11148.28. Future budgeting will have to consider increases in construction costs.

Each project will have to be re-evaluated during the design stage for determining the appropriate sizes based upon detailed utility investigations. The Garden Grove Sanitary District will review the proposed schedule annually, and revise it as necessary based upon the more detailed information available to provide the most efficient service to its customers.

Priority No. 1 (Project No. 1) Garden Grove Boulevard, Coast Street and Trask Avenue

Project No. 1 was completed in Fiscal Year 2006-2007. The project started at Fern Street and Garden Grove Boulevard; extended west to Coast Street, south to Trask Avenue, and west to Beach Boulevard where it terminated at the Orange County Sanitation District's 15-inch Trask Branch of the Hoover-Western Sub-Trunk.

The depths of flow in the sewers involved were previously determined to exceed the District's criterion. The project included replacement of existing sewers and construction of 488 feet of 12-inch diameter sewer in Garden Grove Boulevard between Fern Street and Coast Street, 830 feet of 15-inch diameter sewer in Coast Street north of Garden Grove Freeway, and 1928 feet of 18-inch diameter sewers in the rest of Coast Street and in Trask Avenue.

Some of the flow tributary to this project is from the City of Stanton territories at Sycamore Street and Garden Grove Boulevard. The City of Stanton paid its fair share in the new facility based upon the ratio of average flow contributed by each agency. The total cost of the project was \$2.29 Million.

Priority No. 2 (Project No. 2) Brookhurst Street and Garden Grove Boulevard

Project No. 2 was completed in Fiscal Year 2006-2007. The project started at Brookhurst Street and Stanford Avenue; extended south to Garden Grove Boulevard, and east to Century Boulevard, where it terminated at Orange County Sanitation District's 54-inch Euclid Relief Trunk Sewer.

Project No. 2 diverts all the wastewater flow south at Brookhurst Street and Stanford Avenue, and intercepts the flows from the area north of Garden Grove Boulevard between Brookhurst Street and Century Boulevard. It eliminates the previously identified capacity deficiencies in:

- Garden Grove Boulevard between Nutwood Street and Galway Street
- Cypress Street south of Imperial Avenue
- > Flower Street between Garden Grove Boulevard and Trask Avenue
- Galway Street between Garden Grove Boulevard and Central Avenue
- Stanford Avenue between Brookhurst Street and Brookhurst Way
- Brookhurst Way between Stanford Avenue and Garden Grove Boulevard
- Trask Avenue between Flower Street and Gilbert Street

It also provides capacity for the following proposed development projects:

- Brookhurst Triangle Development north of Garden Grove Boulevard and west of Brookhurst Street
- > Meredith Development south of Garden Grove Boulevard and west of Brookhurst Street

This project included 602 feet of 15-inch sewer and 936 feet of 18-inch sewer in Brookhurst Street, 1640 feet of 18-inch sewer in Garden Grove Boulevard between Brookhurst Street and Nutwood Street, and 1403 feet of 21-inch sewer between Nutwood Street and Century Boulevard.

The total cost of the project was \$4.89 Million.

Table 9-5 ecommended Capacity Improvement Projects

					Recomn	<u>nended (</u>	Capacity In	nprovement	t Projects					
Priority No.	Project No.	Location	Description	U/S MH	D/S MH	-	Proposed Size (in)		Estimated Construction Cost (\$) July 2016	Total Cost (Cons, Engin, Inspect, &Admin) (\$)	Comments	Completed Project Cost (\$)	Plan No.	Year Scheduled for Construction
		Garden Grove Boulevard	Fern Street to Coast Street	7719	7104	8	12	488	-					
1	1		Garden Grove Boulevard to north of Route 22	7104	7107	10	15	830			Cost includes Project No. 4	2,290,000	W-485	Constructed 2007
		Coast Street	North of Route 22 to Trask Avenue	7107	7115	10	18	1,796						2001
		Trask Avenue	Coast Street to Beach Boulevard	7115	7121	10	18	132	-					
		Brookhurst Street	Stanford Avenue to south of Stanford Avenue	13323	11371	-	15	602	-					
2		Brookhurst Street	South of Stanford Avenue to Garden Grove Boulevard	11371	11342	-	18	936				4,890,000	W-486	Constructed 2007
		Garden Grove Boulevard	Brookhurst Street to Nutwood Street	11342	11379	-	18	1,640						
		Garden Grove Boulevard	Nutwood Street to Century Boulevard	11379	11623	-	21	1,403	-					
3	4	Newland Street	Gloria Avenue to Trask Avenue	7665	8608	8	12	246	-		Cost included in Project No. 1	See Project No. 1	W-485	Constructed 2007
4		Joyzelle Street	Gilbert Street to Magnolia Avenue	10108	10387	8	15	2,487				1,030,000	W-492	Constructed 2007
		Chapman Avenue	Nearing Drive to Beach Boulevard	13526	8363	10	18	1,590						Constructed
5		Nearing Drive	Augusta Drive to Fillmore Street	8540	13572	8	15	686				606,000	W-500	2008
		Nearing Drive	Fillmore Street to Chapman Avenue	13572	13526	8	15	489	-					2000
6	14	Augusta Drive	Dale Street to Nearing Drive	13585	8540	8	12	1,165	-			415,000	W-500	Constructed 2008
7	15	Chapman Avenue	Dale Street to Nearing Drive	8520	13526	8	12	985				869,000	W-500	Constructed 2008
		Volkwood Street	Twintree Lane to Lampson Avenue	13807	13806	8	15	822						
		Volkwood Street	Lampson Avenue to Aspenwood Avenue	13806	13805	8	18	1,454	-					
8	7	Aspenwood Avenue	Volkwood Street to Harbor Boulevard	13805	13753	8-10	18	1,132	-			2,532,000	W-505	Constructed
ŭ		Palm Street	Aspenwood Avenue to Garden Grove Boulevard	13753	13721	-	21	1,126	-			2,002,000		2008
		Garden Grove Boulevard	Palm Street to east of Harbor Boulevard	13721	13668	-	21	1,379	-					
9	9	Garden Grove Boulevard	East of Harbor Boulevard to West Street	13668	12897	10	24	1,184	-			845,000	W-505	Constructed 2008
10	6	Gilbert Street	North of Shannon Avenue to Chapman Avenue	10090	13884	10	15	1,737	-			665,000	W-506	Constructed 2009
11	101	Tiffany Pump Station	1560 gpm firm capacity						-			2,493,000	W-512	Constructed 2010
12	8	Buaro Street	Hoggan Avenue to Lampson Avenue	14370	12147	10	12	274	-			686,800	W-517	Constructed
12	0	Buaro Street	Lampson Avenue to Harbor Boulevard	12147	14361	10	15	2,320	-			080,800	VV-517	2009
13	102	Belgrave Pump Station	1560 gpm firm capacity						-			2,469,056	W-538	
		Garden Grove Boulevard	East of Village Center Drive	7140	7142	8	12	373					Stanton	Constructed
14	3								-			272,100	(S-1001-L thru	Constructed 2009
		Garden Grove Boulevard	Village Center Drive to Hoover Street	7142	7174	8	15	1,115					S-1007-L)	2009

Table 95 (Continued)

					Recomn	<u>nended (</u>	Capacity In	nprovemen	t Projects					
Priority No.	Project No.	Location	Description	U/S MH	D/S MH	Existing Size (in)	Proposed Size (in)		Estimated Construction Cost (\$) July 2016	Total Cost (Cons, Engin, Inspect, &Admin) (\$)	Comments	Completed Project Cost (\$)	Plan No.	Year Scheduled for Construction
15	20	Lampson Avenue	Haster Street to Volkwood Street	12643	13806	8	15	1,453		7 (17		(1)		
16	21	Lampson Avenue	Easement to Haster Street	12627	12643	8	15	1,350				1,471,623	W-533	Constructed 2012
17	10	Lampson Avenue at Euclid Street	Divert to Euclid Trunk Sewer (OCSD)	12790	-	-	-	-	-			27,800	Sewer Diversion	Constructed 2007
18	11	Trask Avenue west of Clinton Street	Divert to Newhope Placentia Trunk (OCSD) east of East Garden Grove Wintersburg Channel	6754	-	-	-	-	-			154,600	W-529	Constructed 2010
19	12	Brookhurst Street	Hill Road to Chapman Avenue	14748	14744	10	18	1,952	-			1,702,600	W-525	Constructed 2010
20	13	Brookhurst Street	Parliament Ave to Hill Road (includes double barrel 10" & 12" siphon under Anaheim Barber Channel)	14762	14748	10	15	1,463	-		Cost included in Project No. 12	See Project No. 12	W-525	Constructed 2010
21	16	Parliament Avenue	Palmwood Drive to Dallas Drive	9832	14803	8	12	1,096	-		Cost included in Project No. 12	See Project No. 12	W-525	Constructed 2010
22	17	Parliament Avenue	Dallas Drive to Brookhurst Street	14803	14762	8	12	1,603			Cost included in Project No. 12	See Project No. 12	W-525	Constructed 2010
		Galway Street	Central Avenue to Trask Avenue	12052	14517	12	18	1,358					W-516 &	Constructed
23	19	Garden Grove Boulevard	Brookhurst Way to Galway Street	11337	14483	8	12	1,449	-			1,478,900	W508	2009
		Garden Grove Boulevard	East of Brookhurst Way	11335	11337	8	10	297	-					
24	22	Easement	Twintree Circle to Lampson Avenue	12625	12627	8	New Alignment and diversion.	730	-			See Projects 20	W-533	Constructed
25	23	Twintree Circle	East of Anzio Circle	12647	12625	8	New Alignment and diversion.	495	-			& 21	VV-000	2012
26	24	TwIntree Lane	Haster Street to Volkwood Street	12644	13807	8	15	1,463						
27	25	Haster Street	Allard Avenue to Twintree Lane	12656	12644	8	10	500	-			970,000	W-537	Constructed
28	26	Haster Street	Blue Spruce Avenue to Garden Grove Boulevard	12427	13228	8	12	1,426	-					2012
29	27	Cerritos Avenue	Brookhurst Street to Perdido Street (89% Anaheim)	9144	9215	8	15	1,185	-			633,855	7,825	
30	28	Cerritos Avenue	Perdido Street to Gilbert Street (89% Anaheim)	9215	9343	8	15	1,464				000,000	7,020	
		Lampson Avenue	Walnut Street to Euclid Street	11766	11768	8	12	405	-					
31	32	Euclid Street	Lampson Avenue to OCSD Euclid Trunk Sewer	11768	12790	8	12	518	-			963,782	W-542	
32	35	Trask Avenue	Gilbert Street to Magnolia Street	11525	11594	18	21	1,473	-		Cost included in Project No. 19	See Project No. 19	W-516	Constructed 2009

Table 9-5 (Continued) Recommended Capacity Improvement Projects

Priority No.	Project No.	Location	Description	U/S MH	D/S MH	Existing Size (in)	Proposed Size (in)	Length (ft)	Estimated Construction Cost (\$) July 2016	Total Cost (Cons, Engin, Inspect, &Admin) (\$)	Comments	Completed Project Cost (\$)	Plan No.	Year Scheduled for Construction
33	45	Gilbert Street	Crosby Avenue to Trask Avenue	12087	11525	8	12	1,824	-		Cost included in Project No. 19	See Project No. 19	W-516	Constructed 2009
34	90	Newland Street	North of Westminster Avenue	14541	14544	8	Parallel 8"	190	-			23,800	A-1790	Constructed 2010
35	56	LYOCKEV STREET	Divert flow to the parallel line-same elevation	11607	11612	-	8	133	-			61,100	Yockey Sewer Improvements	Constructed 2008
36	80	Stanford Avenue at Nelson	Divert flow to OCSD in Nelson	13424	-	-	-	-	-			215,700	W-510	Constructed 2008
37	57	Grove Street	Acacia Avenue to Garden Grove Boulevard	11842	12260	8	12	648	-			350,000	W-509	Constructed 2008
38	60		Jerry Lane to Lampson Avenue Elmwood Street to Walnut Avenue	12316 11763	11763 11766	6 8	8 12	1,155 740				See Project	W-542	Constructed 2013
39	61		East of Palm Street	12457	13721	10	15	212			Cost included in Project No. 7	See Project No. 7	W-505	Constructed 2008
40	70	Chapman Avenue	Loraleen Street to Magnolia Street	13877	10846	18	24	1,307	-			953,000	W-506	Constructed
41	71	Chapman Avenue Chapman Avenue	West of Magnolia Street Gilbert Street to Loraleen Street	10325 13884	10846 13877	18	10 24	256 1,079				853,000	W-506	2008 Constructed
		Chapman Avenue	East of Gilbert Street	10043	10047	10	15	385	-					2008
42	72		Brookhurst Street to east of Gilbert Street	14744	10047	15	18	1,913			Under Design	2,496,912	W-541	Constructed 2013
		Chapman Avenue	East of Gilbert Street to Gilbert Street	10047	13884	15	24	753	-					2013
53	54	Lampson Avenue	Brookhurst Street to Spruce Street	9445	9481	8	12	565	-		Verified Deficiency			
54	55	Brookhurst Street	Bonser Avenue to Lampson Avenue	9456	9445	8	12	1,355	-		Minimal Capacity	2,129,142	W-555	Constructed
55	74	Lampson Avenue	Spruce Street to Gilbert Street	9481	9521	10	12	2,023	-		Minimal Capacity	2,129,142	VV-333	2014
56	36	Lampson Avenue	Gilbert Street to Leroy Avenue	9521	9111	12	18	1,325	-		Minimal Capacity			
57	64	Joyzelle Street	Barkley Drive to Gilbert Street	10100	10108	8	10	1,255	-		Verified Deficiency	657,854	W-560	Constructed 2015
81	82	Hill Road	Garden Drive to Brookhurst Street	10203	14748	8	10	774	-		Calculated Deficiency	See Project 64	W-560	Constructed 2015
72	33	Westminster Avenue	Roxey Drive to Clinton Street	7482	7508	10	15	689	-		Minimal Capacity		SS-089	Constructed 2013
73	34	Westminster Avenue	Clinton Street to Harbor Boulevard	7508	7556	12	18	2,666	-		Minimal Capacity		SS-089	Constructed 2013
47	59	, ,	Dawson Street to Brookhurst Street	10507	11369	8	12	917	-		Verified Deficiency			2017-2018
48	65	THODE STEET	Morningside Drive to Westminster Channel	7264	7265	8	12	193	-		Verified Deficiency; Does not include siphon at Westminster			2017-2018
		Deanann Place	Jennrich Avenue to Hazard Avenue	7267	7558	8	12	1,134	-		Channel			2017-2018

Table 9-5 (Continued)

Recommended Capacity Improvement Projects

					Recomn	<u>nended (</u>	Capacity In	nprovement	Projects					
Priority No.	Project No.	Location	Description	U/S MH	D/S MH	Existing Size (in)	Proposed Size (in)	Length (ft)	Estimated Construction Cost (\$) July 2016	Total Cost (Cons, Engin, Inspect, &Admin) (\$)	Comments	Completed Project Cost (\$)	Plan No.	Year Scheduled for Construction
51	99	Ward Street	Davit Avenue to McFadden Avenue	7312	7318	8	12	652	482,213	650,988	Verified Deficiency			In Design
52	96	Ward Street	North of Bolsa Avenue	7301	7302	8	10	200	123,265	166,408	Verified Deficiency			In Design
		Nutwood Street	Molama Circle to Lampson Avenue	11229	11137	8	10	334	205,853	277,901	-			
		Nutwood Street	Lampson Avenue to Stanford Avenue	11137	11120	8	12	1,327	981,437	1,324,940				
58	53	Nutwood Street	Park Avenue to Garden Grove Boulevard	11122	13361	10	15	966	893,056	1,205,625	Verified Deficiency			In Design
61	91	Trask Avenue	Jackson Street to Coast Street	7076	7115	10	15	525	485,356	655,231	Verified Deficiency			In Design
62	92	Donegal Drive	Madison Circle to Bolsa Avenue	6938	6937	8	12	1,478	1,093,115	1,475,705	Verified Deficiency			In Design
65	51	Stanford Avenue	Blackthorn Street to Brookhurst Street	11322	13323	8	12	914	675,986	912,581	Minimal Capacity			In Design
71	31	Lampson Avenue at 9th Street	Divert to South Anaheim Interceptor (OCSD)	12526	12533	8	10	360	458,033	618,345	Minimal Capacity			In Design
74	44	Imperial Avenue	East of Magnolia Street to Magnolia Trunk (OCSD)	11545	11587	8	10	541	333,432	450,133	Minimal Capacity	with project	W-568	In Design
77	76	Josephine Street	Acacia to Garden Grove Boulevard	8393	9394	8	10	852	525,109	708,898	Minimal Capacity	with Project	W-568	In Design
75	63	Newland Street	Route 22 to Gloria Avenue	7660	7665	8	12	1,010	746,987	1,008,432	Minimal Capacity	1.0		In Design
43	46	Monarch Street	Anaconda Avenue to Lampson Avenue	8104	8098	8	12	540	399,379	539,162	Verified Deficiency			2017-2018
44	75	Lampson Avenue	Monarch Street to Western Avenue	8098	7189	12	15	1,320	1,220,325	1,647,438	Minimal Capacity			2017-2018
45	68	Onyx Street	North of Chapman Avenue	7384	7386	8	10	253	155,930	210,506	Verified Deficiency			2017-2018
46	43	Lamplighter Street	Killarney Avenue to Lenore Ave	7729	7732	8	12	258	190,814	257,599	- Minimal Capacity			2017-2018
46		Lenore Avenue	Lamplighter Street to Springdale Street	7732	7404	8	12	1,204	890,467	1,202,131				2017-2018
49	52	Lampson Avenue	Monroe Street to Beach Boulevard (Partly Stanton)	8695	8703	8	12	1,775	1,312,774	1,772,244	Verified Deficiency			2018-2019
50	56A	Yockey Street	Reestablish 8" connection to easterly sewer and split flow	11607	14201	-	8	51	25,146	33,947	Verified Deficiency			2018-2019
59	79	Chapman Avenue	West of Harbor Boulevard (for Anaheim/Orange Flows)	13028	13052	12	18	1,045	0	0	Verified Deficiency; Anheim / Orange Funded			2018-2019
60	67	Chapman Avenue	East of Harbor Boulevard (80% Anaheim and Orange)	13025	13028	12	15	805	148,843	200,938	Minimal Capacity			2018-2019
63	47	Banner Drive	East of Newhope Street	10893	10866	8	12	1,185	876,415	1,183,160	Minimal Capacity			2018-2019
64	48	Newhope Street	Banner Drive to Paloma Avenue	10866	13175	8	12	517	382,368	516,197	Minimal Capacity			2018-2019
66	85	Chapman Avenue	East of Haster Street (for Orange flows)	12252	13004	10	12	763	0	0	Funded			2018-2019
76	93	Westminster Avenue	Anita Place to Euclid Street	11967	11974	12	15	620	573,183	773,797	Minimal Capacity			2018-2019
78	37	Belgrave Avenue	St. Mark Street to Belgrave Pump Station	8653	8913	12	18	290	321,722	434,325	Calculated Deficiency			2018-2019
79	38	Laurelton Avenue	Bailey Street to St. Mark Street	7780	8652	8	12	325	240,367	324,495	Calculated Deficiency			2018-2019
80	39	Bailey Street	South of Chapman Avenue to Laurelton Avenue	8909	7780	8	12	442	326,899	441,314	Calculated Deficiency			2018-2019

Table 9-5 (Continued)

Recommended Capacity Improvement Projects

										Total Cost (Cons, Engin,		Completed		Year Scheduled
Priority	Project					Existing	Proposed		Cost (\$)	Inspect,		Project Cost		for
No.	No.	Location	Description	U/S MH	D/S MH	Size (in)	Size (in)	Length (ft)	July 2016	&Admin) (\$)	Comments	(\$)	Plan No.	Construction
	Total Constructed									35,206,624				
Total in Design or Under Construction								9,159	7,003,843	9,455,187				
Total Future Projects								11,393	7,064,632	9,537,253				
Grand Total								94,114		54,199,065				

Priority No. 3 (Project No. 4) Newland Street Sewer, Gloria Avenue to Trask Avenue

Project No. 4 was completed in Fiscal Year 2006-2007. The design and construction was packaged in with Project No. 1.

The hydraulic model of the system showed this 246 foot section of 8-inch pipe to flow full with peak dry weather flows. It was replaced with a 12-inch pipe between Manholes 7665 and 8608.

Priority No. 4 (Project No. 77) Joyzelle Street Sewer, Gilbert Street to Magnolia Avenue

Project No. 77 was completed in Fiscal Year 2006-2007. The system hydraulic model showed the 584 feet of 8-inch sewer between Manholes 10841 and 10843 (Homeway Drive to Magnolia Avenue) to flow at a depth to diameter ratio of 0.64 with peak dry weather flows.

The system hydraulic model also showed 2,245 feet of 10-inch sewer in Gilbert Street, between Orangewood Avenue and Chapman Avenue, to flow at a depth to diameter ratio of 0.63 to 1.00 with peak dry weather flows.

To alleviate the deficiency in Gilbert Street as wells as to take care of the condition and capacity deficiencies in Joyzelle Street, the flow was diverted to the west at the intersection of Joyzelle Street and Gilbert Street at Manhole 10108. Approximately 2,487 feet of 15-inch pipe was constructed in Joyzelle Street from Gilbert Street (10108) to Magnolia Avenue (10387). The new sewer ties into the OCSD's existing Magnolia Purchase Trunk Sewer at the intersection of Joyzelle Street and Magnolia Avenue.

The total cost of the project was \$1.03 Million.

Priority No. 5 (Project No. 5) Chapman Avenue and Nearing Drive

The system hydraulic model determined that the 10-inch diameter sewer in Chapman Avenue from Nearing Drive to Beach Boulevard, and the 8-inch diameter sewer in Nearing Drive between Augusta Drive and Chapman Avenue would flow full with peak dry weather flows. Flow monitoring conducted in March 2005 confirmed this. The pipes were replaced with larger pipes as follows:

- ➤ 1590 feet of 10-inch sewer replaced with 18-inch sewer in Chapman Avenue between Nearing Drive and Beach Boulevard (13526 to 8363)
- ➤ 1175 feet of 8-inch sewer replaced with 15-inch sewer in Nearing Drive between Augusta Drive and Chapman Avenue (8540 to 13526)

Project No. 5 was completed in 2008. The cost of the project was \$606,000.

Priority No. 6 (Project No. 14) Augusta Drive, Dale Street to Nearing Drive

This is 1165 feet of 8-inch line extending from Manhole 13585 in Dale Street to Manhole 8540 in Nearing Drive. The system hydraulic model showed it to be flowing full with peak dry weather flows. It was replaced with a 12-inch line.

Project No. 14 was completed in 2008. The cost of the project was \$415,000

Priority No. 7 (Project No. 15) Chapman Avenue, Dale Street to Nearing Drive

Project No. 15 replaced 985 feet of 8-inch line between Manhole 8520 at Dale Street and Chapman Avenue and Manhole 13526 at Nearing Drive and Chapman Avenue with a 12-inch line. The system hydraulic model previously showed this reach to have peak dry weather flow depth to diameter ratios of 0.74 to 1.00.

Project No. 15 was completed in 2008. The cost of the project cost was \$869,000

Priority No. 8 (Project No. 7) Volkwood Street, Aspenwood Avenue, Palm Street, and Garden Grove Boulevard

The purpose of this project was to provide relief to the sewers in:

- Lampson Avenue between Volkwood Street and Buaro Street
- Twintree Lane between Volkwood Street and Harbor Boulevard
- Harbor Boulevard between Twintree Lane and Lampson Avenue
- > Blue Spruce Avenue between Volkwood Street and Choisser Road
- Choisser Road between Blue Spruce Avenue and Aspenwood Avenue
- > Easement between Harbor Boulevard and Buaro Street

All these lines were previously identified by the system hydraulic model to be capacity deficient.

This project consisted of:

- ➤ 822 feet of 15-inch pipe in Volkwood Street between Twintree Lane (13807) and Lampson Avenue (13806), diverting all the flow south in Volkwood Street
- ➤ 1454 feet of 18-inch sewer in Volkwood Street between Lampson Avenue (13806) and Aspenwood Avenue (13805), diverting all the flow south in Volkwood Street
- ➤ 1132 feet of 18-inch sewer in Aspenwood Avenue between Volkwood Street (13805) and Harbor Boulevard (13753)
- ➤ 1126 feet of 21-inch sewer in Palm Street between Aspenwood Avenue (13753) and Garden Grove Boulevard (13721)
- ➤ 1379 feet of 21-inch sewer in Garden Grove Boulevard between Palm Street (13721) and Harbor Boulevard (13668)

The 21-inch pipe ties into the 24-inch sewer of Project No. 9 at the intersection of Garden Grove Boulevard and Harbor Boulevard. The flow is conveyed to the west and discharges into OCSD's South Anaheim Interceptor at the intersection of Newhope Street and Garden Grove Boulevard.

Project No. 7 was completed in 2009. It was packaged with Project No. 61 and the total cost was \$2,532,000.

Priority No. 9 (Project No. 9) Garden Grove Boulevard, Harbor Boulevard to West Street

There were two parallel sewers in Garden Grove Boulevard between Harbor Boulevard and West Street. The

northerly sewer is 18-inches in diameter. The southerly sewer is 10-inches in diameter. The hydraulic model showed that the flows in the 18-inch sewer would exceed the District's depth to diameter criterion due to the many anticipated development projects tributary to this line. One reach of the 10-inch sewer would also become deficient due to the Partridge Pump Station and forcemain that now diverts the flows generated at the mobile home park at the south end of Partridge Street, north to Garden Grove Boulevard.

Project No. 9 replaced the 10-inch sewer with 1184 feet of 24-inch diameter pipe. Flows have been diverted from the existing northerly sewer (15-inches east of Harbor Boulevard, 18-inches west of Harbor Boulevard) on Garden Grove Boulevard to the 24-inch sewer.

Project No. 9 was completed in 2008. Its cost was \$845,000.

Priority No. 10 (Project No. 6) Gilbert Street, north of Shannon Avenue to Chapman Avenue

The system hydraulic model showed a portion of this 10-inch sewer to flow at depth to diameter ratios of 0.78 to 1.00 with peak dry weather flows, even after Diversion Project No. 77. Although the field flow monitoring did not show greater than 0.57 depth to diameter ratio at the location monitored, with upcoming development in the tributary area, this sewer was recommended to be replaced with a 15-inch pipe between Manholes 10090 and 13884. The total length was 1737 feet.

Project No. 6 was completed in 2009. The project cost was \$665,000

Priority No. 11 (Project No. 101) Tiffany Pump Station Replacement

The construction of a replacement facility with a firm capacity of 1,560 gpm was completed in Fiscal Year 2010-2011. The new pump station was placed in service in 2011. The project cost was \$2,493,000.

Priority No. 12 (Project No. 8) Buaro Street, Hoggan Avenue to Harbor Boulevard

The purpose of this project was to provide relief to the sewers in:

- Lampson Avenue between Buaro Street and West Street
- > West Street between Lampson Avenue and Stanford Avenue

This project was completed in 2009. It consisted of the following:

- ➤ 274 feet of 12-inch sewer in Buaro Street between Hoggan Avenue (14370) and Lampson Avenue (12147)
- Approximately 2320 feet of 15-inch sewer in Buaro Street between Lampson Avenue (12147) and Harbor Boulevard (14361).

Project No. 8 was completed in 2009. The project cost was \$686,800.

Priority No. 13 (Project No. 102) Belgrave Pump Station Replacement

The District has completed construction of the replacement project with a firm capacity of 1,560 gpm, which. The project cost was \$2,469,000.

Priority No. 14 (Project No. 3) Garden Grove Boulevard, Village Center Drive to Hoover Street

The system hydraulic model showed this sewer to be full with peak dry weather flows. Flow monitoring conducted in April 2005 showed a peak depth to diameter ratio of 0.80, indicating that the pipe may be flowing full. The project replaced 1488 feet of 8-inch pipe with 12-inch pipe between Manholes 7140 and 7174. It was combined with a City of Stanton project that diverted some of the Coast Sewer tributary area west to this facility.

Project No. 102 was completed in 2009. The District's share of this project is \$272,100.

Priority No. 15 (Project No. 20) Lampson Avenue, Haster Street to Volkwood Street

The system hydraulic model shows the 1453 feet of 8-inch pipe between Manholes 12643 and 13806 to be full with peak dry weather flows. It was replaced in 2012 with a 15-inch pipe.

Project No. 20, 21, 22, and 23 were packaged together. The total project cost was \$1,472,000.

Priority No. 16 (Project No. 21) Lampson Avenue, Easement to Haster Street

The system hydraulic model shows the 1350 feet of 8-inch pipe between Manholes 12627 and 12643 to be full with peak dry weather flows. It will was replaced in 2012 with a 15-inch pipe.

Project No. 20, 21, 22, and 23 were packaged together. The total project cost was \$1,472,000.

Priority No. 17 (Project No. 10) Diversion to OCSD Euclid Trunk Sewer, Lampson Avenue at Euclid Street

Project No. 10 was completed in 2007. It has relieved sewers with calculated capacity deficiencies in Main Street between Lampson Avenue and Garden Grove Boulevard, by diverting the flow at Manhole 12790 to Euclid Trunk Sewer.

The project cost was \$27,800

Priority No. 18 (Project No. 11) Diversion to OCSD Newhope-Placentia Trunk Sewer, Trask Avenue West of Clinton Street

Project No. 11 was completed in 2010. It has relieved the capacity deficiencies in Trask Avenue between East Garden Grove Wintersburg Channel and Harbor Boulevard, by diverting the flows to OCSD's Newhope-Placentia Trunk Sewer at Manhole 6754. This project also eliminated the inverted siphon under the channel just west of the proposed diversion.

The project cost was \$154,600.

Priority No. 19 (Project No. 12) Brookhurst Street, Hill Road to Chapman Avenue

Project No. 12 was completed in 2010. The system hydraulic model showed this sewer to be full with peak dry weather flows. Flow monitoring conducted in September 2004 showed a peak depth to diameter ratio of 0.82, indicating that the pipe may be flowing full. This project replaced 1952 feet of 10-inch pipe with 18-inch

pipe between Manholes 14748 and 14744.

Project No. 12, 13, 16, and 17 were packaged together. The total project cost was \$1,702,600.

Priority No. 20 (Project No. 13) Brookhurst Street, Parliament Avenue to Hill Road

Project No. 13 was completed in 2010. The system hydraulic model showed the existing 10-inch diameter pipe between Manholes 14762 and 14748 to be full with peak dry weather flows. This project replaced 1463 feet of 10-inch pipe with 15-inch pipe.

Project No. 12, 13, 16, and 17 were packaged together. The total project cost was \$1,702,600.

Priority No. 21 (Project No. 16) Parliament Avenue, Palmwood Drive to Dallas Drive

Project No. 16 was constructed in 2010. The system hydraulic model shows this 1096 feet of 8-inch line with depth to diameter ratios of 0.68 to 1.00 at peak dry weather flows. Project No. 16 replaced the existing sewer with a 12-inch line between Manholes 9832 and 14803.

Project No. 12, 13, 16, and 17 were packaged together. The total project cost was \$1,702,600.

Priority No. 22 (Project No. 17) Parliament Avenue, Dallas Drive to Brookhurst Street

Project No. 17 was constructed in 2010. This line is shown by the hydraulic model to flow full with peak dry weather flows between Manholes 14803 and 14762. Flow monitoring conducted at 14762 in September 2004 verified this. Project No. 17 replaced the existing sewer with 1603 feet of 12-inch pipe.

Project No. 12, 13, 16, and 17 were packaged together. The total project cost was \$1,702,600.

Priority No. 23 (Project No. 19) Galway Street, Central Avenue to Trask Avenue

Project No. 19 was completed in 2009. It involved the replacement of 1358 feet of 12-inch diameter pipe with milder slope than the rest of the system in Galway Street. The model showed this reach to be deficient even after significant flow diversion with Project No. 2. It was replaced with a 18-inch pipe between Manholes 12052 and 14517. It also included replacement of 1746 feet of 8-inch pipe with 10-inch pipe and 12-inch pipe in Garden Grove Boulevard between Brookhurst Way and Galway Street (MH 11335 to 14483).

Project No. 19, 35, and 45 were packaged together. The total project cost was \$1,478,900.

Priority No. 24 (Project No. 22) Easement, Twintree Circle to Lampson Avenue

The system hydraulic model shows the depth to diameter ratios in 730 feet of 8-inch pipe between Manholes 12625 and 12627 to be 0.80 to 1.00 with peak dry weather flows. Along with Project #23, a 12-inch diversion sewer was constructed to the south west to Manhole 15024 on Lampson Avenue, east of Haster Street.

Project No. 20, 21, 22, and 23 were packaged together. The total project cost was \$1,472,000.

Priority No. 25 (Project No. 23) Twintree Circle, East of Anzio Circle

The system hydraulic model shows the depth to diameter ratios in 495 feet of 8-inch pipe between Manholes 12647 and 12625 to be 0.69 to 1.00 with peak dry weather flows. Along with Project #23, a 12-inch diversion sewer was constructed to the south west to Manhole 15024 on Lampson Avenue, east of Haster Street.

Project No. 20, 21, 22, and 23 were packaged together. The total project cost was \$1,472,000.

Priority No. 26 (Project No. 24) Twintree Lane, Haster Street to Volkwood Street

The system hydraulic model shows the 1463 feet of 8-inch pipe between Manholes 12644 and 13807 to flow full with peak dry weather flows. It was replaced with a 15-inch pipe.

Project No. 24, 25, and 26 were packaged together. The total project cost was \$970,000.

Priority No. 27 (Project No. 25) Haster Street, Allard Avenue to Twintree Lane

The system hydraulic model shows this line between Manholes 12656 and 12644 to have peak dry weather flow depth to diameter ratios from 0.67 to 0.71. The existing 500 feet of 8-inch pipe was replaced with a 10-inch pipe.

Project No. 24, 25, and 26 were packaged together. The total project cost was \$970,000.

Priority No. 28 (Project No. 26) Haster Street, Blue Spruce Avenue to Garden Grove Boulevard

The system hydraulic model shows this line between Manholes 12427 and 13228 to have peak dry weather flow depth to diameter ratios from 0.66 to 1.00. The existing 1426 feet of 8-inch pipe was replaced with a 12-inch pipe.

Project No. 24, 25, and 26 were packaged together. The total project cost was \$970,000.

Priority No. 29 (Project No. 27) Cerritos Avenue, Brookhurst Street to Perdido Street

The system hydraulic model shows the 1185 feet of 8-inch pipe between Manholes 9144 and 9215 to flow full with peak dry weather flows. Flow monitoring conducted in 2005 showed a depth to diameter ratio of 0.86 with peak dry weather flows, verifying the deficiency. It is estimated that 89 percent of the flow tributary to this line is contributed by the City of Anaheim territories. It was replaced with a 15-inch pipe.

Project No. 27 and 28 were packaged together. The total project cost was \$633,900.

Priority No. 30 (Project No. 28) Cerritos Avenue, Perdido Street to Gilbert Street

The system hydraulic model shows the 1464 feet of 8-inch pipe between Manholes 9215 and 9343 to flow full with peak dry weather flows. Flow monitoring conducted in 2005 showed a depth to diameter ratio of 0.86

with peak dry weather flows, verifying the deficiency. It is estimated that 89 percent of the flow tributary to this line is contributed by the City of Anaheim territories. It was replaced with a 15-inch pipe.

Project No. 27 and 28 were packaged together. The total project cost was \$633,900.

Priority No. 31 (Project No. 32) Lampson Avenue and Euclid Street

The system hydraulic model shows the 923 feet of 8-inch pipe between Manholes 11766 and 12790 to flow full with peak dry weather flows. It was replaced with a 12-inch pipe.

Project No. 32 was constructed with a project cost is \$964,000.

Priority No. 32 (Project No. 35) Trask Avenue, Gilbert Street to Magnolia Street

The system hydraulic model showed the 1473 feet of 18-inch pipe between Manholes 11525 and 11594 to flow at depth to diameter ratios of 0.66 to 1.00 full with peak dry weather flows, even after the diversion with Project No. 2. Following the completion of Project No. 2, the peak d/D of this reach was measured at about 0.61. Project No. 35 replaced the existing pipe with a 21-inch pipe.

Project No. 19, 35, and 45 were packaged together. The total project cost was \$1,478,900.

Priority No. 33 (Project No. 45) Gilbert Street, Crosby Avenue to Trask Avenue

The system hydraulic model showed the 1824 feet of 8-inch sewer between Manholes 12087 and 11525 to flow at depth to diameter ratios of 0.64 to 0.79 with peak dry weather flows. Project No. 45 replaced the existing pipe with a 12-inch sewer.

Project No. 19, 35, and 45 were packaged together. The total project cost was \$1,478,900.

Priority No. 34 (Project No. 90) Newland Street, north of Westminster Avenue

The system hydraulic model showed the 190 feet of 8-inch sewer between Manholes 6995 and 7006 to flow at depth to diameter ratios of 1.00 with peak dry weather flows. It was paralleled with an 8-inch sewer (Manhole 14541 to 14544), eliminating the deficiency.

Project No. 90 was completed in 2010. The project cost is \$23,800.

Priority No. 35 (Project No. 56) Diversion to Parallel GGSD Sewer at Yockey Street north of Trask Avenue

This project diverted flows from Manhole 11607 to 11612.

Project No. 56 was completed in 2008. The project cost was \$61,100.

Priority No. 36 (Project No. 80) Diversion to OCSD Trunk Sewer at Stanford Avenue and Nelson Street

Project 80 was for the purpose of relieving sewers with calculated capacity deficiencies on Stanford Avenue, Acacia Parkway, and Grove Street, by diverting the flow at Manhole 13424 to the OCSD trunk sewer in Nelson Street.

Project No. 80 was completed in 2008. The project cost was \$215,700.

Priority No. 37 (Project No. 57) Grove Street, Acacia Avenue to Garden Grove Boulevard

The system hydraulic model showed the 648 feet of 8-inch sewer between Manholes 11842 and 12260 to flow at a depth to diameter ratios of 0.78 with peak dry weather flows after Project No. 80 was implemented. Project No. 57 was completed in 2008 by constructing a new sewer on Grove Avenue. The project cost was \$350,000.

Priority No. 38 (Project No. 60) Elmwood Street and Lampson Avenue

The system hydraulic model shows the 1895 feet of 6-inch and 8-inch sewer between Manholes 12316 and 11766 to flow at a depth to diameter ratios of 0.70 to 0.82 with peak dry weather flows. It was replaced with 1155 feet of 8-inch sewer in Elmwood Street and 740 feet of 12-inch sewer in Lampson Avenue.

Project No. 60 was completed with Project #32 in 2013. The estimated project cost is \$964,000.

Priority No. 39 (Project No. 61) Garden Grove Boulevard, east of Palm Street

The proposed Bahia Development (500-600 DU) on Blackbird Street south of Garden Grove Boulevard will consist of a new pump station and forcemain that will be tributary to this reach. The system hydraulic model shows that 212 feet of 10-inch sewer between Manholes 12457 and 13721 will flow at a depth to diameter ratios of 0.66 with peak dry weather flows. This reach was replaced with 15-inch pipe.

Project No. 61 was completed in 2008 in conjunction with Project No. 7 which had a total cost of \$2,532,000.

Priority No. 40 (Project No. 70) Chapman Avenue, Loraleen Street to Magnolia Street

The system hydraulic model showed the 1307 feet of 18-inch sewer between Manholes 13877 and 10846 to flow at depth to diameter ratios of 0.68 to 1.00 with peak dry weather flows. The system hydraulic model showed the 256 feet of 8-inch sewer between Manholes 10325 and 10846 to flow at a depth to diameter ration of 0.68 with peak dry weather flows.

Project No. 70 was completed in 2008. The project cost was \$953,000.

Priority No. 41 (Project No. 71) Chapman Avenue, Gilbert Street to Loraleen Street

The system hydraulic model showed the 1079 feet of 18-inch sewer between Manholes 13884 and 13877 to flow at depth to diameter ratios of 0.75 to 0.80 with peak dry weather flows.

This line was replaced with a 24-inch sewer in 2008. The project cost was \$853,000

Priority No. 42 (Project No. 72) Chapman Avenue, Brookhurst Street to Gilbert Street

The system hydraulic model shows the 2666 feet of 15-inch sewer between Manholes 14744 and 14281 to flow at depth to diameter ratios of 0.68 to 1.00 with peak dry weather flows. Flow monitoring conducted along the mildest reach of this pipe had a peak dry weather depth to diameter ratio of 0.59. Although the field flow monitoring did not show greater than 0.59 depth to diameter ratio at the location monitored, with upcoming development in the tributary area, this sewer was replaced with a 18-inch and 24-inch.

The hydraulic model also shows 385 feet of 10-inch sewer between manholes 10043 and 10047 to flow at d/D of 0.65 to 0.76 with peak dry weather flows. These pipes were replaced with 15-inch pipe. Project No. 72 was completed in 2013. The project cost was \$2,497,000.

Priority No. 53 (Project No. 54) Lampson Avenue, West of Brookhurst Street

The system hydraulic model shows the 565 feet of 8-inch sewer between Manholes 9445 and 9481 to flow at a depth to diameter ratio of 0.71 to 1.00 with peak dry weather flows. Flow monitoring conducted in July 2007 confirmed the deficiency. It was replaced with a 12-inch sewer.

Project No. 54, 55, 74, and 36 were packaged together. The project was completed in 2014, with a total project cost was \$2,129,900.

Priority No. 54 (Project No. 55) Brookhurst Street, Bonser Avenue to Lampson Avenue

The system hydraulic model shows the 1355 feet of 8-inch sewer between Manholes 9455 and 9445 to flow at a depth to diameter ratios of 0.65 to 0.76 with peak dry weather flows. It was replaced with a 12-inch sewer.

Project No. 54, 55, 74, and 36 were packaged together. The project was completed in 2014, with a total project cost was \$2,129,900.

Priority No. 55 (Project No. 74) Lampson Avenue, Spruce Street to Gilbert Street

The system hydraulic model shows the 2023 feet of 10-inch sewer between Manholes 9481 and 9521 to flow at depth to diameter ratios of 0.65 to 1.00 with peak dry weather flows. It was replaced with a 12-inch sewer. Project No. 54, 55, 74, and 36 were packaged together. The project was completed in 2014, with a total project cost was \$2,129,900.

Priority No. 56 (Project No. 36) Lampson Avenue, Gilbert Street to Leroy Avenue

The system hydraulic model shows the 1325 feet of 10-inch and 12-inch sewer between Manholes 9521 and 9111 to flow at depth to diameter ratios of 0.65 to 1.00 with peak dry weather flows. It was replaced with an 18-inch pipe.

Project No. 54, 55, 74, and 36 were packaged together. The project was completed in 2014, with a total project cost was \$2,129,900.

Priority No. 57 (Project No. 64) Joyzelle Street, Barkley Drive to Gilbert Street

The system hydraulic model shows that the 1255 feet of 8-inch sewer between Manholes 10100 and 10108 has depth to diameter ratios of 0.70 to 0.73 with peak dry weather flows. Flow monitoring conducted in March 2006 confirmed the deficiency. It was replaced with a 10-inch sewer.

Project Nos. 64 and 82 were constructed in 2015, with a total project cost of \$658,000.

Priority No. 72 (Project No. 33) Westminster Avenue, Roxey Drive to Clinton Street

The system hydraulic model shows the 689 feet of 10-inch pipe between Manholes 7482 and 7508 to flow at depth to diameter ratios of 0.82 to 1.00 full with peak dry weather flows. Flow monitoring conducted in December 2011 resulted in peak dry weather depth to diameter ratios up to 0.32. It was replaced with a 15-inch pipe.

Project No. 33 was constructed in 2013.

Priority No. 73 (Project No. 34) Westminster Avenue, Clinton Street to Harbor Boulevard

The system hydraulic model shows the 2666 feet of 12-inch pipe between Manholes 7508 and 7556 to flow at depth to diameter ratios of 0.64 to 1.00 full with peak dry weather flows. Minimal capacity available was verified in the field by City staff observation. It was replaced with an 18-inch pipe.

Project No. 34 was constructed in 2013.

Priority No. 81 (Project No. 82) Hill Road, West of Garden Drive

The system hydraulic model shows the 774 feet of 8-inch sewer between Manholes 10203 and 14748 to flow at a depth to diameter ratio of 0.65 with peak dry weather flows. Flow monitoring conducted in December 2011 resulted in peak dry weather depth to diameter ratios up to 0.38. It was replaced with a 10-inch sewer. Project Nos. 64 and 82 were constructed in 2015, with a total project cost of \$658,000.

Priority No. 47 (Project No. 59) Traylor Way, Dawson Street to Brookhurst Street

The system hydraulic model shows the 917 feet of 8-inch sewer between Manholes 10507 and 11369 to flow at a depth to diameter ratios of 0.64 to 0.75 with peak dry weather flows. Flow monitoring conducted in February 2006 resulted in peak dry weather depth to diameter ratios up to 0.64. It will need to be replaced with a 12-inch sewer.

Project No. 59 was constructed in 2012.

Priority No. 48 (Project No. 65) Deanann Street, Morningside Drive to Hazard Avenue

The system hydraulic model shows the 8-inch sewer between Manholes 7264 and 7558 to flow at a depth to diameter ratios of 0.79 to full with peak dry weather flows. The deficiency was verified in the field in Morningside Drive north of Hazard Avenue by City staff observation. The siphon crossing beneath the Westminster channel (manhole 7265 to 7266) and the portion of sewer underneath private property (manhole 7266 to 7267) was observed to flow at depth of 2.5 inches to 3 inches during peak flow. These sections are not included in the project. The total project includes the replacement of 1327 feet of 8-inch sewer with a 12-inch sewer.

Project No. 65 was constructed in 2012..

Priority No. 51 (Project No. 99) Ward Street, Davit Avenue to McFadden Avenue

The system hydraulic model shows the 8-inch sewer between Manholes 7312 and 7318 to flow full with peak dry weather flows. Flow monitoring conducted in September 2011 confirmed the deficiency.

Project No. 99 is is in design and construction stages. The estimated project cost is \$482,000. The tributary area to this sewer in Ward Street includes areas within the Cities of Santa Ana and Westminster (Midway City Sanitary District service area). If a replacement sewer is needed, the appropriate agencies will share in the cost of the construction.

Priority No. 52 (Project No. 96) Ward Street, north of Bolsa Avenue

The system hydraulic model shows the 200 feet of 8-inch sewer between Manholes 7301 and 7302 to flow at depth to diameter ratios of 0.65 with peak dry weather flows. Flow monitoring conducted in September 2011 resulted in peak dry weather depth to diameter ratios up to 0.83. It will need to be replaced with a 10-inch sewer.

Project No. 96 is in design and construction stages. The estimated project cost is \$123,000.

Priority No. 58 (Project No. 53) Nutwood Street, Molama Circle to Garden Grove Boulevard

The system hydraulic model shows the 334 feet of 8-inch and 10-inch sewer between Manholes 11229 and 13361 to flow at depth to diameter ratios of 0.66 to full with peak dry weather flows. Flow monitoring conducted in Manhole 13361 in February 2005 showed a depth to diameter ratio of 0.50 with peak dry weather flows, which is below the District's criterion. Development in the tributary area will be monitored, and if needed, this line will be replaced with 1327 feet of 12-inch pipe and 966 feet of 15-inch pipe.

Note that a portion of the sewer in Nutwood Street, south of Stanford Avenue consists of a parallel 8-inch and a parallel 10-inch line. This portion of the system is not considered capacity deficient.

Project No. 53 is in design and construction stages. The estimated project cost is \$2,080,000.

Priority No. 61 (Project No. 91) Trask Avenue, Jackson Street to Coast Street

The system hydraulic model shows the 525 feet of 10-inch sewer between Manholes 7076 and 7115 to flow at depth to diameter ratios of 0.79 to 1.00 with peak dry weather flows. Flow monitoring conducted in November 2011 resulted in peak dry weather depth to diameter ratios up to 0.68. It will need to be replaced with a 15-inch sewer.

Project No. 91 is in design and construction stages. The estimated project cost is \$485,000.

Priority No. 62 (Project No. 92) Donegal Drive, Madison Circle to Bolsa Avenue

The system hydraulic model shows the 1478 feet of 8-inch sewer between Manholes 6938 and 6937 to flow at depth to diameter ratios of 0.64 to 1.00 with peak dry weather flows. Flow monitoring conducted in August 2011 resulted in peak dry weather depth to diameter ratios up to 0.66. It will need to be replaced with a 12-inch sewer.

Project No. 92 is in design and construction stages. The estimated project cost is \$1,093,000.

Priority No. 65 (Project No. 51) Stanford Avenue, Blackthorn Street to Brookhurst Street

The system hydraulic model shows the 914 feet of 8-inch sewer between Manholes 11322 and 13323 to flow at depth to diameter ratios of 0.66 to 1.00 with peak dry weather flows. Flow monitoring conducted in August 2011 resulted in peak dry weather depth to diameter ratios up to 0.53. It will need to be replaced with a 12-inch sewer.

Project No. 51 is in design and construction stages. The estimated project cost is \$676,000.

Priority No. 71 (Project No. 31) Diversion to OCSD's South Anaheim Interceptor Sewer at Lampson Avenue and 9th Street

Project No. 31 will relieve the sewers in 9th Street south of Lampson Avenue by diverting the flow from the area tributary to the intersection of 9th Street and Lampson Avenue into OCSD's South Anaheim Interceptor Sewer at Manhole 12533. Flow monitoring conducted in July 2009 in 9th Street downstream of the diversion location, resulted in peak dry weather depth to diameter ratios up to 0.42. Also included with this project is 360 feet of 10-inch pipe located in Lampson Avenue just east of 9th Street. The hydraulic model shows the existing 8-inch pipe from between Manholes 12526 and 12533 to flow at a depth to diameter ratio of 0.64 with peak dry weather flows.

Project No. 31 is in design and construction stages. The estimated project cost is \$458,000.

Priority No. 74 (Project No. 44) Imperial Avenue, East of Magnolia Street to OCSD's Magnolia Trunk Sewer

The system hydraulic model shows the 541 feet of 8-inch sewer in Imperial Avenue between Manholes 11545 and 11587 to flow at depth to diameter ratios of 0.66 to 0.67 with peak dry weather flows. The sewer in Magnolia Avenue between Manhole 11588 and 11590 are estimated to be flowing full. Minimal capacity

available was verified in the field by City staff observation. It is recommended to replace the 541 feet of sewer in Imperial Avenue with a 10-inch sewer that ties into the existing OCSD trunk Sewer in Magnolia, alleviating the existing GGSD sewer in Magnolia which will then not have to be upsized.

Project No. 44 is in design and construction stages. The estimated project cost is \$333,000.

Priority No. 77 (Project No. 76) Josephine Street, North of Acacia Avenue to Garden Grove Boulevard

The system hydraulic model shows the 852 feet of 8-inch sewer between Manholes 8393 and 9394 to flow at a depth to diameter ratios of 0.64 to 0.68 with peak dry weather flows. Flow monitoring conducted in December 2011 resulted in peak dry weather depth to diameter ratios up to 0.47. It will need to be replaced with a 10-inch sewer.

Project No. 76 is in design and construction stages. The estimated project cost is \$525,000.

Priority No. 75 (Project No. 63) Newland Street, Garden Grove Freeway to Gloria Avenue

The system hydraulic model shows the 1010 feet of 8-inch sewer between Manholes 7660 and 7665 to flow at a depth to diameter ratios of 0.66 to 0.74 with peak dry weather flows. Flow monitoring conducted in August 2011 resulted in peak dry weather depth to diameter ratios up to 0.46. It will need to be replaced with a 12-inch sewer.

Project No. 63 is in design and construction stages. The estimated project cost is \$746,000.

Future Projects

Priority No. 43 (Project No. 46) Monarch Street, Anaconda Avenue to Lampson Avenue

The system hydraulic model shows the 540 feet of 8-inch sewer between Manholes 8104 and 8098 to flow at depth to diameter ratio of 0.81 with peak dry weather flows. This deficiency was verified in the field by City staff observation. It will need to be replaced with a 12-inch sewer.

Project No. 46 is scheduled for Fiscal year 2017-2018. The estimated project cost is \$399,000.

Priority No. 44 (Project No. 75) Lampson Avenue, Monarch Street to Western Avenue

The system hydraulic model shows the 1320 feet of 12-inch sewer between Manholes 8098 and 7189 to flow at depth to diameter ratios of 0.64 to 0.76 with peak dry weather flows. It will need to be replaced with a 15-inch sewer.

Project No. 75 is scheduled for Fiscal year 2017-2018. The estimated project cost is \$1,220,000.

Priority No. 45 (Project No. 68) Onyx Street, north of Chapman Avenue

The system hydraulic model shows the 253 feet of 8-inch sewer between Manholes 7384 and 7386 to flow at a depth to diameter ratio of 0.70 with peak dry weather flows. Flow monitoring conducted in November 2011

resulted in peak dry weather depth to diameter ratios up to 0.87. It will need to be replaced with a 10-inch sewer.

Project No. 68 is scheduled for Fiscal year 2017-2018. The estimated project cost is \$156,000.

Priority No. 46 (Project No. 43) Lamplighter Street and Lenore Avenue

The system hydraulic model shows the 1462 feet of 8-inch sewer between Manholes 7729 and 7404 to flow at depth to diameter ratios of 0.68 to 0.71 with peak dry weather flows. Minimal capacity available was verified in the field by City staff observation. It will need to be replaced with a 12-inch sewer.

Project No. 43 is currently scheduled for Fiscal year 2017-2018. The estimated project cost is \$2,081,000.

Priority No. 49 (Project No. 52) Lampson Avenue, Monroe Street to Beach Boulevard

The system hydraulic model shows the 1775 feet of 8-inch sewer between Manholes 8695 and 8703 to flow at depth to diameter ratios of 0.65 to 1.00 with peak dry weather flows. This deficiency was verified in the field by City staff observation. It will need to be replaced with a 12-inch sewer.

Part of the flow tributary to this project is generated within the City of Stanton territories. Project No. 52 is scheduled for Fiscal year 2018-2019. The estimated project cost is \$1,313,000.

Priority No. 50 (Project No. 56A) Reestablish flow to Parallel GGSD Sewer in Yockey Street (east side of street) north of Trask Avenue

The system hydraulic model shows the 8-inch sewer in Yockey Street north of Trask Avenue to flow with depth to diameter ratios of about 0.71 with peak dry weather flows. Field depth checks performed in March 2012 resulted in 5 inches of flow or a depth to diameter ratio of 0.63. This project will reestablish the 8" sewer from Manhole 11607 to 14201. The flow will ultimately be split between the two parallel 8" sewers in Yockey Street north of Trask Avenue.

Project No. 56A is currently scheduled for Fiscal year 2018-2019. The estimated project cost is \$25,000

Priority No. 59 (Project No. 79) Chapman Avenue, west of Harbor Boulevard

The system hydraulic model shows the 1045 feet of 12-inch sewer between Manholes 13028 and 13052 to flow at depth to diameter ratios of 0.66 to 0.69 with peak dry weather flows. Flow monitoring conducted in November 2011 confirmed the deficiency. It will need to be replaced with an 18-inch sewer.

The flow tributary to 13028 at the intersection of Harbor Boulevard and Chapman Avenue is currently channeled to the west except for emergency overflow conditions, when it can flow south into the "Hotel Line" in Harbor Boulevard.

West of Harbor Boulevard, the flow tributary to 13052 must be allowed to split to the west and the south to prevent peak dry weather depth to diameter ratios exceeding 0.62 in the existing 15-inch sewer (south side of

Chapman Avenue). Currently, the flow at 13052 is normally channeled to the south and prevented from flowing to the west.

All flow tributary to this line is generated by the City of Anaheim and Orange territories.

Project No. 79 is scheduled for Fiscal year 2018-2019. The project cost should be paid for by the City of Anaheim and Orange.

Priority No. 60 (Project No. 67) Chapman Avenue, east of Harbor Boulevard

The system hydraulic model shows the 805 feet of 12-inch sewer between Manholes 13025 and 13028 to flow at a depth to diameter ratios of 0.65 to 0.71 with peak dry weather flows. Flow monitoring conducted in November 2011 resulted in peak dry weather depth to diameter ratios up to 0.56. It will be replaced with a 15-inch line.

Approximately 80 percent of the flow in this line is generated by the City of Anaheim and Orange territories. Project No. 67 is scheduled for Fiscal year 2018-2019. The District's share of the estimated project cost is \$149,000.

Priority No. 63 (Project No. 47) Banner Drive, east of Newhope Street

The system hydraulic model shows the 1185 feet of 8-inch between Manholes 10893 and 10866 to flow at depth to diameter ratios of 0.77 to 0.82 with peak dry weather flows. Flow monitoring conducted in August 2011 resulted in peak dry weather depth to diameter ratios up to 0.62. It will need to be replaced with a 12-inch sewer.

Project No. 47 is scheduled for Fiscal year 2018-2019. The estimated project cost is \$876,000.

Priority No. 64 (Project No. 48) Newhope Street, Banner Drive to Paloma Avenue

The system hydraulic model shows the 517 feet of 8-inch sewer between Manholes 10866 and 13175 to flow at depth to diameter ratios of 0.73 to 0.79 with peak dry weather flows. It will need to be replaced with a 12-inch sewer.

Project No. 48 is scheduled for Fiscal year 2018-2019. The estimated project cost is \$382,000.

Priority No. 66 (Project No. 85) Chapman Avenue, east of Haster Street (Orange Flows)

The system hydraulic model shows the 763 feet of 10-inch sewer between Manholes 12252 and 13004 to flow full with peak dry weather flows. Flow monitoring conducted in November 2011 resulted in peak dry weather depth to diameter ratios up to 0.51. It will need to be replaced with a 12-inch sewer.

The flows in this line are generated by the City of Orange territories.

Project No. 85 is scheduled for Fiscal year 2018-2019. The project cost should be paid for by the City of Orange.

Priority No. 76 (Project No. 93) Westminster Avenue, Anita Place to Euclid Street

The system hydraulic model shows the 620 feet of 12-inch sewer between Manholes 11967 and 11974 to flow at depth to diameter ratios of 0.71 with peak dry weather flows. Flow monitoring conducted in November 2011 resulted in peak dry weather depth to diameter ratios up to 0.43. It will need to be replaced with a 15-inch sewer.

Project No. 93 is currently scheduled for Fiscal year 2019-2020. The estimated project cost is \$573,000.

Priority No. 78 (Project No. 37) Belgrave Avenue, St. Mark Street to Belgrave Pump Station

The system hydraulic model shows the 290 feet of 12-inch sewer between Manholes 8653 and 8913 to flow full with peak dry weather flows. It will need to be replaced with an 18-inch sewer.

Project No. 37 is scheduled for Fiscal year 2019-2020. The estimated project cost is \$322,000.

Priority No. 79 (Project No. 38) Laurelton Avenue, Bailey Street to St. Mark Street

The system hydraulic model shows the 325 feet of 8-inch sewer between Manholes 7780 and 8652 to flow at full with peak dry weather flows. It will need to be replaced with a 12-inch sewer.

Project No. 38 is scheduled for Fiscal year 2019-2020. The estimated project cost is \$240,000.

Priority No. 80 (Project No. 39) Bailey Street, south of Chapman Avenue to Laurelton Avenue

The system hydraulic model shows the 442 feet of 8-inch between Manholes 8909 and 7780 to flow full with peak dry weather flows. It will need to be replaced with a 12-inch sewer.

Project No. 39 is scheduled for Fiscal year 2019-2020. The estimated project cost is \$327,000.

Eliminated Projects

Project No. 18 (Eliminated) Gilbert Street, Orangewood Avenue to Skylark Boulevard

Project No. 18 has been eliminated as a result of Project No. 77 in Joyzelle Street, which will divert flows to the west and alleviate the capacity problems in Gilbert Street.

Project No. 29 (Eliminated) Diversion to OCSD's Newhope-Placentia Trunk Sewer at Newhope Street and Woodbury Road

Project No. 29 was recommended to relieve the sewers in Woodbury Road, Libby Lane, Shirley Street and Westminster Avenue east of Euclid Street by diverting the flow from the area tributary to Newhope Street and Paloma Avenue into OCSD's Newhope-Placentia Trunk Sewer. After further investigation, the connection to OCSD's trunk was found to already exist. Therefore, Project No. 29 is eliminated.

Project No. 30 (Eliminated) Diversion to OCSD's Newhope Placentia Interceptor Sewer at Newhope Street and Woodbury Road

Project No. 30 was eliminated due to a correction made in the hydraulic model.

Project No. 40 (Eliminated) Acacia Avenue, Cantor Street to Seneca Street

Project No. 40 was eliminated due to a correction made in the hydraulic model.

Project No. 41 (Eliminated) Cantor Street, Stanford Avenue to Acacia Avenue

Project No. 41 was eliminated due to a correction made in the hydraulic model.

Project No. 42 (Eliminated) Stanford Avenue, Lamplighter Street to Cantor Street

Project No. 42 was eliminated due to a correction made in the hydraulic model.

Project No. 49 (Eliminated) Decker Avenue, Jean Street to Endry Street

The system hydraulic model showed the 1018 feet of 10-inch sewer between Manholes 8351 and 8966 to flow full with peak dry weather flows. Flow monitoring conducted at Manhole 8976 in 2002 showed a depth to diameter ratio of 0.64 with peak dry weather flows. However, the City of Anaheim constructed a project on Katella Avenue east of Gilbert Street, which diverted Anaheim flows from this reach, eliminating the capacity deficiency.

Therefore, Project No. 49 is removed from the deficiency list.

Project No. 50 (Eliminated) Endry Street, South of Decker Avenue

The system hydraulic model showed the 301 feet of 10-inch sewer to flow full with peak dry weather flows. Because of the diversion of Anaheim flows described for Project 49, this deficiency has also been eliminated. Therefore, Project No. 50 has been from the deficiency list.

Project No. 58 (Eliminated) Blackbird Street, Pearce Street, Clinton Street, and Trask Avenue

Project No. 58 is eliminated due to the assumption that the proposed Bahia Development (500-600 du) on Blackbird Street south of Garden Grove Boulevard will consist of a new pump station and forcemain that will divert the tributary flows to Garden Grove Boulevard. The existing sewer that crosses the Garden Grove Freeway (SR-22) will be abandoned. The sewers in Clinton Street will no longer be capacity deficient at that time and will not need to be upgraded.

Project No. 62 (Eliminated) Pacific Avenue, Chamberlin Drive to Gilbert Street (Mostly Anaheim Flows)

Project No. 62 was eliminated due to field review of water depth which did not verify a capacity deficiency.

Project No. 66 (Eliminated) Ward Street, North of Hazard Avenue

Project No. 66 was eliminated due to a correction made in the hydraulic model.

Project No. 69 (Eliminated) Valley View Street, north of Chapman Avenue

Project No. 69 was eliminated due to a correction made in the hydraulic model and field review of water depth which did not verify a capacity deficiency.

Project No. 73 (Eliminated) Dale Street, Orangewood Avenue to Augusta Drive

Project No. 73 was eliminated due to field review of water depth which did not verify a capacity deficiency.

Project No. 78 (Eliminated) Gilbert Street, Joyzelle Drive to Orangewood Avenue

Project No. 78 has been eliminated as a result of Project No. 77 in Joyzelle Street, which will divert flows to the west and alleviate the capacity problems in Gilbert Street.

Project No. 81 (Eliminated) Medina Drive, Ramona Way to Chapman Avenue

Project No. 81 was eliminated due to a correction made in the hydraulic model.

Project No. 83 (Eliminated) Garden Drive, North of Geraldine Road

Project No. 83 was eliminated due to a correction made in the hydraulic model.

Project No. 84 (Eliminated) Harbor Boulevard, Wilken Way to Chapman Avenue (Anaheim Flows)

All the flow in this line is from the City of Anaheim territories. This line has been upsized by the City of Anaheim to 15-inches in diameter. This should be sufficient to handle the peak flows of the tributary area. Project No. 84 is therefore eliminated.

Project No. 86 (Eliminated) Chapman Avenue, west of Grant Place (Anaheim and Orange Flows)

Project No. 86 was eliminated due to a correction made in the hydraulic model.

Project No. 87 (Eliminated) Katella Avenue, Berry Avenue to Magnolia Street (Partly Anaheim Flows)

Project No. 87 was eliminated due to field review of water depth which did not verify a capacity deficiency.

Project No. 88 (Eliminated) Katella Avenue, Gilbert Street to Berry Avenue (Partly Anaheim Flows)

Project No. 88 was eliminated due to field review of water depth which did not verify a capacity deficiency.

Project No. 89 (Eliminated) Aspenwood Avenue, East of Harbor Boulevard

Project No. 89 has been incorporated into Project No. 7.

Project No. 94 (Eliminated) Sycamore Street, Acacia Avenue to Garden Grove Boulevard

A parallel 10-inch line was found to exist in in Sycamore Street from Acacia Avenue to Garden Grove Boulevard (Manhole 7099 to 7103). It was apparently constructed by the City of Stanton. Design plans could not be located. The inverts were surveyed and the information was added to the hydraulic model. The previously identified deficiency was eliminated and therefore Project No. 94 was also eliminated.

Project No. 95 (Eliminated) Brookhurst Street, south of Chapman Avenue

Project No. 95 was eliminated due to field review of water depth which did not verify a capacity deficiency.

Project No. 97 (Eliminated) Hope Street, north of Westminster Avenue

Project No. 97 was eliminated due to a correction made in the hydraulic model and field review of water depth which did not verify a capacity deficiency.

Project No. 98 (Eliminated) Chanticleer Road, Deste Drive to Gilbert Street

The system hydraulic model shows the 585 feet of 8-inch sewer between Manholes 9345 and 9339 to flow at depth to diameter ratios of 0.64 with peak dry weather flows. Flow monitoring conducted in 2009 showed this sewer to flow at a depth to diameter ratio of 0.57. Therefore, this project was removed from the deficiency list.

Project No. 100 (Eliminated) Anthony Avenue, Adams Street to east of Alonzo Cook Street

Project No. 100 was eliminated due to a correction made in the hydraulic model.

Project No. 103 (Eliminated) Cypress Street, Imperial Avenue to Russell Avenue

Project No. 103 was eliminated due to field review of water depth which did not verify a capacity deficiency.

Project No. 104 (Eliminated) Easement, west of Ditmore Drive to Lorna Street

Project No. 104 was eliminated due to a correction made in the hydraulic model and field review of water depth which did not verify a capacity deficiency.

Project No. 105 (Eliminated) Gilbert Street, Pacific Avenue to Katella Avenue (Partly Anaheim Flows)

Project No. 105 was eliminated due to field review of water depth which did not verify a capacity deficiency.

Funding Plan

The requirements of the District's System Evaluation and Capacity Assurance Plan and Sewer System Rehabilitation Plan (Section 5 of this report), as well as the operational and maintenance needs of the system were incorporated into a financial plan with recommended annual expenditures.

The sewer rate structure prior to September 2005 had flat monthly charges for the two classes of customers-residential and non-residential. The residential charge was \$4.64 per month and the non-residential was \$5.70 per month. Revenues derived from the existing rate structure could not support the projects that will improve the system's capacity and condition within the recommended schedule.

A pay-as-you-go alternative and a combination pay-as-you-go/pay-as-you use alternative was developed and evaluated to generate the needed revenues. Both alternatives were evaluated with a new rate structure that has a fixed base charge for the various customer classes and a use charge applied to estimated flow to the collection system. The Board of Directors of the Garden Grove Sanitary District considered the new rates, held two public hearings, and adopted the recommendations with minor refinements. The rate structure is capable of implementing approximately \$5 million worth of capacity and condition Improvement projects annually (July 2005 dollars). The rates have been adjusted annually to keep up with increases in the construction industry. Appendix G-2 includes Ordinance 10, which details the District's authority to manage and regulate its sewer user fees.

D. SCHEDULE

Order 2006-0003-DWQ requires that "the Enrollee shall develop a schedule of completion dates for all portions of the capital improvement program developed in (a)-(c) above. This schedule shall be reviewed and updated consistent with the SSMP review and update requirements".

A list of the completed and scheduled projects (as of November 2015) is included in Table 8-5. The District has completed approximately 71,000 feet of capacity improvements since 2005 when the first SECAP was prepared. Partridge Pump Station was constructed in 2010. Tiffany Pump Station was reconstructed in 2010. The Belgrave Pump Station was reconstructed in 2013.

SECTION 10 MONITORING, MEASUREMENT, AND PROGRAM MODIFICATIONS

The Order requires:

The Enrollee shall:

- (a) Maintain relevant information that can be used to establish and prioritize appropriate SSMP activities;
- (b) Monitor the implementation and, where appropriate, measure the effectiveness of each element of the SSMP;
- (c) Assess the success of the preventative maintenance program;
- (d) Update program elements, as appropriate, based on monitoring or performance evaluations; and
- (e) Identify and illustrate SSO trends, Including: frequency, location, and volume.

10-1 COMPLIANCE

The District will monitor the effectiveness of its program continuously in order to minimize the possibility of SSOs.

A. RELEVANT INFORMATION

The District keeps updated records of all sewer related documents which include but are not restricted to the following:

- GIS Shapefiles
- CCTV Records
- Maintenance Records
- Hotspot List
- Root Control Program Information
- Equipment Inventory List
- > FSE Inspections Information
- Sanitary Sewer Overflow Reports
- Sewer Capital Improvement Program

<u>GIS Shapefiles</u> - The City of Garden Grove's Information Technology division and the Water Services division maintain the GIS shapefiles, which are stored on the City's Intranet.

<u>CCTV Records</u> –Currently, the Information Technology Department joins the CCTV recordings to the Computerized Maintenance Management System (CMMS) prepared by Munsys Inc.

The District maintains a summary database of the CCTV records and recommendations, which were updated as part of this Sewer System Management Plan report.

<u>Maintenance Records</u> - The District's maintenance records are continually updated through its CMMS. This program allows the District to input, retrieve, and track all maintenance activities regarding routine cleaning, Hot Spot cleaning, emergency repairs, manhole inspections, CCTV inspections, pest control, sewer line foaming, and root control.

Hot Spot List - The District evaluates its Hot Spot locations after the following occurrences:

- Sanitary sewer overflow
- Blockages observed from routine maintenance
- Maintenance records of grease, roots, debris from CCTV records
- Odor complaints

<u>Root Control Program</u> - The District hires a certified and insured contractor to perform its root control services every two years. Reaches are added to the root control program as root obstructions are verified from CCTV inspections, cleaning history, or sewer overflow events.

<u>Equipment Inventory</u> – The District maintains an updated and detailed equipment and materials inventory, as detailed in Appendix D-4.

<u>FSE Inspections</u> – Annual FSE inspection data is maintained electronically by the District.

<u>Sanitary Sewer Overflow Reports</u> – SSO report information is maintained on the California Integrated Water Quality System (CIWQS) website.

<u>Sewer Capital Improvement Program</u> – The 2012 SSMP describes the District's Sewer CIP budget set at: "approximately \$5 million annually (2005 dollars). The rate ordinance has built in escalation for annual adjustments for increases in construction costs." The District maintains a CIP for both the system capacity improvements and rehabilitation and replacement projects.

B. SSMP MONITORING

Order 2006-0003-DWQ requires the District to "monitor the implementation and, where appropriate, measure the effectiveness of each element of the SSMP."

Table 10-1 is a summary of the SSMP monitoring performance indicators and response actions the District takes to monitor the implementation and effectiveness of the SSMP elements.

C. SUCCESS OF PREVENTATIVE MAINTENANCE PROGRAM

Order 2006-0003-DWQ requires the City to "assess the success of the preventative maintenance program."

A sewer collection system with less than three (3) spills from the publically owned system (excluding private property spills that do not result from a blockage in the public system) per 100 miles per year is considered an adequate system.

For the District's sewer system (321 miles), this is an average of about 9.6 (3 x 3.2) spills per year, not including private spills. The District annually evaluates the spills from its sewer system to determine the efficiency of its preventative maintenance plan. The District will make changes as necessary to minimize the number and volume of spills.

D. UPDATE PROGRAM ELEMENTS

Order 2006-0003-DWQ requires the District to "Update program elements, as appropriate, based on monitoring or performance evaluations."

Biennial audits of the SSMP are conducted to measure program effectiveness. The audit itself is a formal methodology for measuring program effectiveness. Based on the findings of the SSMP audit, the District modifies its SSMP elements accordingly.

At a minimum, the District reviews and updates its SSMP document every five (5) years, as required by the Waste Discharge Requirements.

The Change Log is included in Section 13 of this report. Recommendations to the District's SSMP will be tracked in the Change Log. The items in the Change Log will be incorporated into the SSMP documents, when the District conducts its next SSMP update.

E. SSO TRENDS

Order 2006-0003-DWQ requires the City, "Identify and illustrate SSO trends, including: frequency, location, and volume."

The SSO trends are detailed on Figure 10-1 and Table 10-2. Table 10-3 summarizes all SSOs since 2011. A map of the SSO locations is included on Figure 10-2.

Table 10-1
SSMP Monitoring Performance Indicators and Recommended Actions

SSMP Element	Summary of Element Purpose	Performance Indicators for Tracking Effectiveness	Possible Response Actions
1. Goals	Establish priorities of District and provide focus for staff	Annual review of goals based upon results of performance evaluations	Update as necessary.
2. Organization	Document organization of District staff and chain of command / communication for SSO response	Annual review of organization chart and all contact information.	Update and distribute a copy to all parties so they are informed of their responsibilities related to the SSMP elements.
3. Legal Authority	Ensure the District has sufficient legal authority to properly maintain and protect the integrity of the system	Annual review Municipal Code sections and ordinances related to the sewer system annually. Consult District staff to determine if any problems occurred due to inadequate legal authority in relation to the sewer system, SSOs, FOG.	Update as necessary.
4. Operations and Maintenance	Minimize blockages and SSOs by properly operating and maintaining	Monthly review routine and hot spot cleaning records to ensure the preventative maintenance goals are being met.	Review staffing levels if goals are not being met. Consider use of private contractors.
Program	the system	Annual review of pump station maintenance logs to ensure preventative maintenance goals are being met.	
		Annual review of CCTV inspections to ensure reinspections are being performed as scheduled based on date of inspection and the existing priority.	
		Annual review of training schedules/records annually to ensure maintenance staff has the appropriate training in all areas related to sewer system maintenance and SSOs.	Revise training schedules as necessary.
		Annual review of SSO statistics: > Total number and volume of SSOs > Number of repeat SSOs at same location	
		Number of lateral SSOsNumber of mainline SSOs	
		 Total volume spilled Total amount recovered Total amount estimated to reach surface waters 	
		 Percent reaching surface waters Number of pipe failures Total length of pipe cleaned 	
		> Total length of hot spots cleaned	

Table 10-1 (Continued) SSMP Monitoring Performance Indicators and Recommended Actions

SSMP Element	Summary of Element Purpose	Performance Indicators for Tracking Effectiveness	Possible Response Actions
5. Design and Construction Standards	Ensure new facilities are properly designed and constructed	Annual review of existing design and construction standards. New technologies and materials for collection system assets should also be evaluated annually.	Update design and construction standards, as necessary.
6. Overflow Emergency Response Plan (OERP)	Provide timely and effective response to SSO emergencies and comply with regulatory reporting requirements	Annual review of SSOERP document. Annual review of SSO statististics: > Average response time from call to arrival > Average response time from arrival to SSO stoppage and cleanup > Percent of total SSO volume contained or returned to the sewer	Consult maintenance staff for recommendations of improvement based on experiences in field and in reporting SSOs when they occurred. Update as necessary.
7. Fats, Oils & Grease (FOG) Control	Minimize blockages and overflows due to FOG	Annual review of FOG Control Program documents Annual review of FSE inspection data to ensure goals are being met Annual review of SSO and FOG statististics: > Number of blockages due to FOG > Number of SSOs due to FOG	Consult FSE inspector for recommendations of improvements. Update as FOG Control Program, as necessary. Map and correlate SSOs with FSE locations and determine what corrective actions are needed, such as adding portions of system to the frequent cleaning list or further education
8. System Evaluation and Capacity Assurance Plan (SECAP)	Provide adequate hydraulic capacity to convey dry and peak wet weather flows through system	> Numnber of FOG producting facitilities inspected Annual review of hydraulic model and capacity improvement program projects.	at upstream FSE locations. This task should be done anytime an SSO occurs. Update as necessary.
9. Monitoring, Measurement, & Program Modifications	Evaluate effectiveness of SSMP, keep SSMP up-to-date, and identify necessary changes to SSMP Elements Formally identify SSMP effectiveness, limitations, and	Annual review of performance indicators described in Element 4, 6, & 7. Perform bi-annual SSMP audit	Keep audits reports on file for a minimum of five (5) years per the SWRCB Monitoring and
11. Communication Plan	necessary changes. Communicate with public and satellite agencies	Annual review of communications program.	Reporting Program requirements Place sewer system related documents on City website.



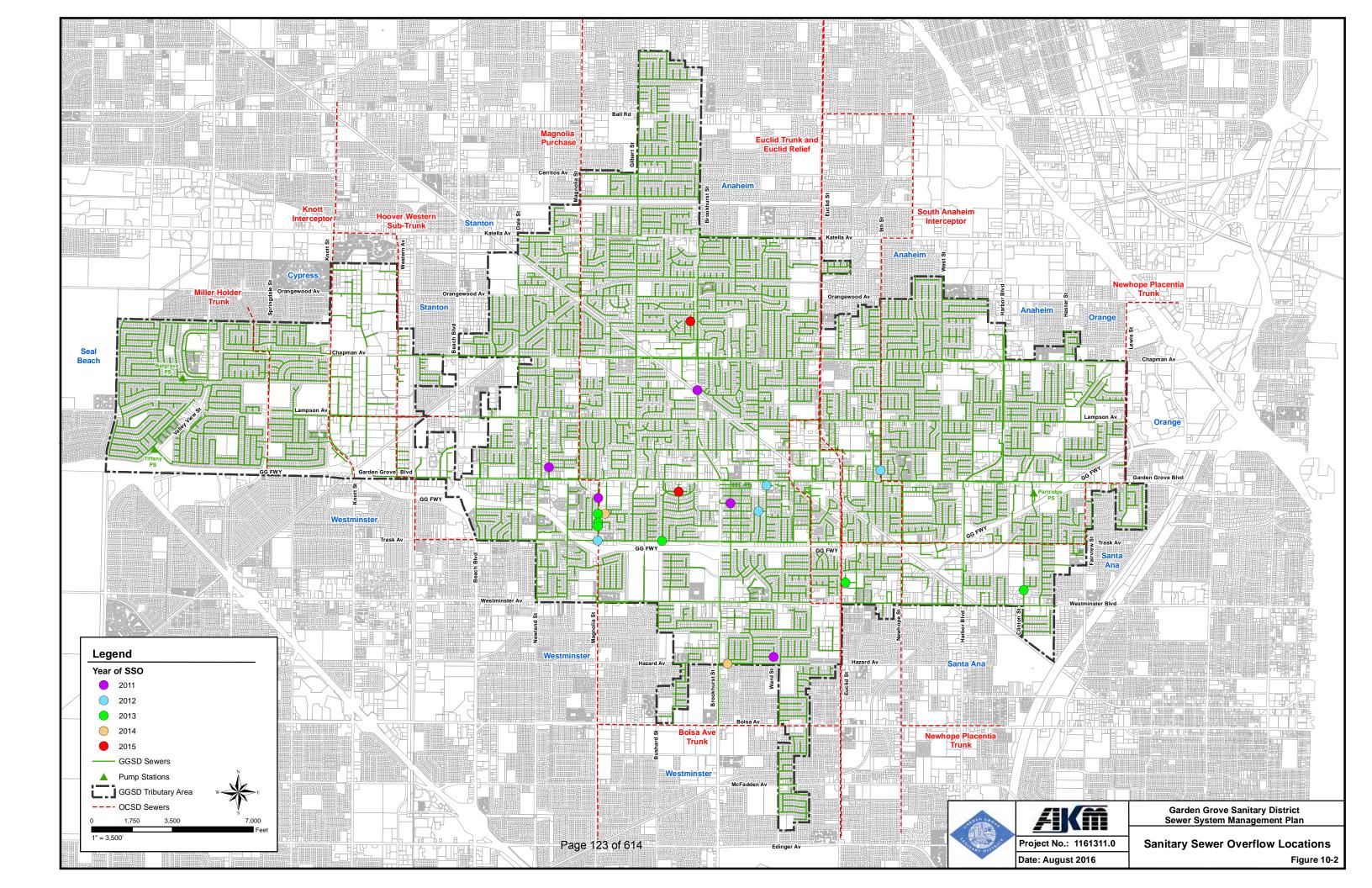
Figure 10-1
Sanitary Sewer Overflows by Year

Table 10-2 SSOs by Cause

			Debris/					
	Public	Private	Rags	Grease	Roots	Structural	NA	Totals
2011	5	5	2	7		1		10
2012	4	7		10		1		11
2013	6	1	3	1	1		2	7
2014	2	1		3				3
2015	2	1		2	1			3
Totals	19	15	5	23	2	2	2	34

Table 10-3
Sewer System Overflow Summary

Year	Date	Public/ Private	Location	Spill Volume (gal)	Recovered Volume (gal)	Likely Cause	Comments
	3/22/2011	GGSD	Flower and Crosby	22	22	Debris/rags	
	4/26/2011	Private	13436 Magnolia	30	30	Debris/rags	
	6/7/2011	GGSD	Kern Avenue and Bowen	32	32	Grease	
			13991 Brookhurst St (Lee's				
	6/14/2011	Private	Sandwiches)	18	18	Grease	
	6/21/2011	Private	13011 Brookhurst St	52	52	Structural	
	7/13/2011	Private	12051 Valley View (McDonalds)	62	62	Grease	
	7/17/2011	GGSD	Magnolia at Larson	61	61	Grease	
	8/20/2011	Private	12188 Brookhurst	37	37	Grease	
	10/6/2011	GGSD	Josephine and Anthony	767	767	Grease	
2011	10/15/2011	GGSD	Brookhurst and Bonser	294	294	Grease	
	2/19/2012	Private	8939 Hewitt Pl.	53	53	Grease	
	4/3/2012	Private	12781 Josephine St.	16	16	Grease	
	5/1/2012	Private	9731 Garden Grove Blvd.	16	5	Grease	
	6/25/2012	Private	7725 Garden Grove Blvd.	15	15	Structural	
	7/14/2012	GGSD	12891 9th Street	326	326	Grease	
	8/1/2012	Private	12591 Westminster	69	69	Grease	
	9/4/2012	Private	13436 Magnolia St.	31	31	Grease	
	10/16/2012	Private	13871 Shady Ln.	210	210	Grease	
	11/7/2012	GGSD	13052 Cypress St.	138	138	Grease	
•	11/26/2012	GGSD	Adland and Central	531	531	Grease	
2012	12/7/2012	GGSD	Magnolia and Trask	765	765	Grease	
	3/14/2013	GGSD	11028 Cynthia Cir.	857	857	Debris/rags	
	9/5/2013	GGSD	13361 Magnolia	NA	NA	NA	Not Reported on CIWQS
	9/6/2013	GGSD	13371 Magnolia	NA	NA	NA	Not Reported on CIWQS
	10/23/2013	GGSD	9670 Trask	203	203	Grease	
	12/11/2013	Private	9691 Hazard Ave.	6	6	Debris/rags	
	12/15/2013	GGSD	Clinton north of Westminster	115	115	Roots	
2013	12/31/2013	GGSD	13271 Magnolia	812	812	Debris/rags	
	3/13/2014	Private	10145 Westminster	NA	NA	Grease	Not Reported on CIWQS
	3/15/2014	GGSD	9031 Imperial Ave.	878	878	Grease	
2014	6/29/2014	GGSD	Hazard and Brookhurst	496	496	Grease	
	1/19/2015	GGSD	11701 Flamingo	31	31	Roots	
2045	6/12/2015	Private	10120 Westminster	NA 10	NA 10	Grease	Not Reported on CIWQS
2015	7/8/2015	GGSD	9820 Garden Grove Blvd.	10	10	Grease	



SECTION 11 SSMP PROGRAM AUDITS

The Order requires:

As part of the SSMP, the District shall conduct periodic internal audits, appropriate to the size of the system and the number of SSOs. At a minimum, these audits must occur every two years and a report must be prepared and kept on file.

This audit shall focus on evaluating the effectiveness of the SSMP and the District's compliance with the SSMP requirements identified in this subsection (D.13), including identification of any deficiencies in the SSMP and steps to correct them.

11-1 COMPLIANCE

The District performs audits of its SSMP documents bi-annually. The District completed its last SSMP in November 2015.

SSMP audits for the past five years, at minimum, are kept on file per the State Water Resources Control Board (SWRCB) Monitoring and Reporting Program Requirements.

SECTION 12 COMMUNICATION

The Order requires that:

The District shall communicate on a regular basis with the public on the development, implementation, and performance of its SSMP. The communication system shall provide the public the opportunity to provide input to the District as the program is developed and implemented.

The District shall also create a plan of communication with systems that are tributary and/or satellite to the District's sanitary sewer system.

12-1 COMPLIANCE

The District provides communication to its customers through informational brochures, door hangers information, grease lids and discussions at public events such as the Public Works Open House, Garden Grove Pride, and the Coast Keeper Outreach Program. The District also provides other innovative means of public outreach, which include a sewer saver display that demonstrates the effect of tree roots and solids on the District's sewers. A hands-on "Knock the Grease Goblin out of the Sewer Game" was also created as part of the District's public outreach program.

The District maintains the SSMP documents at the Municipal Service Center located at 13802 Newhope St., Garden Grove, CA 92840.

The District has placed its current SSMP document on the City of Garden Grove's (City) website:

http://www.ci.garden-grove.ca.us/pw/sewersystemmanagementplan

SECTION 13 CHANGE LOG

13-1 WASTE

The Section D.14 of Order 2006-0003 require that, "The SSMP must be updated every five (5) years, and must include any significant program changes."

The District performs annual reviews to evaluate the efficiency of its sewer system and its Sewer System Management Plan. Per Order 2006-0003, the District also performs detailed bi-annual SSMP audits. Table 13-1 includes the SSMP Change Log, which provide the District a means to track the necessary changes to the SSMP document. These items will be incorporated into the SSMP document when the District conducts its next update.

Table 13-1 SSMP Change Log

Section	Action Item	Status
		-

Section	Action Item	Status

GARDEN GROVE SANITARY DISTRICT

SEWER SYSTEM MANAGEMENT PLAN APPENDICES

Prepared for:

Garden Grove Sanitary District 13802 Newhope Street, Garden Grove, California 92843 (714) 741-5395

Prepared by:

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TABLE OF CONTENTS

Appendix A – Introduction

- A-1 State Water Resources Control Board Order No. 2006-0003-DWQ
- A-2 State Water Resources Control Board Order No. WQ 2013-0058-EXEC

Appendix B – Organization

- B-1 Roles and Responsibilities
- B-2 Reporting Guidelines

Appendix C – Legal Authority

- C-1 Code of Regulations (2010)
- C-2 Stormwater Quality
- C-3 Ordinance No. 6 (FOG Requirements)
- C-4 City of Anaheim Agreement
- C-5 City of Orange Agreement
- C-6 City of Stanton Agreement
- C-7 City of Midway Agreement
- C-8 City of Santa Ana Agreement

Appendix D - O&M Program

- D-1 Sewer and Storm Drain Map
- D-2 Pump Station Description
- D-3 CCTV Database
- D-4 Condition Assessment Priorities
- D-5 Equipment Inventory

Appendix E - Design and Performance

- E-1 Design Criteria for Sewer Facilities
- E-2 Standard Drawings

Appendix F - FOG Control Program

- F-1 FOG Control Program for Food Service Establishments
- F-2 FOG Informational Handouts
- F-3 Certified Liquid Wastehauler Vehicles

Appendix G - SECAP

- G-1 Recommended Capacity Improvement Projects
- G-2 Ordinance No. 10



STATE WATER RESOURCES CONTROL BOARD ORDER NO. 2006-0003-DWQ

STATEWIDE GENERAL WASTE DISCHARGE REQUIREMENTS FOR SANITARY SEWER SYSTEMS

The State Water Resources Control Board, hereinafter referred to as "State Water Board", finds that:

- All federal and state agencies, municipalities, counties, districts, and other public
 entities that own or operate sanitary sewer systems greater than one mile in
 length that collect and/or convey untreated or partially treated wastewater to a
 publicly owned treatment facility in the State of California are required to comply
 with the terms of this Order. Such entities are hereinafter referred to as
 "Enrollees".
- 2. Sanitary sewer overflows (SSOs) are overflows from sanitary sewer systems of domestic wastewater, as well as industrial and commercial wastewater, depending on the pattern of land uses in the area served by the sanitary sewer system. SSOs often contain high levels of suspended solids, pathogenic organisms, toxic pollutants, nutrients, oxygen-demanding organic compounds, oil and grease and other pollutants. SSOs may cause a public nuisance, particularly when raw untreated wastewater is discharged to areas with high public exposure, such as streets or surface waters used for drinking, fishing, or body contact recreation. SSOs may pollute surface or ground waters, threaten public health, adversely affect aquatic life, and impair the recreational use and aesthetic enjoyment of surface waters.
- 3. Sanitary sewer systems experience periodic failures resulting in discharges that may affect waters of the state. There are many factors (including factors related to geology, design, construction methods and materials, age of the system, population growth, and system operation and maintenance), which affect the likelihood of an SSO. A proactive approach that requires Enrollees to ensure a system-wide operation, maintenance, and management plan is in place will reduce the number and frequency of SSOs within the state. This approach will in turn decrease the risk to human health and the environment caused by SSOs.
- 4. Major causes of SSOs include: grease blockages, root blockages, sewer line flood damage, manhole structure failures, vandalism, pump station mechanical failures, power outages, excessive storm or ground water inflow/infiltration, debris blockages, sanitary sewer system age and construction material failures, lack of proper operation and maintenance, insufficient capacity and contractorcaused damages. Many SSOs are preventable with adequate and appropriate facilities, source control measures and operation and maintenance of the sanitary sewer system.

SEWER SYSTEM MANAGEMENT PLANS

- 5. To facilitate proper funding and management of sanitary sewer systems, each Enrollee must develop and implement a system-specific Sewer System Management Plan (SSMP). To be effective, SSMPs must include provisions to provide proper and efficient management, operation, and maintenance of sanitary sewer systems, while taking into consideration risk management and cost benefit analysis. Additionally, an SSMP must contain a spill response plan that establishes standard procedures for immediate response to an SSO in a manner designed to minimize water quality impacts and potential nuisance conditions.
- 6. Many local public agencies in California have already developed SSMPs and implemented measures to reduce SSOs. These entities can build upon their existing efforts to establish a comprehensive SSMP consistent with this Order. Others, however, still require technical assistance and, in some cases, funding to improve sanitary sewer system operation and maintenance in order to reduce SSOs.
- SSMP certification by technically qualified and experienced persons can provide a useful and cost-effective means for ensuring that SSMPs are developed and implemented appropriately.
- 8. It is the State Water Board's intent to gather additional information on the causes and sources of SSOs to augment existing information and to determine the full extent of SSOs and consequent public health and/or environmental impacts occurring in the State.
- 9. Both uniform SSO reporting and a centralized statewide electronic database are needed to collect information to allow the State Water Board and Regional Water Quality Control Boards (Regional Water Boards) to effectively analyze the extent of SSOs statewide and their potential impacts on beneficial uses and public health. The monitoring and reporting program required by this Order and the attached Monitoring and Reporting Program No. 2006-0003-DWQ, are necessary to assure compliance with these waste discharge requirements (WDRs).
- 10. Information regarding SSOs must be provided to Regional Water Boards and other regulatory agencies in a timely manner and be made available to the public in a complete, concise, and timely fashion.
- 11. Some Regional Water Boards have issued WDRs or WDRs that serve as National Pollution Discharge Elimination System (NPDES) permits to sanitary sewer system owners/operators within their jurisdictions. This Order establishes minimum requirements to prevent SSOs. Although it is the State Water Board's intent that this Order be the primary regulatory mechanism for sanitary sewer systems statewide, Regional Water Boards may issue more stringent or more

prescriptive WDRs for sanitary sewer systems. Upon issuance or reissuance of a Regional Water Board's WDRs for a system subject to this Order, the Regional Water Board shall coordinate its requirements with stated requirements within this Order, to identify requirements that are more stringent, to remove requirements that are less stringent than this Order, and to provide consistency in reporting.

REGULATORY CONSIDERATIONS

- 12. California Water Code section 13263 provides that the State Water Board may prescribe general WDRs for a category of discharges if the State Water Board finds or determines that:
 - The discharges are produced by the same or similar operations;
 - The discharges involve the same or similar types of waste;
 - The discharges require the same or similar treatment standards; and
 - The discharges are more appropriately regulated under general discharge requirements than individual discharge requirements.

This Order establishes requirements for a class of operations, facilities, and discharges that are similar throughout the state.

- 13. The issuance of general WDRs to the Enrollees will:
 - a) Reduce the administrative burden of issuing individual WDRs to each Enrollee:
 - b) Provide for a unified statewide approach for the reporting and database tracking of SSOs:
 - c) Establish consistent and uniform requirements for SSMP development and implementation;
 - d) Provide statewide consistency in reporting; and
 - e) Facilitate consistent enforcement for violations.
- 14. The beneficial uses of surface waters that can be impaired by SSOs include, but are not limited to, aquatic life, drinking water supply, body contact and noncontact recreation, and aesthetics. The beneficial uses of ground water that can be impaired include, but are not limited to, drinking water and agricultural supply. Surface and ground waters throughout the state support these uses to varying degrees.
- 15. The implementation of requirements set forth in this Order will ensure the reasonable protection of past, present, and probable future beneficial uses of water and the prevention of nuisance. The requirements implement the water quality control plans (Basin Plans) for each region and take into account the environmental characteristics of hydrographic units within the state. Additionally, the State Water Board has considered water quality conditions that could reasonably be achieved through the coordinated control of all factors that affect

- water quality in the area, costs associated with compliance with these requirements, the need for developing housing within California, and the need to develop and use recycled water.
- 16. The Federal Clean Water Act largely prohibits any discharge of pollutants from a point source to waters of the United States except as authorized under an NPDES permit. In general, any point source discharge of sewage effluent to waters of the United States must comply with technology-based, secondary treatment standards, at a minimum, and any more stringent requirements necessary to meet applicable water quality standards and other requirements. Hence, the unpermitted discharge of wastewater from a sanitary sewer system to waters of the United States is illegal under the Clean Water Act. In addition, many Basin Plans adopted by the Regional Water Boards contain discharge prohibitions that apply to the discharge of untreated or partially treated wastewater. Finally, the California Water Code generally prohibits the discharge of waste to land prior to the filing of any required report of waste discharge and the subsequent issuance of either WDRs or a waiver of WDRs.
- 17. California Water Code section 13263 requires a water board to, after any necessary hearing, prescribe requirements as to the nature of any proposed discharge, existing discharge, or material change in an existing discharge. The requirements shall, among other things, take into consideration the need to prevent nuisance.
- 18. California Water Code section 13050, subdivision (m), defines nuisance as anything which meets all of the following requirements:
 - a. Is injurious to health, or is indecent or offensive to the senses, or an obstruction to the free use of property, so as to interfere with the comfortable enjoyment of life or property.
 - b. Affects at the same time an entire community or neighborhood, or any considerable number of persons, although the extent of the annoyance or damage inflicted upon individuals may be unequal.
 - c. Occurs during, or as a result of, the treatment or disposal of wastes.
- 19. This Order is consistent with State Water Board Resolution No. 68-16 (Statement of Policy with Respect to Maintaining High Quality of Waters in California) in that the Order imposes conditions to prevent impacts to water quality, does not allow the degradation of water quality, will not unreasonably affect beneficial uses of water, and will not result in water quality less than prescribed in State Water Board or Regional Water Board plans and policies.
- 20. The action to adopt this General Order is exempt from the California Environmental Quality Act (Public Resources Code §21000 et seq.) because it is an action taken by a regulatory agency to assure the protection of the environment and the regulatory process involves procedures for protection of the environment. (Cal. Code Regs., tit. 14, §15308). In addition, the action to adopt

this Order is exempt from CEQA pursuant to Cal.Code Regs., title 14, §15301 to the extent that it applies to existing sanitary sewer collection systems that constitute "existing facilities" as that term is used in Section 15301, and §15302, to the extent that it results in the repair or replacement of existing systems involving negligible or no expansion of capacity.

- 21. The Fact Sheet, which is incorporated by reference in the Order, contains supplemental information that was also considered in establishing these requirements.
- 22. The State Water Board has notified all affected public agencies and all known interested persons of the intent to prescribe general WDRs that require Enrollees to develop SSMPs and to report all SSOs.
- 23. The State Water Board conducted a public hearing on February 8, 2006, to receive oral and written comments on the draft order. The State Water Board received and considered, at its May 2, 2006, meeting, additional public comments on substantial changes made to the proposed general WDRs following the February 8, 2006, public hearing. The State Water Board has considered all comments pertaining to the proposed general WDRs.

IT IS HEREBY ORDERED, that pursuant to California Water Code section 13263, the Enrollees, their agents, successors, and assigns, in order to meet the provisions contained in Division 7 of the California Water Code and regulations adopted hereunder, shall comply with the following:

A. DEFINITIONS

- Sanitary sewer overflow (SSO) Any overflow, spill, release, discharge or diversion of untreated or partially treated wastewater from a sanitary sewer system. SSOs include:
 - (i) Overflows or releases of untreated or partially treated wastewater that reach waters of the United States;
 - (ii) Overflows or releases of untreated or partially treated wastewater that do not reach waters of the United States; and
 - (iii) Wastewater backups into buildings and on private property that are caused by blockages or flow conditions within the publicly owned portion of a sanitary sewer system.
- 2. Sanitary sewer system Any system of pipes, pump stations, sewer lines, or other conveyances, upstream of a wastewater treatment plant headworks used to collect and convey wastewater to the publicly owned treatment facility. Temporary storage and conveyance facilities (such as vaults, temporary piping, construction trenches, wet wells, impoundments, tanks, etc.) are considered to be part of the sanitary sewer system, and discharges into these temporary storage facilities are not considered to be SSOs.

For purposes of this Order, sanitary sewer systems include only those systems owned by public agencies that are comprised of more than one mile of pipes or sewer lines.

- Enrollee A federal or state agency, municipality, county, district, and other
 public entity that owns or operates a sanitary sewer system, as defined in the
 general WDRs, and that has submitted a complete and approved application for
 coverage under this Order.
- 4. SSO Reporting System Online spill reporting system that is hosted, controlled, and maintained by the State Water Board. The web address for this site is http://ciwqs.waterboards.ca.gov. This online database is maintained on a secure site and is controlled by unique usernames and passwords.
- 5. **Untreated or partially treated wastewater** Any volume of waste discharged from the sanitary sewer system upstream of a wastewater treatment plant headworks.
- 6. **Satellite collection system** The portion, if any, of a sanitary sewer system owned or operated by a different public agency than the agency that owns and operates the wastewater treatment facility to which the sanitary sewer system is tributary.
- 7. **Nuisance** California Water Code section 13050, subdivision (m), defines nuisance as anything which meets all of the following requirements:
 - a. Is injurious to health, or is indecent or offensive to the senses, or an obstruction to the free use of property, so as to interfere with the comfortable enjoyment of life or property.
 - b. Affects at the same time an entire community or neighborhood, or any considerable number of persons, although the extent of the annoyance or damage inflicted upon individuals may be unequal.
 - c. Occurs during, or as a result of, the treatment or disposal of wastes.

B. APPLICATION REQUIREMENTS

- 1. Deadlines for Application All public agencies that currently own or operate sanitary sewer systems within the State of California must apply for coverage under the general WDRs within six (6) months of the date of adoption of the general WDRs. Additionally, public agencies that acquire or assume responsibility for operating sanitary sewer systems after the date of adoption of this Order must apply for coverage under the general WDRs at least three (3) months prior to operation of those facilities.
- 2. Applications under the general WDRs In order to apply for coverage pursuant to the general WDRs, a legally authorized representative for each agency must submit a complete application package. Within sixty (60) days of adoption of the general WDRs, State Water Board staff will send specific instructions on how to

- apply for coverage under the general WDRs to all known public agencies that own sanitary sewer systems. Agencies that do not receive notice may obtain applications and instructions online on the Water Board's website.
- Coverage under the general WDRs Permit coverage will be in effect once a complete application package has been submitted and approved by the State Water Board's Division of Water Quality.

C. PROHIBITIONS

- 1. Any SSO that results in a discharge of untreated or partially treated wastewater to waters of the United States is prohibited.
- 2. Any SSO that results in a discharge of untreated or partially treated wastewater that creates a nuisance as defined in California Water Code Section 13050(m) is prohibited.

D. PROVISIONS

- 1. The Enrollee must comply with all conditions of this Order. Any noncompliance with this Order constitutes a violation of the California Water Code and is grounds for enforcement action.
- 2. It is the intent of the State Water Board that sanitary sewer systems be regulated in a manner consistent with the general WDRs. Nothing in the general WDRs shall be:
 - (i) Interpreted or applied in a manner inconsistent with the Federal Clean Water Act, or supersede a more specific or more stringent state or federal requirement in an existing permit, regulation, or administrative/judicial order or Consent Decree;
 - (ii) Interpreted or applied to authorize an SSO that is illegal under either the Clean Water Act, an applicable Basin Plan prohibition or water quality standard, or the California Water Code;
 - (iii) Interpreted or applied to prohibit a Regional Water Board from issuing an individual NPDES permit or WDR, superseding this general WDR, for a sanitary sewer system, authorized under the Clean Water Act or California Water Code; or
 - (iv) Interpreted or applied to supersede any more specific or more stringent WDRs or enforcement order issued by a Regional Water Board.
- The Enrollee shall take all feasible steps to eliminate SSOs. In the event that an SSO does occur, the Enrollee shall take all feasible steps to contain and mitigate the impacts of an SSO.
- 4. In the event of an SSO, the Enrollee shall take all feasible steps to prevent untreated or partially treated wastewater from discharging from storm drains into

flood control channels or waters of the United States by blocking the storm drainage system and by removing the wastewater from the storm drains.

- 5. All SSOs must be reported in accordance with Section G of the general WDRs.
- 6. In any enforcement action, the State and/or Regional Water Boards will consider the appropriate factors under the duly adopted State Water Board Enforcement Policy. And, consistent with the Enforcement Policy, the State and/or Regional Water Boards must consider the Enrollee's efforts to contain, control, and mitigate SSOs when considering the California Water Code Section 13327 factors. In assessing these factors, the State and/or Regional Water Boards will also consider whether:
 - (i) The Enrollee has complied with the requirements of this Order, including requirements for reporting and developing and implementing a SSMP;
 - (ii) The Enrollee can identify the cause or likely cause of the discharge event;
 - (iii) There were no feasible alternatives to the discharge, such as temporary storage or retention of untreated wastewater, reduction of inflow and infiltration, use of adequate backup equipment, collecting and hauling of untreated wastewater to a treatment facility, or an increase in the capacity of the system as necessary to contain the design storm event identified in the SSMP. It is inappropriate to consider the lack of feasible alternatives, if the Enrollee does not implement a periodic or continuing process to identify and correct problems.
 - (iv) The discharge was exceptional, unintentional, temporary, and caused by factors beyond the reasonable control of the Enrollee;
 - (v) The discharge could have been prevented by the exercise of reasonable control described in a certified SSMP for:
 - Proper management, operation and maintenance;
 - Adequate treatment facilities, sanitary sewer system facilities, and/or components with an appropriate design capacity, to reasonably prevent SSOs (e.g., adequately enlarging treatment or collection facilities to accommodate growth, infiltration and inflow (I/I), etc.);
 - Preventive maintenance (including cleaning and fats, oils, and grease (FOG) control);
 - Installation of adequate backup equipment; and
 - Inflow and infiltration prevention and control to the extent practicable.
 - (vi) The sanitary sewer system design capacity is appropriate to reasonably prevent SSOs.

- (vii) The Enrollee took all reasonable steps to stop and mitigate the impact of the discharge as soon as possible.
- 7. When a sanitary sewer overflow occurs, the Enrollee shall take all feasible steps and necessary remedial actions to 1) control or limit the volume of untreated or partially treated wastewater discharged, 2) terminate the discharge, and 3) recover as much of the wastewater discharged as possible for proper disposal, including any wash down water.

The Enrollee shall implement all remedial actions to the extent they may be applicable to the discharge and not inconsistent with an emergency response plan, including the following:

- (i) Interception and rerouting of untreated or partially treated wastewater flows around the wastewater line failure;
- (ii) Vacuum truck recovery of sanitary sewer overflows and wash down water;
- (iii) Cleanup of debris at the overflow site;
- (iv) System modifications to prevent another SSO at the same location;
- (v) Adequate sampling to determine the nature and impact of the release;
 and
- (vi) Adequate public notification to protect the public from exposure to the SSO.
- 8. The Enrollee shall properly, manage, operate, and maintain all parts of the sanitary sewer system owned or operated by the Enrollee, and shall ensure that the system operators (including employees, contractors, or other agents) are adequately trained and possess adequate knowledge, skills, and abilities.
- 9. The Enrollee shall allocate adequate resources for the operation, maintenance, and repair of its sanitary sewer system, by establishing a proper rate structure, accounting mechanisms, and auditing procedures to ensure an adequate measure of revenues and expenditures. These procedures must be in compliance with applicable laws and regulations and comply with generally acceptable accounting practices.
- 10. The Enrollee shall provide adequate capacity to convey base flows and peak flows, including flows related to wet weather events. Capacity shall meet or exceed the design criteria as defined in the Enrollee's System Evaluation and Capacity Assurance Plan for all parts of the sanitary sewer system owned or operated by the Enrollee.
- 11. The Enrollee shall develop and implement a written Sewer System Management Plan (SSMP) and make it available to the State and/or Regional Water Board upon request. A copy of this document must be publicly available at the Enrollee's office and/or available on the Internet. This SSMP must be approved by the Enrollee's governing board at a public meeting.

- 12. In accordance with the California Business and Professions Code sections 6735, 7835, and 7835.1, all engineering and geologic evaluations and judgments shall be performed by or under the direction of registered professionals competent and proficient in the fields pertinent to the required activities. Specific elements of the SSMP that require professional evaluation and judgments shall be prepared by or under the direction of appropriately qualified professionals, and shall bear the professional(s)' signature and stamp.
- 13. The mandatory elements of the SSMP are specified below. However, if the Enrollee believes that any element of this section is not appropriate or applicable to the Enrollee's sanitary sewer system, the SSMP program does not need to address that element. The Enrollee must justify why that element is not applicable. The SSMP must be approved by the deadlines listed in the SSMP Time Schedule below.

Sewer System Management Plan (SSMP)

- (i) Goal: The goal of the SSMP is to provide a plan and schedule to properly manage, operate, and maintain all parts of the sanitary sewer system. This will help reduce and prevent SSOs, as well as mitigate any SSOs that do occur.
- (ii) Organization: The SSMP must identify:
 - (a) The name of the responsible or authorized representative as described in Section J of this Order.
 - (b) The names and telephone numbers for management, administrative, and maintenance positions responsible for implementing specific measures in the SSMP program. The SSMP must identify lines of authority through an organization chart or similar document with a narrative explanation; and
 - (c) The chain of communication for reporting SSOs, from receipt of a complaint or other information, including the person responsible for reporting SSOs to the State and Regional Water Board and other agencies if applicable (such as County Health Officer, County Environmental Health Agency, Regional Water Board, and/or State Office of Emergency Services (OES)).
- (iii) **Legal Authority:** Each Enrollee must demonstrate, through sanitary sewer system use ordinances, service agreements, or other legally binding procedures, that it possesses the necessary legal authority to:
 - (a) Prevent illicit discharges into its sanitary sewer system (examples may include I/I, stormwater, chemical dumping, unauthorized debris and cut roots, etc.);

- (b) Require that sewers and connections be properly designed and constructed:
- (c) Ensure access for maintenance, inspection, or repairs for portions of the lateral owned or maintained by the Public Agency;
- (d) Limit the discharge of fats, oils, and grease and other debris that may cause blockages, and
- (e) Enforce any violation of its sewer ordinances.
- (iv) Operation and Maintenance Program. The SSMP must include those elements listed below that are appropriate and applicable to the Enrollee's system:
 - (a) Maintain an up-to-date map of the sanitary sewer system, showing all gravity line segments and manholes, pumping facilities, pressure pipes and valves, and applicable stormwater conveyance facilities;
 - (b) Describe routine preventive operation and maintenance activities by staff and contractors, including a system for scheduling regular maintenance and cleaning of the sanitary sewer system with more frequent cleaning and maintenance targeted at known problem areas. The Preventative Maintenance (PM) program should have a system to document scheduled and conducted activities, such as work orders:
 - (c) Develop a rehabilitation and replacement plan to identify and prioritize system deficiencies and implement short-term and long-term rehabilitation actions to address each deficiency. The program should include regular visual and TV inspections of manholes and sewer pipes, and a system for ranking the condition of sewer pipes and scheduling rehabilitation. Rehabilitation and replacement should focus on sewer pipes that are at risk of collapse or prone to more frequent blockages due to pipe defects. Finally, the rehabilitation and replacement plan should include a capital improvement plan that addresses proper management and protection of the infrastructure assets. The plan shall include a time schedule for implementing the short- and long-term plans plus a schedule for developing the funds needed for the capital improvement plan;
 - (d) Provide training on a regular basis for staff in sanitary sewer system operations and maintenance, and require contractors to be appropriately trained; and

(e) Provide equipment and replacement part inventories, including identification of critical replacement parts.

(v) **Design and Performance Provisions**:

- (a) Design and construction standards and specifications for the installation of new sanitary sewer systems, pump stations and other appurtenances; and for the rehabilitation and repair of existing sanitary sewer systems; and
- (b) Procedures and standards for inspecting and testing the installation of new sewers, pumps, and other appurtenances and for rehabilitation and repair projects.
- (vi) Overflow Emergency Response Plan Each Enrollee shall develop and implement an overflow emergency response plan that identifies measures to protect public health and the environment. At a minimum, this plan must include the following:
 - (a) Proper notification procedures so that the primary responders and regulatory agencies are informed of all SSOs in a timely manner;
 - (b) A program to ensure an appropriate response to all overflows;
 - (c) Procedures to ensure prompt notification to appropriate regulatory agencies and other potentially affected entities (e.g. health agencies, Regional Water Boards, water suppliers, etc.) of all SSOs that potentially affect public health or reach the waters of the State in accordance with the MRP. All SSOs shall be reported in accordance with this MRP, the California Water Code, other State Law, and other applicable Regional Water Board WDRs or NPDES permit requirements. The SSMP should identify the officials who will receive immediate notification:
 - (d) Procedures to ensure that appropriate staff and contractor personnel are aware of and follow the Emergency Response Plan and are appropriately trained;
 - (e) Procedures to address emergency operations, such as traffic and crowd control and other necessary response activities; and
 - (f) A program to ensure that all reasonable steps are taken to contain and prevent the discharge of untreated and partially treated wastewater to waters of the United States and to minimize or correct any adverse impact on the environment resulting from the SSOs, including such accelerated or additional monitoring as may be necessary to determine the nature and impact of the discharge.

- (vii) FOG Control Program: Each Enrollee shall evaluate its service area to determine whether a FOG control program is needed. If an Enrollee determines that a FOG program is not needed, the Enrollee must provide justification for why it is not needed. If FOG is found to be a problem, the Enrollee must prepare and implement a FOG source control program to reduce the amount of these substances discharged to the sanitary sewer system. This plan shall include the following as appropriate:
 - (a) An implementation plan and schedule for a public education outreach program that promotes proper disposal of FOG;
 - (b) A plan and schedule for the disposal of FOG generated within the sanitary sewer system service area. This may include a list of acceptable disposal facilities and/or additional facilities needed to adequately dispose of FOG generated within a sanitary sewer system service area;
 - (c) The legal authority to prohibit discharges to the system and identify measures to prevent SSOs and blockages caused by FOG;
 - (d) Requirements to install grease removal devices (such as traps or interceptors), design standards for the removal devices, maintenance requirements, BMP requirements, record keeping and reporting requirements;
 - (e) Authority to inspect grease producing facilities, enforcement authorities, and whether the Enrollee has sufficient staff to inspect and enforce the FOG ordinance;
 - (f) An identification of sanitary sewer system sections subject to FOG blockages and establishment of a cleaning maintenance schedule for each section; and
 - (g) Development and implementation of source control measures for all sources of FOG discharged to the sanitary sewer system for each section identified in (f) above.
- (viii) System Evaluation and Capacity Assurance Plan: The Enrollee shall prepare and implement a capital improvement plan (CIP) that will provide hydraulic capacity of key sanitary sewer system elements for dry weather peak flow conditions, as well as the appropriate design storm or wet weather event. At a minimum, the plan must include:
 - (a) **Evaluation**: Actions needed to evaluate those portions of the sanitary sewer system that are experiencing or contributing to an SSO discharge caused by hydraulic deficiency. The evaluation must provide estimates of peak flows (including flows from SSOs

that escape from the system) associated with conditions similar to those causing overflow events, estimates of the capacity of key system components, hydraulic deficiencies (including components of the system with limiting capacity) and the major sources that contribute to the peak flows associated with overflow events;

- (b) Design Criteria: Where design criteria do not exist or are deficient, undertake the evaluation identified in (a) above to establish appropriate design criteria; and
- (c) Capacity Enhancement Measures: The steps needed to establish a short- and long-term CIP to address identified hydraulic deficiencies, including prioritization, alternatives analysis, and schedules. The CIP may include increases in pipe size, I/I reduction programs, increases and redundancy in pumping capacity, and storage facilities. The CIP shall include an implementation schedule and shall identify sources of funding.
- (d) **Schedule:** The Enrollee shall develop a schedule of completion dates for all portions of the capital improvement program developed in (a)-(c) above. This schedule shall be reviewed and updated consistent with the SSMP review and update requirements as described in Section D. 14.
- (ix) Monitoring, Measurement, and Program Modifications: The Enrollee shall:
 - (a) Maintain relevant information that can be used to establish and prioritize appropriate SSMP activities;
 - (b) Monitor the implementation and, where appropriate, measure the effectiveness of each element of the SSMP;
 - (c) Assess the success of the preventative maintenance program;
 - (d) Update program elements, as appropriate, based on monitoring or performance evaluations; and
 - (e) Identify and illustrate SSO trends, including: frequency, location, and volume.
- (x) **SSMP Program Audits** As part of the SSMP, the Enrollee shall conduct periodic internal audits, appropriate to the size of the system and the number of SSOs. At a minimum, these audits must occur every two years and a report must be prepared and kept on file. This audit shall focus on evaluating the effectiveness of the SSMP and the

Enrollee's compliance with the SSMP requirements identified in this subsection (D.13), including identification of any deficiencies in the SSMP and steps to correct them.

(xi) **Communication Program** – The Enrollee shall communicate on a regular basis with the public on the development, implementation, and performance of its SSMP. The communication system shall provide the public the opportunity to provide input to the Enrollee as the program is developed and implemented.

The Enrollee shall also create a plan of communication with systems that are tributary and/or satellite to the Enrollee's sanitary sewer system.

14. Both the SSMP and the Enrollee's program to implement the SSMP must be certified by the Enrollee to be in compliance with the requirements set forth above and must be presented to the Enrollee's governing board for approval at a public meeting. The Enrollee shall certify that the SSMP, and subparts thereof, are in compliance with the general WDRs within the time frames identified in the time schedule provided in subsection D.15, below.

In order to complete this certification, the Enrollee's authorized representative must complete the certification portion in the Online SSO Database Questionnaire by checking the appropriate milestone box, printing and signing the automated form, and sending the form to:

State Water Resources Control Board Division of Water Quality Attn: SSO Program Manager P.O. Box 100 Sacramento, CA 95812

The SSMP must be updated every five (5) years, and must include any significant program changes. Re-certification by the governing board of the Enrollee is required in accordance with D.14 when significant updates to the SSMP are made. To complete the re-certification process, the Enrollee shall enter the data in the Online SSO Database and mail the form to the State Water Board, as described above.

15. The Enrollee shall comply with these requirements according to the following schedule. This time schedule does not supersede existing requirements or time schedules associated with other permits or regulatory requirements.

Sewer System Management Plan Time Schedule

Task and	Completion Date				
Associated Section					
	Population >	Population	Population	Population <	
	100,000	between 100,000	between 10,000	2,500	
		and 10,000	and 2,500		
Application for Permit					
Coverage	6 months after WDRs Adoption				
Section C	·				
Reporting Program	6 months ofter MDDs Adention ¹				
Section G	6 months after WDRs Adoption ¹				
SSMP Development	9 months after	12 months after	15 months after	18 months after	
Plan and Schedule	WDRs Adoption ²	WDRs Adoption ²	WDRs	WDRs	
No specific Section	WDNS Adoption	WDINS Adoption	Adoption ²	Adoption ²	
Goals and					
Organization Structure	12 months after WDRs Adoption ²		18 months after WDRs Adoption ²		
Section D 13 (i) & (ii)					
Overflow Emergency					
Response Program					
Section D 13 (vi)	ļ				
Legal Authority					
Section D 13 (iii)	24 months after	30 months after	36 months after	39 months after	
Operation and	WDRs Adoption ²	WDRs Adoption ²	WDRs	WDRs	
Maintenance Program	WDINS / (doption	WDINS / NOPHOII	Adoption ²	Adoption ²	
Section D 13 (iv)	ļ				
Grease Control					
Program					
Section D 13 (vii)					
Design and					
Performance					
Section D 13 (v)	ļ				
System Evaluation and					
Capacity Assurance	36 months after	39 months after	48 months after	51 months after	
Plan	WDRs Adoption	WDRs Adoption	WDRs Adoption	WDRs Adoption	
Section D 13 (viii)	VVDING /Ndoption	VVDING Adoption	AUDING AUUPIIUII	TADITO AGOPTION	
Final SSMP,					
incorporating all of the					
SSMP requirements					
Section D 13					

1. In the event that by July 1, 2006 the Executive Director is able to execute a memorandum of agreement (MOA) with the California Water Environment Association (CWEA) or discharger representatives outlining a strategy and time schedule for CWEA or another entity to provide statewide training on the adopted monitoring program, SSO database electronic reporting, and SSMP development, consistent with this Order, then the schedule of Reporting Program Section G shall be replaced with the following schedule:

Reporting Program Section G		
Regional Boards 4, 8, and 9	8 months after WDRs Adoption	
Regional Boards 1, 2, and 3	12 months after WDRs Adoption	
Regional Boards 5, 6, and 7	16 months after WDRs Adoption	

If this MOU is not executed by July 1, 2006, the reporting program time schedule will remain six (6) months for all regions and agency size categories.

2. In the event that the Executive Director executes the MOA identified in note 1 by July 1, 2006, then the deadline for this task shall be extended by six (6) months. The time schedule identified in the MOA must be consistent with the extended time schedule provided by this note. If the MOA is not executed by July 1, 2006, the six (6) month time extension will not be granted.

E. WDRs and SSMP AVAILABILITY

1. A copy of the general WDRs and the certified SSMP shall be maintained at appropriate locations (such as the Enrollee's offices, facilities, and/or Internet homepage) and shall be available to sanitary sewer system operating and maintenance personnel at all times.

F. ENTRY AND INSPECTION

- The Enrollee shall allow the State or Regional Water Boards or their authorized representative, upon presentation of credentials and other documents as may be required by law, to:
 - Enter upon the Enrollee's premises where a regulated facility or activity is located or conducted, or where records are kept under the conditions of this Order;
 - b. Have access to and copy, at reasonable times, any records that must be kept under the conditions of this Order;

- Inspect at reasonable times any facilities, equipment (including monitoring and control equipment), practices, or operations regulated or required under this Order; and
- d. Sample or monitor at reasonable times, for the purposes of assuring compliance with this Order or as otherwise authorized by the California Water Code, any substances or parameters at any location.

G. GENERAL MONITORING AND REPORTING REQUIREMENTS

- 1. The Enrollee shall furnish to the State or Regional Water Board, within a reasonable time, any information that the State or Regional Water Board may request to determine whether cause exists for modifying, revoking and reissuing, or terminating this Order. The Enrollee shall also furnish to the Executive Director of the State Water Board or Executive Officer of the applicable Regional Water Board, upon request, copies of records required to be kept by this Order.
- 2. The Enrollee shall comply with the attached Monitoring and Reporting Program No. 2006-0003 and future revisions thereto, as specified by the Executive Director. Monitoring results shall be reported at the intervals specified in Monitoring and Reporting Program No. 2006-0003. Unless superseded by a specific enforcement Order for a specific Enrollee, these reporting requirements are intended to replace other mandatory routine written reports associated with SSOs.
- 3. All Enrollees must obtain SSO Database accounts and receive a "Username" and "Password" by registering through the California Integrated Water Quality System (CIWQS). These accounts will allow controlled and secure entry into the SSO Database. Additionally, within 30days of receiving an account and prior to recording spills into the SSO Database, all Enrollees must complete the "Collection System Questionnaire", which collects pertinent information regarding a Enrollee's collection system. The "Collection System Questionnaire" must be updated at least every 12 months.
- 4. Pursuant to Health and Safety Code section 5411.5, any person who, without regard to intent or negligence, causes or permits any untreated wastewater or other waste to be discharged in or on any waters of the State, or discharged in or deposited where it is, or probably will be, discharged in or on any surface waters of the State, as soon as that person has knowledge of the discharge, shall immediately notify the local health officer of the discharge. Discharges of untreated or partially treated wastewater to storm drains and drainage channels, whether man-made or natural or concrete-lined, shall be reported as required above.

Any SSO greater than 1,000 gallons discharged in or on any waters of the State, or discharged in or deposited where it is, or probably will be, discharged in or on any surface waters of the State shall also be reported to the Office of Emergency Services pursuant to California Water Code section 13271.

H. CHANGE IN OWNERSHIP

1. This Order is not transferable to any person or party, except after notice to the Executive Director. The Enrollee shall submit this notice in writing at least 30 days in advance of any proposed transfer. The notice must include a written agreement between the existing and new Enrollee containing a specific date for the transfer of this Order's responsibility and coverage between the existing Enrollee and the new Enrollee. This agreement shall include an acknowledgement that the existing Enrollee is liable for violations up to the transfer date and that the new Enrollee is liable from the transfer date forward.

I. INCOMPLETE REPORTS

1. If an Enrollee becomes aware that it failed to submit any relevant facts in any report required under this Order, the Enrollee shall promptly submit such facts or information by formally amending the report in the Online SSO Database.

J. REPORT DECLARATION

- 1. All applications, reports, or information shall be signed and certified as follows:
 - (i) All reports required by this Order and other information required by the State or Regional Water Board shall be signed and certified by a person designated, for a municipality, state, federal or other public agency, as either a principal executive officer or ranking elected official, or by a duly authorized representative of that person, as described in paragraph (ii) of this provision. (For purposes of electronic reporting, an electronic signature and accompanying certification, which is in compliance with the Online SSO database procedures, meet this certification requirement.)
 - (ii) An individual is a duly authorized representative only if:
 - (a) The authorization is made in writing by a person described in paragraph (i) of this provision; and
 - (b) The authorization specifies either an individual or a position having responsibility for the overall operation of the regulated facility or activity.

K. CIVIL MONETARY REMEDIES FOR DISCHARGE VIOLATIONS

- 1. The California Water Code provides various enforcement options, including civil monetary remedies, for violations of this Order.
- 2. The California Water Code also provides that any person failing or refusing to furnish technical or monitoring program reports, as required under this Order, or

falsifying any information provided in the technical or monitoring reports is subject to civil monetary penalties.

L. SEVERABILITY

- 1. The provisions of this Order are severable, and if any provision of this Order, or the application of any provision of this Order to any circumstance, is held invalid, the application of such provision to other circumstances, and the remainder of this Order, shall not be affected thereby.
- 2. This order does not convey any property rights of any sort or any exclusive privileges. The requirements prescribed herein do not authorize the commission of any act causing injury to persons or property, nor protect the Enrollee from liability under federal, state or local laws, nor create a vested right for the Enrollee to continue the waste discharge.

CERTIFICATION

The undersigned Clerk to the State Water Board does hereby certify that the foregoing is a full, true, and correct copy of general WDRs duly and regularly adopted at a meeting of the State Water Resources Control Board held on May 2, 2006.

AYE: Tam M. Doduc

Gerald D. Secundy

NO: Arthur G. Baggett

ABSENT: None

ABSTAIN: None

Song Her

Clerk to the Board



STATE OF CALIFORNIA WATER RESOURCES CONTROL BOARD ORDER NO. WQ 2013-0058-EXEC

AMENDING MONITORING AND REPORTING PROGRAM FOR STATEWIDE GENERAL WASTE DISCHARGE REQUIREMENTS FOR SANITARY SEWER SYSTEMS

The State of California, Water Resources Control Board (hereafter State Water Board) finds:

- The State Water Board is authorized to prescribe statewide general Waste Discharge Requirements (WDRs) for categories of discharges that involve the same or similar operations and the same or similar types of waste pursuant to Water Code section 13263(i).
- Water Code section 13193 et seq. requires the Regional Water Quality Control Boards (Regional Water Boards) and the State Water Board (collectively, the Water Boards) to gather Sanitary Sewer Overflow (SSO) information and make this information available to the public, including but not limited to, SSO cause, estimated volume, location, date, time, duration, whether or not the SSO reached or may have reached waters of the state, response and corrective action taken, and an enrollee's contact information for each SSO event. An enrollee is defined as the public entity having legal authority over the operation and maintenance of, or capital improvements to, a sanitary sewer system greater than one mile in length.
- Water Code section 13271, et seq. requires notification to the California Office of Emergency Services (Cal OES), formerly the California Emergency Management Agency, for certain unauthorized discharges, including SSOs.
- 4. On May 2, 2006, the State Water Board adopted Order 2006-0003-DWQ, "Statewide Waste Discharge Requirements for Sanitary Sewer Systems" (hereafter SSS WDRs) to comply with Water Code section 13193 and to establish the framework for the statewide SSO Reduction Program.
- Subsection G.2 of the SSS WDRs and the Monitoring and Reporting Program (MRP) provide that the Executive Director may modify the terms of the MRP at any time.
- On February 20, 2008, the State Water Board Executive Director adopted a revised MRP for the SSS WDRs to rectify early notification deficiencies and ensure that first responders are notified in a timely manner of SSOs discharged into waters of the state.
- 7. When notified of an SSO that reaches a drainage channel or surface water of the state, Cal OES, pursuant to Water Code section 13271(a)(3), forwards the SSO notification information² to local government agencies and first responders including local public health officials and the applicable Regional Water Board. Receipt of notifications for a single SSO event from both the SSO reporter

Available for download at: http://www.waterboards.ca.gov/board_decisions/adopted_orders/water_quality/2006/wqo/wqo2006_0003.pdf

² Cal OES Hazardous Materials Spill Reports available Online at: http://w3.calema.ca.gov/operational/malhaz.nsf/\$defaultview and http://w3.calema.ca.gov/operational/malhaz.nsf

- and Cal OES is duplicative. To address this, the SSO notification requirements added by the February 20, 2008 MRP revision are being removed in this MRP revision.
- 8. In the February 28, 2008 Memorandum of Agreement between the State Water Board and the California Water and Environment Association (CWEA), the State Water Board committed to redesigning the CIWQS³ Online SSO Database to allow "event" based SSO reporting versus the original "location" based reporting. Revisions to this MRP and accompanying changes to the CIWQS Online SSO Database will implement this change by allowing for multiple SSO appearance points to be associated with each SSO event caused by a single asset failure.
- 9. Based on stakeholder input and Water Board staff experience implementing the SSO Reduction Program, SSO categories have been revised in this MRP. In the prior version of the MRP, SSOs have been categorized as Category 1 or Category 2. This MRP implements changes to SSO categories by adding a Category 3 SSO type. This change will improve data management to further assist Water Board staff with evaluation of high threat and low threat SSOs by placing them in unique categories (i.e., Category 1 and Category 3, respectively). This change will also assist enrollees in identifying SSOs that require Cal OES notification.
- 10. Based on over six years of implementation of the SSS WDRs, the State Water Board concludes that the February 20, 2008 MRP must be updated to better advance the SSO Reduction Program⁴ objectives, assess compliance, and enforce the requirements of the SSS WDRs.

IT IS HEREBY ORDERED THAT:

Pursuant to the authority delegated by Water Code section 13267(f), Resolution 2002-0104, and Order 2006-0003-DWQ, the MRP for the SSS WDRs (Order 2006-0003-DWQ) is hereby amended as shown in Attachment A and shall be effective on September 9, 2013.

Date

Thomas Howard
Executive Director

³ California Integrated Water Quality System (CIWQS) publicly available at http://www.waterboards.ca.gov/ciwqs/publicreports.shtml

⁴ Statewide Sanitary Sewer Overflow Reduction Program information is available at: http://www.waterboards.ca.gov/water_issues/programs/sso/

ATTACHMENT A

STATE WATER RESOURCES CONTROL BOARD ORDER NO. WQ 2013-0058-EXEC

AMENDING MONITORING AND REPORTING PROGRAM
FOR
STATEWIDE GENERAL WASTE DISCHARGE REQUIREMENTS FOR
SANITARY SEWER SYSTEMS

This Monitoring and Reporting Program (MRP) establishes monitoring, record keeping, reporting and public notification requirements for Order 2006-0003-DWQ, "Statewide General Waste Discharge Requirements for Sanitary Sewer Systems" (SSS WDRs). This MRP shall be effective from September 9, 2013 until it is rescinded. The Executive Director may make revisions to this MRP at any time. These revisions may include a reduction or increase in the monitoring and reporting requirements. All site specific records and data developed pursuant to the SSS WDRs and this MRP shall be complete, accurate, and justified by evidence maintained by the enrollee. Failure to comply with this MRP may subject an enrollee to civil liabilities of up to \$5,000 a day per violation pursuant to Water Code section 13350; up to \$1,000 a day per violation pursuant to Water Code section 13268; or referral to the Attorney General for judicial civil enforcement. The State Water Resources Control Board (State Water Board) reserves the right to take any further enforcement action authorized by law.

A. SUMMARY OF MRP REQUIREMENTS

Table 1 – Spill Categories and Definitions

CATEGORIES	DEFINITIONS [see Section A on page 5 of Order 2006-0003-DWQ, for Sanitary Sewer Overflow (SSO) definition]		
CATEGORY 1	 Discharges of untreated or partially treated wastewater of <u>any volume</u> resulting from an enrollee's sanitary sewer system failure or flow condition that: Reach surface water and/or reach a drainage channel tributary to a surface water; or Reach a Municipal Separate Storm Sewer System (MS4) and are not fully captured and returned to the sanitary sewer system or not otherwise captured and disposed of properly. Any volume of wastewater not recovered from the MS4 is considered to have reached surface water unless the storm drain system discharges to a dedicated storm water or groundwater infiltration basin (e.g., infiltration pit, percolation pond). 		
CATEGORY 2	Discharges of untreated or partially treated wastewater of 1,000 gallons or greater resulting from an enrollee's sanitary sewer system failure or flow condition that do not reach surface water, a drainage channel, or a MS4 unless the entire SSO discharged to the storm drain system is fully recovered and disposed of properly.		
CATEGORY 3	All other discharges of untreated or partially treated wastewater resulting from an enrollee's sanitary sewer system failure or flow condition.		
PRIVATE LATERAL SEWAGE DISCHARGE (PLSD)	Discharges of untreated or partially treated wastewater resulting from blockages or other problems within a privately owned sewer lateral connected to the enrollee's sanitary sewer system or from other private sewer assets. PLSDs that the enrollee becomes aware of may be voluntarily reported to the California Integrated Water Quality System (CIWQS) Online SSO Database.		

Table 2 - Notification, Reporting, Monitoring, and Record Keeping Requirements

ELEMENT	REQUIREMENT	METHOD
NOTIFICATION (see section B of MRP)	Within two hours of becoming aware of any Category 1 SSO greater than or equal to 1,000 gallons discharged to surface water or spilled in a location where it probably will be discharged to surface water, notify the California Office of Emergency Services (Cal OES) and obtain a notification control number.	Call Cal OES at: (800) 852-7550
REPORTING (see section C of MRP)	 Category 1 SSO: Submit draft report within three business days of becoming aware of the SSO and certify within 15 calendar days of SSO end date. Category 2 SSO: Submit draft report within 3 business days of becoming aware of the SSO and certify within 15 calendar days of the SSO end date. Category 3 SSO: Submit certified report within 30 calendar days of the end of month in which SSO the occurred. SSO Technical Report: Submit within 45 calendar days after the end date of any Category 1 SSO in which 50,000 gallons or greater are spilled to surface waters. "No Spill" Certification: Certify that no SSOs occurred within 30 calendar days of the end of the month or, if reporting quarterly, the quarter in which no SSOs occurred. Collection System Questionnaire: Update and certify every 12 months. 	Enter data into the CIWQS Online SSO Database (http://ciwqs.waterboards.ca.gov/), certified by enrollee's Legally Responsible Official(s).
WATER QUALITY MONITORING (see section D of MRP)	Conduct water quality sampling within 48 hours after initial SSO notification for Category 1 SSOs in which 50,000 gallons or greater are spilled to surface waters.	Water quality results are required to be uploaded into CIWQS for Category 1 SSOs in which 50,000 gallons or greater are spilled to surface waters.
RECORD KEEPING (see section E of MRP)	 SSO event records. Records documenting Sanitary Sewer Management Plan (SSMP) implementation and changes/updates to the SSMP. Records to document Water Quality Monitoring for SSOs of 50,000 gallons or greater spilled to surface waters. Collection system telemetry records if relied upon to document and/or estimate SSO Volume. 	Self-maintained records shall be available during inspections or upon request.

B. NOTIFICATION REQUIREMENTS

Although Regional Water Quality Control Boards (Regional Water Boards) and the State Water Board (collectively, the Water Boards) staff do not have duties as first responders, this MRP is an appropriate mechanism to ensure that the agencies that have first responder duties are notified in a timely manner in order to protect public health and beneficial uses.

- 1. For any Category 1 SSO greater than or equal to 1,000 gallons that results in a discharge to a surface water or spilled in a location where it probably will be discharged to surface water, either directly or by way of a drainage channel or MS4, the enrollee shall, as soon as possible, but not later than two (2) hours after (A) the enrollee has knowledge of the discharge, (B) notification is possible, and (C) notification can be provided without substantially impeding cleanup or other emergency measures, notify the Cal OES and obtain a notification control number.
- 2. To satisfy notification requirements for each applicable SSO, the enrollee shall provide the information requested by Cal OES before receiving a control number. Spill information requested by Cal OES may include:
 - i. Name of person notifying Cal OES and direct return phone number.
 - ii. Estimated SSO volume discharged (gallons).
 - iii. If ongoing, estimated SSO discharge rate (gallons per minute).
 - iv. SSO Incident Description:
 - a. Brief narrative.
 - b. On-scene point of contact for additional information (name and cell phone number).
 - c. Date and time enrollee became aware of the SSO.
 - Name of sanitary sewer system agency causing the SSO.
 - e. SSO cause (if known).
 - v. Indication of whether the SSO has been contained.
 - vi. Indication of whether surface water is impacted.
 - vii. Name of surface water impacted by the SSO, if applicable.
 - viii. Indication of whether a drinking water supply is or may be impacted by the SSO.
 - ix. Any other known SSO impacts.
 - x. SSO incident location (address, city, state, and zip code).
- 3. Following the initial notification to Cal OES and until such time that an enrollee certifies the SSO report in the CIWQS Online SSO Database, the enrollee shall provide updates to Cal OES regarding substantial changes to the estimated volume of untreated or partially treated sewage discharged and any substantial change(s) to known impact(s).
- 4. PLSDs: The enrollee is strongly encouraged to notify Cal OES of discharges greater than or equal to 1,000 gallons of untreated or partially treated wastewater that result or may result in a discharge to surface water resulting from failures or flow conditions within a privately owned sewer lateral or from other private sewer asset(s) if the enrollee becomes aware of the PLSD.

C. REPORTING REQUIREMENTS

- 1. **CIWQS Online SSO Database Account:** All enrollees shall obtain a CIWQS Online SSO Database account and receive a "Username" and "Password" by registering through CIWQS. These accounts allow controlled and secure entry into the CIWQS Online SSO Database.
- 2. SSO Mandatory Reporting Information: For reporting purposes, if one SSO event results in multiple appearance points in a sewer system asset, the enrollee shall complete one SSO report in the CIWQS Online SSO Database which includes the GPS coordinates for the location of the SSO appearance point closest to the failure point, blockage or location of the flow condition that caused the SSO, and provide descriptions of the locations of all other discharge points associated with the SSO event.

3. SSO Categories

- i. **Category 1** Discharges of untreated or partially treated wastewater of <u>any volume</u> resulting from an enrollee's sanitary sewer system failure or flow condition that:
 - a. Reach surface water and/or reach a drainage channel tributary to a surface water; or
 - b. Reach a MS4 and are not fully captured and returned to the sanitary sewer system or not otherwise captured and disposed of properly. Any volume of wastewater not recovered from the MS4 is considered to have reached surface water unless the storm drain system discharges to a dedicated storm water or groundwater infiltration basin (e.g., infiltration pit, percolation pond).
- ii. Category 2 Discharges of untreated or partially treated wastewater greater than or equal to 1,000 gallons resulting from an enrollee's sanitary sewer system failure or flow condition that does not reach a surface water, a drainage channel, or the MS4 unless the entire SSO volume discharged to the storm drain system is fully recovered and disposed of properly.
- iii. **Category 3** All other discharges of untreated or partially treated wastewater resulting from an enrollee's sanitary sewer system failure or flow condition.

4. Sanitary Sewer Overflow Reporting to CIWQS - Timeframes

- i. Category 1 and Category 2 SSOs All SSOs that meet the above criteria for Category 1 or Category 2 SSOs shall be reported to the CIWQS Online SSO Database:
 - a. Draft reports for Category 1 and Category 2 SSOs shall be submitted to the CIWQS Online SSO Database within three (3) business days of the enrollee becoming aware of the SSO. Minimum information that shall be reported in a draft Category 1 SSO report shall include all information identified in section 8.i.a. below. Minimum information that shall be reported in a Category 2 SSO draft report shall include all information identified in section 8.i.c below.
 - b. A final Category 1 or Category 2 SSO report shall be certified through the CIWQS Online SSO Database within 15 calendar days of the end date of the SSO. Minimum information that shall be certified in the final Category 1 SSO report shall include all information identified in section 8.i.b below. Minimum information that shall be certified in a final Category 2 SSO report shall include all information identified in section 8.i.d below.

- ii. Category 3 SSOs All SSOs that meet the above criteria for Category 3 SSOs shall be reported to the CIWQS Online SSO Database and certified within 30 calendar days after the end of the calendar month in which the SSO occurs (e.g., all Category 3 SSOs occurring in the month of February shall be entered into the database and certified by March 30). Minimum information that shall be certified in a final Category 3 SSO report shall include all information identified in section 8.i.e below.
- iii. "No Spill" Certification If there are no SSOs during the calendar month, the enrollee shall either 1) certify, within 30 calendar days after the end of each calendar month, a "No Spill" certification statement in the CIWQS Online SSO Database certifying that there were no SSOs for the designated month, or 2) certify, quarterly within 30 calendar days after the end of each quarter, "No Spill" certification statements in the CIWQS Online SSO Database certifying that there were no SSOs for each month in the quarter being reported on. For quarterly reporting, the quarters are Q1 January/ February/ March, Q2 April/May/June, Q3 July/August/September, and Q4 October/November/December.
 - If there are no SSOs during a calendar month but the enrollee reported a PLSD, the enrollee shall still certify a "No Spill" certification statement for that month.
- iv. Amended SSO Reports The enrollee may update or add additional information to a certified SSO report within 120 calendar days after the SSO end date by amending the report or by adding an attachment to the SSO report in the CIWQS Online SSO Database. SSO reports certified in the CIWQS Online SSO Database prior to the adoption date of this MRP may only be amended up to 120 days after the effective date of this MRP. After 120 days, the enrollee may contact the SSO Program Manager to request to amend an SSO report if the enrollee also submits justification for why the additional information was not available prior to the end of the 120 days.

5. **SSO Technical Report**

The enrollee shall submit an SSO Technical Report in the CIWQS Online SSO Database within 45 calendar days of the SSO end date for any SSO in which 50,000 gallons or greater are spilled to surface waters. This report, which does not preclude the Water Boards from requiring more detailed analyses if requested, shall include at a minimum, the following:

i. Causes and Circumstances of the SSO:

- a. Complete and detailed explanation of how and when the SSO was discovered.
- b. Diagram showing the SSO failure point, appearance point(s), and final destination(s).
- c. Detailed description of the methodology employed and available data used to calculate the volume of the SSO and, if applicable, the SSO volume recovered.
- d. Detailed description of the cause(s) of the SSO.
- e. Copies of original field crew records used to document the SSO.
- f. Historical maintenance records for the failure location.

ii. Enrollee's Response to SSO:

- a. Chronological narrative description of all actions taken by enrollee to terminate the spill.
- b. Explanation of how the SSMP Overflow Emergency Response plan was implemented to respond to and mitigate the SSO.

c. Final corrective action(s) completed and/or planned to be completed, including a schedule for actions not yet completed.

iii. Water Quality Monitoring:

- a. Description of all water quality sampling activities conducted including analytical results and evaluation of the results.
- b. Detailed location map illustrating all water quality sampling points.

6. **PLSDs**

Discharges of untreated or partially treated wastewater resulting from blockages or other problems <u>within a privately owned sewer lateral</u> connected to the enrollee's sanitary sewer system or from other private sanitary sewer system assets may be <u>voluntarily</u> reported to the CIWQS Online SSO Database.

- i. The enrollee is also encouraged to provide notification to Cal OES per section B above when a PLSD greater than or equal to 1,000 gallons has or may result in a discharge to surface water. For any PLSD greater than or equal to 1,000 gallons regardless of the spill destination, the enrollee is also encouraged to file a spill report as required by Health and Safety Code section 5410 et. seq. and Water Code section 13271, or notify the responsible party that notification and reporting should be completed as specified above and required by State law.
- ii. If a PLSD is recorded in the CIWQS Online SSO Database, the enrollee must identify the sewage discharge as occurring and caused by a private sanitary sewer system asset and should identify a responsible party (other than the enrollee), if known. Certification of PLSD reports by enrollees is not required.

7. CIWQS Online SSO Database Unavailability

In the event that the CIWQS Online SSO Database is not available, the enrollee must fax or e-mail all required information to the appropriate Regional Water Board office in accordance with the time schedules identified herein. In such event, the enrollee must also enter all required information into the CIWQS Online SSO Database when the database becomes available.

8. Mandatory Information to be Included in CIWQS Online SSO Reporting

All enrollees shall obtain a CIWQS Online SSO Database account and receive a "Username" and "Password" by registering through CIWQS which can be reached at CIWQS@waterboards.ca.gov or by calling (866) 792-4977, M-F, 8 A.M. to 5 P.M. These accounts will allow controlled and secure entry into the CIWQS Online SSO Database. Additionally, within thirty (30) days of initial enrollment and prior to recording SSOs into the CIWQS Online SSO Database, all enrollees must complete a Collection System Questionnaire (Questionnaire). The Questionnaire shall be updated at least once every 12 months.

i. SSO Reports

At a minimum, the following mandatory information shall be reported prior to finalizing and certifying an SSO report for each category of SSO:

- a. <u>Draft Category 1 SSOs</u>: At a minimum, the following mandatory information shall be reported for a draft Category 1 SSO report:
 - 1. SSO Contact Information: Name and telephone number of enrollee contact person who can answer specific questions about the SSO being reported.
 - 2. SSO Location Name.
 - 3. Location of the overflow event (SSO) by entering GPS coordinates. If a single overflow event results in multiple appearance points, provide GPS coordinates for the appearance point closest to the failure point and describe each additional appearance point in the SSO appearance point explanation field.
 - 4. Whether or not the SSO reached surface water, a drainage channel, or entered and was discharged from a drainage structure.
 - 5. Whether or not the SSO reached a municipal separate storm drain system.
 - 6. Whether or not the total SSO volume that reached a municipal separate storm drain system was fully recovered.
 - 7. Estimate of the SSO volume, inclusive of all discharge point(s).
 - 8. Estimate of the SSO volume that reached surface water, a drainage channel, or was not recovered from a storm drain.
 - 9. Estimate of the SSO volume recovered (if applicable).
 - 10. Number of SSO appearance point(s).
 - 11. Description and location of SSO appearance point(s). If a single sanitary sewer system failure results in multiple SSO appearance points, each appearance point must be described.
 - 12. SSO start date and time.
 - 13. Date and time the enrollee was notified of, or self-discovered, the SSO.
 - 14. Estimated operator arrival time.
 - 15. For spills greater than or equal to 1,000 gallons, the date and time Cal OES was called.
 - 16. For spills greater than or equal to 1,000 gallons, the Cal OES control number.
- b. <u>Certified Category 1 SSOs</u>: At a minimum, the following mandatory information shall be reported for a certified Category 1 SSO report, in addition to all fields in section 8.i.a:
 - 1. Description of SSO destination(s).
 - 2. SSO end date and time.
 - 3. SSO causes (mainline blockage, roots, etc.).
 - 4. SSO failure point (main, lateral, etc.).
 - 5. Whether or not the spill was associated with a storm event.
 - Description of spill corrective action, including steps planned or taken to reduce, eliminate, and prevent reoccurrence of the overflow; and a schedule of major milestones for those steps.
 - 7. Description of spill response activities.
 - 8. Spill response completion date.
 - 9. Whether or not there is an ongoing investigation, the reasons for the investigation and the expected date of completion.

- 10. Whether or not a beach closure occurred or may have occurred as a result of the SSO.
- 11. Whether or not health warnings were posted as a result of the SSO.
- 12. Name of beach(es) closed and/or impacted. If no beach was impacted, NA shall be selected.
- 13. Name of surface water(s) impacted.
- 14. If water quality samples were collected, identify parameters the water quality samples were analyzed for. If no samples were taken, NA shall be selected.
- 15. If water quality samples were taken, identify which regulatory agencies received sample results (if applicable). If no samples were taken, NA shall be selected.
- 16. Description of methodology(ies) and type of data relied upon for estimations of the SSO volume discharged and recovered.
- 17. SSO Certification: Upon SSO Certification, the CIWQS Online SSO Database will issue a final SSO identification (ID) number.
- c. <u>Draft Category 2 SSOs</u>: At a minimum, the following mandatory information shall be reported for a draft Category 2 SSO report:
 - 1. Items 1-14 in section 8.i.a above for Draft Category 1 SSO.
- d. <u>Certified Category 2 SSOs</u>: At a minimum, the following mandatory information shall be reported for a certified Category 2 SSO report:
 - 1. Items 1-14 in section 8.i.a above for Draft Category 1 SSO and Items 1-9, and 17 in section 8.i.b above for Certified Category 1 SSO.
- e. <u>Certified Category 3 SSOs</u>: At a minimum, the following mandatory information shall be reported for a certified Category 3 SSO report:
 - 1. Items 1-14 in section 8.i.a above for Draft Category 1 SSO and Items 1-5, and 17 in section 8.i.b above for Certified Category 1 SSO.

ii. Reporting SSOs to Other Regulatory Agencies

These reporting requirements do not preclude an enrollee from reporting SSOs to other regulatory agencies pursuant to state law. In addition, these reporting requirements do not replace other Regional Water Board notification and reporting requirements for SSOs.

iii. Collection System Questionnaire

The required Questionnaire (see subsection G of the SSS WDRs) provides the Water Boards with site-specific information related to the enrollee's sanitary sewer system. The enrollee shall complete and certify the Questionnaire at least every 12 months to facilitate program implementation, compliance assessment, and enforcement response.

iv. SSMP Availability

The enrollee shall provide the publicly available internet web site address to the CIWQS Online SSO Database where a downloadable copy of the enrollee's approved SSMP, critical supporting documents referenced in the SSMP, and proof of local governing board approval of the SSMP is posted. If all of the SSMP documentation listed in this subsection is not publicly available on the Internet, the enrollee shall comply with the following procedure:

a. Submit an <u>electronic</u> copy of the enrollee's approved SSMP, critical supporting documents referenced in the SSMP, and proof of local governing board approval of the SSMP to the State Water Board, within 30 days of that approval and within 30 days of any subsequent SSMP re-certifications, to the following mailing address:

State Water Resources Control Board
Division of Water Quality
Attn: SSO Program Manager
1001 I Street, 15th Floor, Sacramento, CA 95814

D. WATER QUALITY MONITORING REQUIREMENTS:

To comply with subsection D.7(v) of the SSS WDRs, the enrollee shall develop and implement an SSO Water Quality Monitoring Program to assess impacts from SSOs to surface waters in which 50,000 gallons or greater are spilled to surface waters. The SSO Water Quality Monitoring Program, shall, at a minimum:

- 1. Contain protocols for water quality monitoring.
- 2. Account for spill travel time in the surface water and scenarios where monitoring may not be possible (e.g. safety, access restrictions, etc.).
- 3. Require water quality analyses for ammonia and bacterial indicators to be performed by an accredited or certified laboratory.
- 4. Require monitoring instruments and devices used to implement the SSO Water Quality Monitoring Program to be properly maintained and calibrated, including any records to document maintenance and calibration, as necessary, to ensure their continued accuracy.
- 5. Within 48 hours of the enrollee becoming aware of the SSO, require water quality sampling for, at a minimum, the following constituents:
 - i. Ammonia
 - ii. Appropriate Bacterial indicator(s) per the applicable Basin Plan water quality objective or Regional Board direction which may include total and fecal coliform, enterococcus, and e-coli.

E. RECORD KEEPING REQUIREMENTS:

The following records shall be maintained by the enrollee <u>for a minimum of five (5) years</u> and shall be made available for review by the Water Boards during an onsite inspection or through an information request:

- 1. General Records: The enrollee shall maintain records to document compliance with all provisions of the SSS WDRs and this MRP for each sanitary sewer system owned including any required records generated by an enrollee's sanitary sewer system contractor(s).
- 2. SSO Records: The enrollee shall maintain records for each SSO event, including but not limited to:
 - i. Complaint records documenting how the enrollee responded to all notifications of possible or actual SSOs, both during and after business hours, including complaints that do not

result in SSOs. Each complaint record shall, at a minimum, include the following information:

- a. Date, time, and method of notification.
- b. Date and time the complainant or informant first noticed the SSO.
- c. Narrative description of the complaint, including any information the caller can provide regarding whether or not the complainant or informant reporting the potential SSO knows if the SSO has reached surface waters, drainage channels or storm drains.
- d. Follow-up return contact information for complainant or informant for each complaint received, if not reported anonymously.
- e. Final resolution of the complaint.
- ii. Records documenting steps and/or remedial actions undertaken by enrollee, using all available information, to comply with section D.7 of the SSS WDRs.
- iii. Records documenting how all estimate(s) of volume(s) discharged and, if applicable, volume(s) recovered were calculated.
- 3. Records documenting all changes made to the SSMP since its last certification indicating when a subsection(s) of the SSMP was changed and/or updated and who authorized the change or update. These records shall be attached to the SSMP.
- 4. Electronic monitoring records relied upon for documenting SSO events and/or estimating the SSO volume discharged, including, but not limited to records from:
 - i. Supervisory Control and Data Acquisition (SCADA) systems
 - ii. Alarm system(s)
 - iii. Flow monitoring device(s) or other instrument(s) used to estimate wastewater levels, flow rates and/or volumes.

F. CERTIFICATION

- All information required to be reported into the CIWQS Online SSO Database shall be certified by a person designated as described in subsection J of the SSS WDRs. This designated person is also known as a Legally Responsible Official (LRO). An enrollee may have more than one LRO.
- 2. Any designated person (i.e. an LRO) shall be registered with the State Water Board to certify reports in accordance with the CIWQS protocols for reporting.
- 3. Data Submitter (DS): Any enrollee employee or contractor may enter draft data into the CIWQS Online SSO Database on behalf of the enrollee if authorized by the LRO and registered with the State Water Board. However, only LROs may certify reports in CIWQS.
- 4. The enrollee shall maintain continuous coverage by an LRO. Any change of a registered LRO or DS (e.g., retired staff), including deactivation or a change to the LRO's or DS's contact information, shall be submitted by the enrollee to the State Water Board within 30 days of the change by calling (866) 792-4977 or e-mailing help@ciwqs.waterboards.ca.gov.

A registered designated person (i.e., an LRO) shall certify all required reports under penalty of perjury laws of the state as stated in the CIWQS Online SSO Database at the time of certification.

CERTIFICATION

The undersigned Clerk to the Board does hereby certify that the foregoing is a full, true, and correct copy of an order amended by the Executive Director of the State Water Resources Control Board.

Appendix B-1 Roles and Responsibilities

GARDEN GROVE SANITARY DISTRICT ROLES AND RESPONSIBILITIES

A. RESPONSIBLE OFFICIAL

The Legally Responsible Official (LRO) who shall sign and certify the SSMP is the Water Services Manager, William E. Murray.

B. RESPONSIBILITIES FOR THE GGSD SSMP

City Manager:

- Establishes policy
- Allocates resources
- Delegates responsibility
- Oversees the preparation of the Sewer Enterprise Funding Plan for proper operation and maintenance of the collection system, and implementing the capital improvement plan

Director of Public Works:

- Provides adequate operation and maintenance of facilities and equipment through Water Services Manager
- Oversees the preparation and maintenance of an up to date map of the collection system, including the stormwater conveyance facilities
- Maintains relative information to establish and prioritize appropriate SSMP activities
- Oversees the system capacity evaluation, including urban runoff diversion to the sewer system during dry weather periods and control of infiltration and intrusion during both wet weather events and dry weather periods
- Oversees the preparation of Capacity Assurance Plan
- Oversees the inspection and condition assessment of the system to identify and prioritize structural deficiencies
- Participates in the preparation of the Sewer Enterprise Funding Plan
- Oversees the preparation of plans, specifications and estimates for the capital improvement projects, including rehabilitation and repair projects
- Reviews the Sanitary Sewer Overflow Report Form completed at the conclusion of a response to an SSO

Water Services Manager:

- Legally Responsible Official (LRO)
- Provides adequate operation and maintenance of facilities and equipment through Water Services Manager

- Oversees the preparation and maintenance of an up to date map of the collection system, including the stormwater conveyance facilities
- Maintains relative information to establish and prioritize appropriate SSMP activities
- Oversees the system capacity evaluation, including urban runoff diversion to the sewer system during dry weather periods and control of infiltration and intrusion during both wet weather events and dry weather periods
- Oversees the preparation of Capacity Assurance Plan
- Oversees the inspection and condition assessment of the system to identify and prioritize structural deficiencies
- Prepares and monitors the Sewer Enterprise budget and capital and replacement funds
- Oversees the preparation of plans, specifications and estimates for the capital improvement projects, including rehabilitation and repair projects
- Reviews the Sanitary Sewer Overflow Report Form completed at the conclusion of a response to an SSO
- Directs sewer operational guidelines
- Plan and direct short term and long term system improvements

District Engineer:

- Prepares the Capacity Assurance Plan
- Oversees the inspection and condition assessment of the system to identify and prioritize structural deficiencies
- Oversees the preparation of plans, specifications and estimates for the capital improvement projects, including rehabilitation and repair projects
- Assists in planning and directing short term and long term system improvements
- Oversees the system capacity evaluation, including urban runoff diversion to the sewer system during dry weather periods and control of infiltration and intrusion during both wet weather events and dry weather periods

GARDEN GROVE SANITARY DISTRICT ROLES AND RESPONSIBILITIES

Supervisor:

- Direct sewer operational guidelines
- Prepare and monitor Sewer budget
- Prepare and monitor Sewer five year Capital and Replacement plan
- Control expenditures of Sewer funds
- Work on special projects as assigned
- Maintain records and documentation of incidents relating to safety
- Plan and direct short and long term personnel development and training by implementing goals, objectives, and performance standards
- Establish goals and objectives that coordinate with the mission/vision of the Division
- Coordinate with other staff to order materials and equipment
- Direct Sanitation Section operational guidelines
- Support and direct aspects and activities of Sanitation Section
- Oversee, supervise and provide managerial assistance in support of field crews in specific work sections
- Inspect emergency situation and informs personnel of problem
- Respond to situations reported by residents and City departments
- Perform necessary procedures to restore situations and request adequate assistance when necessary to restore situation
- Plan and conduct safety meetings
- Maintain records and documentation of incidents relating to safety
- Review files and train on Material Safety Data Sheets (MSDS)
- Oversee all new Sanitation projects
- Attend committee meetings
- Plan and organize all operational strategies
- Perform customer service activities in the field
- Review projects for utility input
- Review and update standards
- Attends developmental related meetings
- Coordinate and supervise construction of Sewer projects
- Review Capital projects for utility input

- Assists in the preparation of special events
- Oversee, supervise and provide managerial assistance in support of field crews in specific work sections
- Plan and implement goals, objectives, and performance standards for divisional sections; act on behalf of Public Works Division Manager during absence; and make presentations to City officials, public groups and staff
- Interview, select, train and evaluate the performance of employees
- Direct and plan the work of employees, including determining the techniques to be used by employees
- Set job performance standards for employees and ensure that standards are met
- Responsible for employee discipline when necessary
- Plan, review, and evaluate the work of crews engaged in a wide variety of maintenance activities; provide staff training and development; maintain a variety of records related to employee work activities
- Interpret and enforce safety provisions in accordance with City procedures, County, State, Federal, OSHA and related guidelines and regulations; and oversee field safety and/or hazardous materials programs
- Identify problems, obtain and analyze information to evaluate, determine and make recommendations for alternate courses of action to resolve problems
- Plan and implement maintenance schedules; estimate personnel, materials, and equipment requirements for section planning and budgeting
- Keep detailed manual and computerized records; gather and compile data; write a variety of technical, administrative, operational and maintenance reports; perform special projects; and procure supplies, equipment and facilities
- Provide on-site field tasks that include performing skilled labor as needed, making field computations, investigating and troubleshooting problems, inspecting contractual work to insure compliance, and reading and interpreting blue prints, maps and GIS system related information

Foreman:

- Plan and direct short and long term personnel development and training by implementing goals, objectives, and performance standards
- Coordinate with other staff to order materials and equipment
- Direct Sanitation Section operational guidelines
- Respond to situations reported by residents and City departments
- Perform necessary procedures to restore situations and request adequate assistance when necessary to restore situation
- Plan and conduct safety meetings
- Establish safety standards per OSHA guidelines
- Review files and Material Safety Data Sheets (MSDS)
- Maintain records and documentation of incidents relating to safety
- Attend committee meetings
- Supervise and direct personnel
- Support and direct aspects and activities of Sanitation Section
- Perform customer service activities in the field
- Fills in when crews are absent
- Work with other departments to complete public works projects
- Oversee, direct, and implement sewer operational guidelines
- Inspect lines to maintain proper conditions for sewer flow
- Inspect lift station pumps for proper operation
- Monitor and supervise progress and direction of the Roving Check Program and prepare data for presentation to other departments
- Supervise all aspects of lift station maintenance and reporting
- Perform maintenance and monitoring of the lift stations, filling in for crew when necessary
- Supervise and monitor the line cleaning, hot spot, and CCTV programs
- Log progress and prepare reports for section programs and responsibilities
- Write and prepare various reports to regulators per the WDR reporting guidelines
- Conduct physical examinations of manholes
- Supervise special projects such as manhole rehabilitation, lateral and main sewer line repairs, and other agencies' construction activities near City lines

- Coordinate with other agencies and contractors for marking sewer lines
- Provide hands-on supervisory assistance in support of field crews in specific work sections.
- Implement goals, objectives, and performance standards for deSignated work section
- Handle work orders by directing, assigning, supervising, overseeing, inspecting, evaluating and performing the work of assigned crew; participate in the selection of new employees; fill in for supervisor during absence
- Train personnel in use of equipment and methods of maintenance; provide input on evaluations; recommend and assist with followthrough of disciplinary actions when appropriate
- Interpret and enforce safety provisions in accordance with City procedures, County, State, Federal, OSHA and related guidelines and regulations.
- Operate a variety of light, medium and heavy construction and maintenance equipment and vehicles; operate a two-way radio; clean and maintain mechanical equipment, basic tools used on the job; perform minor maintenance on assigned equipment; respond to special requests and emergency calls during regular 'and off-hours as needed
- Drive, operate and inspect cars, trucks and a variety of power and automotive equipment
- Identify, research, obtain and analyze necessary information; determine and evaluate alternative approaches and courses of action; make recommendations to resolve problems both verbally and in writing
- Keep detailed manual and computerized daily records and logs; prepare operational and maintenance reports; assist with special projects as needed; order supplies and equipment
- Gather data and compile records, make field computations, and investigate and troubleshoot related problems; inspect contractual work performed to ensure compliance; read and interpret blue prints, maps and GIS system related information
- Work on special projects as assigned

Senior Sewer Maintenance Worker:

- Supervise and direct specific Sanitary District crews (Hot Spots, Line Cleaning, and CCTV)
- Maintain accurate data entry records of work performed by District crews
- Handle work orders by directing, assigning, supervising, overseeing, inspecting, evaluating, performing and reporting the work of assigned crews
- Obtain and maintain a Grade II Wastewater Collection System Maintenance Certification; obtain and maintain a California Class B commercial drivers license with airbrake and tanker endorsements
- Supervise the activities of a small crew or work independently without supervision
- Meet all roles and responsibilities of a Sewer Maintenance Worker
- Operate and maintain a combination "Vactor" truck and a "Hydroflusher" truck
- Install, operate, and repair sewer systems, laterals, flow meters, manholes, lift station equipment and mechanical and electrical equipment associated with sewer lift stations
- Troubleshoot sewer blockages and lift station problems
- Dig ditches and holes using power and manual equipment
- Erect various types of barricades around excavations
- Measure, cut and fit pipe
- Clean and repair various pumps
- Drive a truck to transport tools, department personnel and equipment
- Clean and maintain vehicles, shops and the maintenance yard
- Operate and maintain hand and power tools along with light and heavy equipment
- Secure necessary tools and equipment for trucks
- Assist with minor repairs to sewer collection systems and lift station equipment
- Spray pesticide and clean in and around manhole covers, pumps and equipment
- Work on special projects as needed

Ability to:

Supervise the activities of a small crew or work independently without supervision; perform the physical actions necessary to maintain sewer collection systems and job sites, including working in confined spaces and lifting up to 90 pounds; safely operate motorized vehicles including cars and trucks, and related equipment and tools, such as a forklift, hydraulic crane, jack hammer, air ratchet, shovel, hose, and a variety of basic power and manual hand tools; safely operate a CCTV video camera and equipment; work both independently and as part of a team; follow safe working practices and safety procedures to maintain safe working conditions; read maps, blueprints and other related diagrams; understand a carry out verbal and written instructions; work cooperatively with others; operate devices and read a variety of gauges and meters; operate personal and handheld computers; complete handwritten or computerized paperwork; perform arithmetical calculations using standard and metric conversions; communicate with the general public, contractors and coworkers in a courteous, effective, and professional manner and commit to providing quality customer service.

Sewer Maintenance Worker:

- Operate and maintain a combination "Vactor" truck
- Operate and maintain a "Hydroflusher" truck
- Install, operate and repair sewer collection systems, laterals, flow meters, manholes, lift station equipment and mechanical and electrical equipment associated with sewer lift stations
- Troubleshoot sewer blockages and lift station problems
- Read and interpret collection system maps, blueprints and diagrams
- Dig ditches and holes using power and manual equipment
- Erect various types of barricades around excavations
- Measure, cut and fit pipe
- Clean and repair various pumps
- Drive a truck to transport tools, department personnel and equipment
- Clean and maintain vehicles, shops and the maintenance yard
- Operate a two-way radio
- Read and record readings of various meters and gauges
- Use a personal computer to input data and retrieve work orders
- Operate CCTV video cameras
- Assist with minor repairs to sewer collection systems and lift station equipment
- Spray pesticide and clean in and around manhole covers, pumps and equipment
- Maintain equipment and tools
- Operate hand and power tools along with light and heavy equipment
- Secure necessary tools and equipment for trucks
- Conduct special projects as needed

Ability to:

Perform the physical actions necessary to maintain sewer collection systems and job sites, including working in confined spaces and lifting up to 90 pounds; safely operate motorized vehicles including cars and trucks, and related equipment and tools, such as a forklift, hydraulic crane, jack hammer, air ratchet, solder torch, tap machine, shovel, hose, and a variety of basic power and manual hand tools; safely operate a CCTV video camera and equipment; work both independently and as part of a team; follow safe working practices and safety procedures to maintain safe working conditions; read maps, blueprints and other related

diagrams; understand and carry out verbal and written instructions; work cooperatively with others; operate devices and read a variety of gauges and meters; operate personal and computers; complete handwritten or computerized paperwork; perform arithmetical calculations using standard and metric conversions; communicate with the general public, contractors and co-workers in a courteous, effective, and professional manner and commit to providing quality customer service.

Senior Administrative Analyst / Aide:

- Prepares written correspondence, such as letters and memos, presentations, staff reports, resolutions, grant applications, and environmental reports
- Reviews written materials prepared in the Water Services Division, including Sanitation Section
- Supervises Administrative Intern
- Organizes and assists in creating and completing projects, such as the Sewer System Management Plan (SSMP)
- Analyzes documents, proposed legislation, and regulations, to determine impacts to Water Services Division, including Sanitation Section
- Attend City committee meetings
- Attends meetings representing water and sewer services throughout Southern California
- Maintains records of studies previously conducted
- Manages submission of all section budget documents, insuring all deadlines are met
- Coordinates with section heads regarding supplemental requests
- Organizes meetings with section heads
- Prepares annual report documenting Best Management Practices
- Prepares Urban Water Management Plan
- Prepares benchmark studies on various topics
- Manages cooperative projects (grants) with Orange County Sanitation District
- Administers Operator State Certification Program
- Responds to various local, state and federal surveys
- Updates Emergency Response Plan
- Attends meetings regarding legislation, conservation, current events and projects occurring throughout Southern California
- Prepares Monthly Sanitary District Reports for Sewer Section
- Coordinates with supervisors to update Public Works Quarterly Newsletter for Water Service's Division, including Sanitation Section
- Updates Division web pages
- Presents information and attends the Sanitary District Citizen Advisory

Committee meetings

- Attends industry-related meetings representing the Sanitary District.
- Assists the Water Services Manager in preparing analysis and administrative reports to local, state, and federal regulatory agencies
- Represents Water Division, including Sanitation Section at public events such as: Garden Grove Pride, school assemblies, Public Works Open House, Children's Drinking Water Festival, and service group meetings

Associate Engineer:

- Reviews of details for equipment submittals
- Coordination of payments
- Utilizes requisitions for form of payments
- Attends developmental related meetings
- Manages and directs operations for Engineering Section
- Conducts project administration
- Reviews projects for impacts to water and sewer system
- Reviews and updates standards
- Administers AQMD (Air Quality Management District) mandates

Foreman:

- Conducts inspections of City water and sewer projects
- Attends developmental related meetings
- Administers customer service contacts for water and sewer projects

Sr. Engineering Technician:

- Assists in project administration
- Inputs GIS record system for Water and Sewer System layers
- Converts existing file drawings to computer format with Access program
- Maintains and updates AutoCad & other computer programs used in the Division
- Installs hardware related to SCADA system
- Installs upgrades and new programming for various reservoir and well sites. All programming related to MMI, PLC's, and SCADA
- Troubleshoot any problems related to programming in PLC's
- Install PLC's and related hardware
- Consults with Water Production staff for programming needs of the City's water system
- Makes recommendations on hardware and software upgrades
- Provides record information for public and developers
- Updates gate valve location book, (approximately 10,000 system)

valves)

- Maintains Water and Sewer Atlas Records
- Maintains filing system for all record plans
- Updates and maintains Water Division Standard Plans
- Participates in consultant selection
- Provides consultant design review
- Facilitates inter-department interactions with sections for projects involved
- Reviews capital projects for utility input
- Maintains records for Capital Improvement Projects (CIP)
- Reviews and comments on each land use case
- Reviews development plans
- Coordinates and supervises construction of Water and Sewer projects
- Answers capacity letters and preliminary inquires
- Conducts fire flow testing and fire flow inquiries for new development
- Performs fire hydrant water pressure tests
- Attends developmental related meetings
- Administers customer service contacts for water and sewer projects
- Performs bi-monthly radio system checks with the Water Emergency Response Organization of Orange County

Environmental Service Coordinator:

- Coordinates City and District Environmental Compliance programs such as the National Pollutant Discharge Elimination System (NPDES) permit, Waste Discharge Requirements (WDRs) for Sanitary Sewer Collection Agencies, Air Quality Management District (AQMD) and hazardous materials/waste programs
- Coordinates City and District Environmental Public Outreach and Education Programs
- Coordinates and conducts enforcement actions
- Represents District at sub-committee meetings and General permittee meetings
- Reviews and coordinates the updating of District environmental compliance documents
- Performs duties as District's Fats, Oils, and Grease (FOG) Program Manager
- Responds to hazardous waste spills
- Coordinates environmental crimes investigations
- Reviews and approves development and construction plans to include conditional use documents

Senior Environmental Service Specialist:

- Conducts NPDES, AQMD and WDR compliance inspections at industrial facilities, food service establishments and other commercial facilities to include residential properties
- Responds to sanitary sewer overflows, that are FOG related
- Responds to hazardous waste spills
- Performs environmental crimes investigations
- Conducts Environmental Public Outreach and Education activities for the City and District
- Performs enforcement actions for the City and District
- Assists in the review of development and construction plans
- Attends regional NPDES meetings

Environmental Service Specialist:

• Conducts NPDES, and WDR compliance inspections at industrial facilities, food service establishments and other commercial facilities to

include residential properties

- Responds to sanitary sewer overflows, that are FOG related
- Responds to hazardous waste spills
- Performs environmental crimes investigations
- Conducts Environmental Public Outreach and Education activities for the City and District
- Performs enforcement actions for the City and District
- Attends regional NPDES meetings

Appendix B-2 Reporting Guidelines

Type of Spill	Initial Notification Timeframe	Agency to Notify by Phone	Report Timeframe
Category 1 — Discharges of untreated or partially treated wastewater resulting from an enrollee's sanitary sewer system failure or flow condition that: A. Reach surface water and/or reach a drainage channel tributary to a surface water; or B. Reach a municipal separate storm sewer system (MS4) and are not fully captured and returned to the sanitary sewer system or not otherwise captured and disposed of properly. Any volume of wastewater not recovered from the municipal separate storm sewer system is considered to have reached surface water unless the storm drain system discharges to a dedicated storm water or ground water infiltration basin (e.g., infiltration pit, percolation pond). Greater than or equal to 1,000 gallons, notify the OES and obtain a notification control number. Category 1 — any volume < 1000 gallons	As soon as practical within 2 hours of	Cal OES OCHCA OCPW	- Submit Draft report within 3 business days of becoming aware of the SSO. - Certify within 15 calendar days of SSO end date. SSO Technical Report: - Certify within 45 calendar days after the end date of any Category 1 SSO in which 50,000 gallons or greater is spilled to surface waters.
Category 2 – Discharges of untreated or partially treated wastewater of 1,000 gallons or greater resulting from an enrollee's sanitary sewer system failure or flow condition that do not reach surface water, a drainage channel, or a municipal separate storm sewer system unless the entire SSO discharged to the storm drain system is fully recovered and disposed of properly.	N.A.		- Submit Draft report within 3 business days of becoming aware of the SSO Certify within 15 calendar days of SSO end date.
Category 3 – All other discharges of untreated or partially treated wastewater resulting from an enrollee's sanitary sewer system failure or flow condition.	N.A.		- Submit Certified report within 30 calendar days after the end of month in which SSO occurred.
Private lateral – Discharges of untreated or partially treated wastewater resulting from blockages or other problems within a privately owned sewer lateral connected to the enrollee's sanitary sewer system or from other private sewer assets.	As soon as practical.	Cal OES	- PLSDs that the enrollee becomes aware of may be voluntarily reported to the CIWQS Online SSO Database.
SSO Notification Contacts OES (Office of Emergency Services)		(800) 852 -	7550



GARDEN GROVE SANITARY DISTRICT



CODE OF REGULATIONS

2010

A Codification of the Ordinances and Regulations of the Garden Grove Sanitary District, 11222 Acacia Parkway, PO Box 3070 Garden Grove, California, 92842

TITLE 1

GENERAL PROVISIONS

Chapters:

1.10

Code Adoption Definitions and Rules of Construction 1.20

CHAPTER 1.10 CODE ADOPTION

1.10.010	Short Title, Reference to Code.
1.10.020	Codification Authority.
1.10.030	Effective Date.
1.10.040	Severability and Validity of Code.
1.10.050	Distribution of Code.
1.10.060	Notation of Amendments.
1.10.070	Amendments.
1.10.080	Prior Ordinances and Regulations.
1.10.090	District Fee Resolution.

- **1.10.010 Short Title, Reference to Code.** This Code shall be known as the "Garden Grove Sanitary District Code of Regulations" and it shall be sufficient to refer to said Code as the "Garden Grove Sanitary District Code" in any prosecution for the violation of any provisions thereof. It shall also be sufficient to designate any ordinance or resolution adding to, amending, or repealing, said Code, or portions thereof, as an addition or amendment to, or a repeal of, the "Garden Grove Sanitary District Code," or a portion thereof.
- **1.10.020** Codification Authority. This Code consists of the General Regulations of the Garden Grove Sanitary District as described under Section 6490 *et. seq.* of the Health and Safety Code of the State of California.
- **1.10.030 Effective Date.** This Code takes effect upon the effective date of the Ordinance of the Board of Directors of the Garden Grove Sanitary District whereby this Code is adopted.
- 1.10.040 Severability and Validity of Code. If any section, subsection, sentence, clause, phrase or portion of this Code is for any reason held to be invalid or unconstitutional by the decision of any court of competent jurisdiction, such decision shall not affect the validity of the remaining portions of this Code. The Board hereby declares that it would have adopted this Code and each section, subsection, sentence, clause, phrase, or portion thereof, irrespective of the fact that any one or more sections, subsections, phrases, or portions be declared invalid or unconstitutional.
- **1.10.050 Distribution of Code.** At least one (1) copy of this Code shall be filed for use and examination by the public in the office of the District Secretary or his or her designee. At least one (1) copy duly certified to by the District Secretary shall be maintained on file in the District Secretary's office. Additional copies shall be prepared in loose-leaf form and mounted to withstand heavy usage in such binders as the District Secretary may prescribe. Copies thereof shall be distributed as determined by the District Secretary.
- **1.10.060 Notation of Amendments.** Upon the adoption of any amendment or addition to this Code, or upon the repeal of any of its provisions, the District Secretary shall certify thereto and shall make an appropriate notation in the volumes of said Code of the taking of such

action, noting thereon the number of the ordinances pursuant to which such action is taken. Duly certified copies of every ordinance making changes in such Code shall be filed in the office of the District Secretary in books for such purpose, duly indexed for ready reference.

- **1.10.070 Amendments.** The District Secretary or his or her designee shall prepare copies of such changes in the Code for insertion in the loose-leaf copies thereof. Every section of the code so changed shall have printed thereon a notation of the ordinance number pursuant to which such change is adopted. All amendments shall be published in the Orange County Evening News, a newspaper published in this District and shall take effect upon the expiration of the week of publication pursuant to California Health and Safety Code § 6490.
- 1.10.080 Prior Ordinances and Regulations. This Code of Regulations is intended to be a comprehensive and complete statement of the District's ordinances and regulations. This Code therefore supersedes all ordinances, resolutions, and regulations of the District in effect on the effective date of this Code of Regulations and all such prior ordinances, resolutions, and regulations shall be deemed amended to read as provided in this Code of Regulations, with the exception of the following Ordinances and Resolutions that shall remain in full force and effect until amended as provided in this Code or under Law.
- **1.10.090 District Fee Resolution.** Except as expressly provided in this Code, all fees, penalties, refunds, reimbursements, and charges of any kind levied, assessed, or collected by the District shall be designated in the District Fee Resolution, as amended by the District Board from time to time. Whenever applicable throughout the Code, reference may be made to the District Fee Resolution in lieu of any reference to specific fee amounts.

CHAPTER 1.20 DEFINITIONS AND RULES OF CONSTRUCTION

1.20.010	Construction.
1.20.020	Effect of Headings.
1.20.030	Reference to Acts or Omissions Within The District.
1.20.040	Prohibited Acts, Including Causing, Permitting or
	Suffering.
1.20.050	Reference Applies to Amendments.
1.20.060	Service of Notices.
1.20.070	Proof of Notice.
1.20.080	Tenses.
1.20.090	Gender.
1.20.100	Number.
1.20.110	Shall and May.
1.20.120	Acts by Deputy.
1.20.130	Definitions.

- **1.20.010 Construction.** Unless the provisions or the context otherwise require, these general provisions, rules of construction and definitions shall govern the construction of this Code. The provisions of this Code and all proceedings under it are to be construed with a view to effect its objects and to promote justice.
- **1.20.020 Effect of Headings.** Title, chapter, section, and subsection headings contained herein shall not be deemed to govern, limit, modify or in any manner affect the scope, meaning or intent of the provisions of any title, chapter, section or subsection hereof.
- **1.20.030** Reference to Acts or Omissions Within The District. This Code shall refer only to the omission or commission of acts within the territorial limits of the District and to that territory over which the District has jurisdiction or control by virtue of any law, or by reason of ownership or control of property.
- 1.20.040 Prohibited Acts, Including Causing, Permitting or Suffering. Whenever in this Code any act or omission is made unlawful, it shall include causing, permitting, aiding, abetting, suffering or concealing such act or omission.
- **1.20.050 Reference Applies to Amendments.** Whenever a reference is made to any portion of this Code, or to any ordinance or resolution of the District, the reference applies to all amendments and additions now or hereafter made.
- **1.20.060 Service of Notices.** Whenever a notice is required to be given under this Code, unless different provisions herein are otherwise specifically made, such notice may be given either by personal delivery thereof to the person to be notified or by deposit in the United States mail in a sealed envelope, postage prepaid, addressed to such person to be notified, at his or her last known business or residence address as the same appears in the public records of the County or other

records pertaining to the matter to which such notice is directed. Service by mail shall be deemed to have been completed at the time of deposit in the post office.

1.20.070 Proof of Notice. Proof of giving any notice may be made by the certificate of any officer or employee of the District or of the City of Garden Grove, or by affidavit or declaration under penalty of perjury as provided by the California Code of Civil Procedure § 2015.5 of any person over the age of eighteen years, which shows service in conformity with this Code, or other provisions of law applicable to the subject matter concerned.

1.20.080 Tenses. The present tense includes the past and future tenses, and the future, the present.

1.20.090 Gender. The masculine gender includes the feminine and neuter.

1.20.100 Number. The singular number includes the plural, and the plural, the singular.

1.20.110 Shall and May. "Shall" is mandatory and "may" is permissive unless the context requires otherwise.

1.20.120 Acts by Deputy. Whenever a power is granted to or is duly imposed upon a public officer or employee, the power may be exercised or the duty may be performed by a deputy of such officer or employee, or by a person otherwise duly authorized, pursuant to law or ordinance or regulation or by an officer of the county or city, or by a deputy or employee of such officer when by contract with the District such officer is obligated and has agreed to perform certain duties on behalf of the District, unless this Code expressly provides otherwise.

1.20.130 Definitions. The following terms and phrases as used in this Code or in any ordinance, resolution, or code adopted hereby shall have the following meanings:

TERM <u>DEFINITION</u>

AB 939 That State legislation commonly known as the California Integrated Waste Management Act (Stats 1989, Chapter 1095, as amended) as codified in Public Resources Code Section 40000, et seq., as it may be amended from time to time.

Bin A metal container, commonly referred to as a dumpster, including a compactor and any such similar device, with a capacity of under ten cubic yards.

Board The Board of Directors of the Garden Grove Sanitary District.

Bulky Items

Solid waste that cannot and/or would not typically be accommodated within a cart including specifically: furniture (including chairs, sofas, mattresses, and rugs); appliances (including refrigerators with and without Freon, ranges, washers, dryers, water heaters, dishwashers, plumbing, small household appliances and other similar items, commonly known as "white goods"); residential waste (including wood waste, tree branches, scrap wood, in the aggregate not exceeding one cubic yard per

collection); and clothing. Notwithstanding any provision hereof to the contrary, bulky items shall specifically include items commonly known in the waste industry as "brown goods," "e-waste" and "universal waste" (including, without limitation all types of electronic waste, stereos, televisions, computers and monitors, cellular phones, VCRs, microwaves and other similar type of equipment and products). Bulky items do not include car bodies, construction and demolition debris or (with the exception of appliances/white goods described above) items that cannot reasonably be moved with equipment of the type which, pursuant to industry standards, would normally be carried in a truck collecting bulky items.

Cart

A plastic container provided by a franchisee for collection, with a hinged lid and wheels serviced by an automated or semi-automated process, as opposed to a manual process of lifting and dumping.

Change in **Operations**

Any modification in the operational procedures of a commercial kitchen which has the potential to significantly increase the amount of grease generated by food preparation, including, without limitation, any substantial increase in the net public area, any substantial increase in the hours of operation, any significant increase in the size of the kitchen or the number of food service or food preparation employees, or any significant change in the size or type of food preparation equipment.

City

City of Garden Grove.

Collection or Collecting

To take physical possession of, transport, and remove solid waste from a premises.

Commercial Kitchen

Any business operating in the District as a full service or take-out restaurant, catering kitchen, employee cafeteria, or any other facility engaged in preparing and heat-processing food for consumption by the public or employees and which uses any equipment that produces grease vapors, steam fumes, smoke or odors that are required to by removed by a Type I or Type II hood. Establishments engaged only in assembling or serving food that is prepared entirely off site, and whose kitchen equipment consists only of beverage warmers and microwaves are not considered commercial kitchens.

Commercial Premises

Premises upon which business activity is conducted, including but not limited to retail sales, services, wholesale operations, manufacturing and industrial operations and MFRFs, but excluding residential premises upon which business activities are conducted when such activities are permitted under applicable zoning regulations and are not the primary use of the property. Notwithstanding any provision to the contrary herein, premises upon which MFRFs, hotels and motels are operated, shall be deemed to be commercial premises.

Commercial

Solid waste generated, produced or discarded by or at commercial premises.

Waste Includes any and all liquid or solid waste substance not sewage from any producing,

manufacturing or processing operation of whatever nature. Notwithstanding the foregoing, it shall include sewage mixed with commercial or industrial waste; however, it shall not include domestic sewage from residences, business buildings and institutions containing only waste from waterclosets, wash water, baths and kitchens.

Construction and

and Demolition Waste Solid waste generated, produced or discarded in connection with construction, demolition, landscaping, or general clean-up activities of premises, including, without limitation, concrete, plaster, drywall, wood scraps, metals, dirt, rock and rubble.

Container Any type of solid waste receptacle, including a cart, bin, and rolloff box.

County County of Orange.

District Garden Grove Sanitary District.

Dwelling Unit A residential structure containing one or more habitable rooms, having one and only

one kitchen, and arranged for or occupied by one or more persons living as a household unit with common access to all living, eating and food preparation areas.

Engage in To carry on, keep, conduct, maintain, or cause to be kept or maintained.

Ex-officio By virtue of office.

Franchisee Any person, persons, firm or corporation to whom a franchise has been granted by

the District for the collection, processing, recycling and disposal of solid waste.

Garbage All animal and vegetable refuse resulting from the preparation, handling or

dispensing of food, including every accumulation of animal and vegetable matter that attends the preparation, consumption, decay, dealings in or storage of meats, fish, fruits, vegetables, tallow, bones or meat trimmings that are rejected as useless

by the owner or producer thereof.

General The City Manager of the City of Garden Grove, or his or her designee. **Manager**

Generator Any person who generates, produces or discards solid waste.

Grease Any oil, fat, or oily, fatty substance such as vegetable or animal fat that runs or may

turn viscous or solidifies with a change in temperature or other conditions.

Green Waste Organic waste generated from any landscape, including but not limited to, grass

clippings, leaves, prunings, tree trimmings, weeds, branches and brush in sizes that can

be placed in containers designated for green waste.

Hazardous Waste

All substances defined as "hazardous waste," "acutely hazardous waste," or "extremely hazardous waste" by the State of California in Health and Safety Code, Division 20, Chapter 6.5, including but not limited to Sections 25110.02, 25115, and 25117, or in the future amendments to or recodifications of such statutes or identified and listed as Hazardous Waste by the US Environmental Protection Agency (EPA), pursuant to the Federal Resource Conservation and Recovery Act (42 USC §6901 et seq.) (RCRA), all future amendments thereto, and all rules and regulations promulgated thereunder.

Law

Denotes applicable federal law, the constitution and statutes of the state of California, the ordinances of the City of Garden Grove, California, and any and all rules and regulations which may be promulgated hereunder.

Medical Waste

All wastes defined as "medical waste," "sharps waste," or "home-generated sharps waste" by the State of California in the Medical Waste Management Act, as codified in Part 14 of Division 104 of the Health and Safety Code (commencing with Section 117600), including but not limited to Sections 117671, 117690-117700, and 117755, or in the future amendments to or recodifications of such statutes.

Multi-Family Dwelling

A building or lot containing more than one dwelling unit at which the District and/or a franchisee determines that each dwelling unit can receive solid waste handling services through the use of carts.

Multi-Family Residential Facility or MFRF

Any building or lot containing more than one dwelling unit at which the District and/or a franchisee determines the dwelling units must receive solid waste handling service through the use of shared bins, as they are not reasonably able to store carts or otherwise receive individualized solid waste handling service through the use of the automated collection system utilizing carts.

Nuisance

Anything which is injurious to health, or is indecent or offensive to the senses, or an obstruction to the free use of property, so as to interfere with the comfortable enjoyment of life or property, or other condition specified in Section 3479 of the Civil Code of the State of California.

Occupant

As used in reference to a building or land shall include any person who occupies the whole or part of such building or land, whether alone or with others.

Office

The use of the title of any officer, employee, or official shall mean such officer, employee, or official of the Garden Grove Sanitary District, or his/her duly authorized representative.

Operate

To carry on, keep, conduct, maintain, or cause to be kept or maintained.

Parcel

A parcel as designated by the County Assessor.

Person Any person, firm, association, organization, partnership, business trust, company or

corporation, and any municipal, political or governmental corporation, district, body or

agency, other than the Garden Grove Sanitary District and City of Garden Grove.

Premises Any land, building and/or structure within the District where solid waste is generated

or accumulated.

Public sewer The main sewer or trunk sewer, constructed in a street, highway, alley, place or

right-of-way dedicated to public use.

Recyclable Materials That solid waste capable of being recycled, including but not limited to glass,

newsprint, paper, aluminum, cardboard, certain plastics or metal.

Recycle Or Recycling

The process of collecting, sorting, cleansing, treating, and reconstituting or otherwise processing materials that are or would otherwise become solid waste and returning

them to the economic mainstream in the form of raw material for new, reused or reconstituted products which meet the quality standards necessary to be used in the

marketplace.

Refuse All non-recyclable solid waste, trash, garbage, rubbish, offal, animal waste, and any

other non-recyclable matter rejected as useless by the owner or producer thereof, whether combustible or non-combustible, except said term shall not include

hazardous waste or medical waste as defined herein.

Remodeling Any physical change to a building that requires a building permit.

Residential Premises

Premises within the District upon which single family and multi-family dwelling units exist; except, notwithstanding any provision to the contrary herein, for purposes

of Title 5, premises upon which MFRFs, hotels, and motels are operated shall be

deemed commercial premises.

Residential Waste

Solid waste, including recyclable materials, originating from residential premises.

Rolloff Box A container of ten cubic yards or larger, including compactors.

Self-Hauler Any person not engaged commercially in waste haulage who, pursuant to Title 5,

provides for the collection, transportation and disposal of solid waste generated at

his/her/its own premises.

Sewage The water borne wastes from dwellings, kitchens, restaurants, institutions, stables,

dairies, commercial or industrial buildings and other similar structures, but excluding

any stormwater, rainwater, surface water, ground water, roof or yard drainage.

Single Family A building or lot containing one dwelling unit and/or each dwelling unit within a

TERM <u>DEFINITION</u>

Dwelling multi-family dwelling.

Solid Waste

All discarded putrescible and nonputrescible solid, semisolid, and liquid wastes, including garbage, trash, refuse, rubbish, construction and demolition waste, industrial waste, commercial solid waste, bulky items (other than those bulky items defined as special wastes), and any other discarded solid, semisolid, and liquid waste permitted to be disposed of at a Class III landfill and which are included within the definition of "Nonhazardous Solid Waste" set forth in the California Code of Regulations, as they may be amended from time to time. Solid Waste does not include hazardous (Class I) waste, low-level radioactive waste, untreated medical waste, or Special Wastes as defined herein.

Solid Waste Handling Services The collection, transfer, transport, recycling, processing, and/or disposal of solid waste.

Special Wastes

Wastes other than solid waste, including sewage sludge (biosolids), industrial sludge, asbestos, auto bodies, tires, used motor oil, hazardous waste, animal body parts, explosive substances, radioactive materials, and other materials which may not be disposed of at a Class III landfill or which require special handling. It shall also mean and include universal waste (or U-Waste), which are those wastes listed in Section 66261.9 of Division 4.5, Title 22, California Code of Regulations.

State The State of California.

Street

Any street, highway, avenue, lane, alley, court, place, square, sidewalk, parkway, curb, or other public way in the District that has been or may hereafter be dedicated and open to public use and accepted by the city in which it is located, or such other public property designated as a street pursuant to any law of this State. For purposes of Title 5, the term street shall also include any privately owned and/or maintained right of way.

Tenant

As used in reference to a building or land shall include any person who occupies the whole or part of such building or land, whether alone or with others.

TITLE 2

ADMINISTRATION

Chapters:

- 2.10 **District Board**
- 2.20
- Officers and Employees Conflict of Interest Code 2.30

CHAPTER 2.10 DISTRICT BOARD

2.10.010	Subsidiary District.
2.10.020	Officers.
2.10.030	Meetings.
2.10.040	Compensation.
2.10.050	Appeals.

- **2.10.010 Subsidiary District.** The District is a subsidiary district of the City of Garden Grove, California, formed in 1997 upon the filing of a certificate of completion, dated May 29, 1997, by the Local Agency Formation Commission. The District is a result of the approval of a change of organization by the Local Agency Formation Commission pursuant to LAFCO Resolution No. 96-14 (Garden Grove Reorganization No. 141) and Government Code Sections 56833 et seq. Pursuant to the change of reorganization approval, the City Council of the City of Garden Grove, California, shall be the governing Board of Directors of the District.
- **2.10.020 Officers.** The Board shall appoint a President and Vice-President from among its members. The President shall preside over all meetings unless absent in which case the Vice-President shall preside.
- **2.10.030 Meetings.** The place and time of regular meetings shall coincide with the regular meetings of the City's City Council. Special meetings shall be held at a place and time noticed according to the Ralph M. Brown Act, which shall be observed for all Board business.
- **2.10.040 Compensation.** Subject to the limitations of Health and safety Code Section 6489, Board Members shall receive compensation of \$100 per day for each day's attendance at meetings, or for each day's service rendered as a Director, but not exceeding six (6) days in any calendar month, plus his/her reasonable expenses incurred incident thereto.
- 2.10.050 Appeals. Any action, determination, or decision of the General Manager may be appealed to the District Board pursuant to the provisions of this Section by any property owner affected by such action, determination, or decision, in writing, specifically stating the grounds for the appeal, and filed with the Secretary within five business days of the action, determination, or decision. The fee for such appeal shall be as established by the District Board in the District Fee Resolution and no appeal shall be deemed filed unless such payment is made. Upon the Secretary's receipt of a timely and otherwise proper appeal of an action, determination, or decision of the General Manager, the appeal shall be set for a public hearing before the District Board no less than ten business days nor more than forty-five business days after receipt of the appeal. Notice of the hearing shall be mailed to the appellant. Upon the hearing of the appeal, the District Board shall review the matter and may uphold, reverse, wholly or partly, or may modify any appealed action, determination, or decision of the General Manager. A reversal or modification shall only be approved by the District Board upon the adoption of a resolution which sets forth in writing the findings relied on to conclude that the appealed action, determination, or

CHAPTER 2.20 OFFICERS AND EMPLOYEES

ger.
el.

- **2.20.010 General Manager.** The General Manager of the District shall be the City Manager of the City of Garden Grove, California. The duties of the General Manager shall be to implement the policy decisions of the Board and to perform those other duties as required by the Board and to adopt such rules and procedures appropriate for and consistent with the provisions of this Code.
- **2.20.020 District Counsel.** The District Counsel of the District shall be the City Attorney of the City of Garden Grove, California. The District Counsel shall provide all legal advice to the Board and perform all litigation services as needed.
- **2.20.030 Secretary.** The Secretary of the District shall be the City Clerk of the City of Garden Grove, California. The Secretary shall perform all duties as prescribed by the General Manager.
- **2.20.040 Treasurer.** The Treasurer of the District shall be the Treasurer of the City of Garden Grove, California. The Treasurer is responsible for the safekeeping, investment and payment of District monies, and shall perform such further duties as prescribed by the General Manager.
- **2.20.050 Employees.** The General Manager is authorized to employ such employees as the District may need from time to time.

CHAPTER 2.30 CONFLICT OF INTEREST CODE

Sections:

2.30.010 City's Conflict of Interest Code Adopted by Reference.

2.30.010 City's Conflict of Interest Code Adopted by Reference. The District hereby adopts the City of Garden Grove's Conflict of Interest Code and any amendments thereto, pursuant to Health and Safety Code § 6491.2.

TITLE 3

REVENUE AND FINANCE

Chapters:

- 3.10
- **Annexation Charges Sewer Connection Charges** 3.20

CHAPTER 3.10 ANNEXATION CHARGES

3.10.010	Standard Charge.
3.10.020	Joint Tenancies.
3.10.030	Additional Charges.
3.10.040	Laterals and Wyes.
3.10.050	Separate Property.
3.10.060	Exclusion of Public Street.
3.10.070	Benefit Adjustments.
3.10.080	Existing Charges.
3.10.090	Property in Assessment Districts.
3.10.100	Mitigation of Development Impacts.

- **3.10.010 Standard Charge.** Property owners who wish to annex to the District shall pay charges in the amount specified by the Board in the District Fee Resolution.
- **3.10.020 Joint Tenancies.** Each petitioner (or petitioners where title is held under joint tenancy, or as tenants in common or as community property) shall pay a minimum annexation charge in the amount specified by the Board in the District Fee Resolution for each separate lot or parcel of land up to one-half acre owned by him or them. In the event more than one petitioner (except where title is held in joint tenancy or as tenants in common or as community property) wishes to join in the same petition for annexation of the property which is contiguous to each other, they shall be considered as separate petitioners for the purpose of arriving at the cost of annexation under this Chapter.
- **3.10.030** Additional Charges. In addition to all other charges set forth above, each petitioner shall pay to the District any additional cost and expense incurred by the District which is of an unusual nature not normally incurred in the course of annexation; or any additional cost or expense incurred by the District to correct any error or misrepresentation, made by any petitioner to the District regarding any proposed annexation.
- **3.10.040 Laterals and Wyes.** In addition to all other charges set forth above, each petitioner shall pay the cost of any laterals and wyes installed by the District for use by petitioners' property. The charges paid shall be the actual cost paid for the laterals or wyes by the District.
- **3.10.050 Separate Property.** The annexation charge shall be for each separate parcel of property which the petitioner wishes to annex. Any parcel or group of parcels of property, which are contiguous to each other and which are included in one request or petition for annexation to the District, shall be considered as separate parcels. A separate piece of property for the purpose of this chapter is a piece of property which carries a separate and distinct legal description.
- **3.10.060** Exclusion of Public Street. For the purpose of determining acreage to establish the costs referred to herein, it is further provided that no existing public street or area

required by a City or County to be dedicated for widening any such street shall be included in the acreage computation for the purpose of arriving at the amount to be paid by such petitioner.

3.10.070 Benefit Adjustments.

- A. In addition to the charges for annexation and other charges provided in this Code, any person desiring to have property annexed to the District shall be charged such additional amount as the Board finds equitable, fair and just in cases where:
 - 1. The land proposed to be annexed would receive a direct benefit from lines or facilities which are being or have been installed by the District or others in the immediate area of the property proposed to be annexed whether by virtue of a special assessment district or otherwise; or
 - 2. In any area within the District where the lines are being or have been installed by a person having a reimbursement program or agreement with the District and where the property of the person desiring to annex would receive a benefit by using the lines of said person who has a reimbursement program or agreement with the District.
- B. The provisions of this section shall not take effect in any instance unless and until the Board shall, after considering the situation, make a finding that facts exist which bring said situation within the provisions of this section.
- **3.10.080 Existing Charges.** Nothing in this chapter shall affect the obligation of any person to the District for annexation charges which are due or unpaid to the District upon the effective date of this chapter or thereafter resulting from the provisions of the general regulation ordinances and minute orders that are otherwise incorporated in this Code. All of said obligations shall remain in full force and effect and shall be due to the District in accordance with the provisions of said prior regulations and orders.
- **3.10.090 Property in Assessment Districts.** The District hereby incorporates the provisions of Sections 5464 and 5474, as amended from time to time, of the State Health and Safety Code pertaining to connection of property to the District sewer lines for owners participating in special assessment districts.
- **3.10.100 Mitigation of Development Impacts.** In addition to the fees set forth in this Chapter 3.10 and in Chapter 3.20 below, when a new sewer line or relief sewer line has to be constructed in any drainage basin because of new development or redevelopment or impending new development or redevelopment, the Board may spread the cost of such construction over such new developments or redevelopments. New developments or redevelopments may be permitted to connect to existing sewer lines having limited capacity provided such new developments or redevelopments contribute their pro rata share as determined by the District, or the estimated costs of a new line or relief line which would be built at a later time.

CHAPTER 3.20 SEWER SERVICE CHARGES

3.20.010	Sewer Service Charge Established, Credit.
3.20.020	Additions to Existing Structures.
3.20.030	Use Changes.
3.20.040	Larger Sewer Lines.
3.20.050	Sewer Service Charge Rates.
3.20.060	Collection of Sewer Service Charges Within City.
3.20.070	Collection of Sewer Service Charges Outside City.
3.20.080	Inspection Charges.
3.20.090	Additional Inspection Charges for Off Hours.
3.20.100	Additional Connection Charges.
3.20.110	Variances, Credits.
3.20.120	Agreements.

- **3.20.010 Sewer Service Charge Established, Credit.** Each lot, piece, parcel, dwelling, building or structure within the District, for which application is made for a permit to connect to the existing sewer lines of the District shall be required to pay a sewer service charge as set forth herein.
- **3.20.020** Additions to Existing Structures. Where additional living or commercial units are added to existing buildings or structures already connected to the sewer lines of the District and such additional units will be making use of said sewer line, then in such event there shall be paid a sewer service charge.
- **3.20.030 Use Changes.** Where existing buildings and structures are now or hereafter connected to the sewer lines of the District and the use of such buildings and/or structures is changed to a use having a higher charge under this Chapter, then in such event there shall be paid a sewer service charge as set forth by the Board in the District Fee Resolution conforming to such new use. Said charge shall be the difference between what the prior use charge would be under this chapter and what the new use charge is under this chapter.
- **3.20.040 Larger Sewer Lines.** Such sewer service charge shall be one charge for the connection and use of the sewage facilities of the District. Such charge shall be over and above all other fees or charges made by the District for inspection of all sewer lines larger than four (4) inches inside diameter.
- **3.20.050 Sewer Service Charge Rates.** The charges and rates therefor shall be established by the District Board in the District Fee Resolution.
- **3.20.060** Collection of Sewer Service Charges Within City. Pursuant to the provisions of Health and Safety Code section 5471, as may be amended from time to time, the Board of Directors hereby elects to have the sewer service charge for parcels within the corporate boundaries of the City of Garden Grove collected with the charges of the City of Garden Grove's

water utility, and that these charges may be collected on the same bills as the water charges, or on separate bills, as may be determined by the City of Garden Grove.

- **3.20.070** Collection of Sewer Service Charges Outside City. Pursuant to the provisions of Health and Safety Code section 5471, as may be amended from time to time, the Board of Directors hereby elects to have the sewer service charges for those areas outside of the corporate boundaries of the City of Garden Grove collected on the tax roll in the same manner, by the same persons, and at the same time as, together with and not separately from, the general taxes of the District.
- **3.20.080 Inspection Charges.** In addition to the sewer service charges herein, the additional amounts as the Board may establish in the District Fee Resolution shall be charged and received by the District for inspection of all sewer lines.
- **3.20.090** Additional Inspection Charges for Off Hours. In addition to the charges under Section 3.20.080 above, there shall be paid a sum in an amount established by the Board in the District Fee Resolution, for the time spent for inspection, including travel, for any inspection requested on a holiday, or at a time other than between 8:00 a.m. and 5:00 p.m. on regular working days.
- **3.20.100 Additional Connection Charges.** The Board may establish in the District Fee Resolution such additional charges and fees as the Board may determine are reasonable and appropriate for connection to the District's facilities and for services the owner of the property may receive or request from the District.

3.20.110 Variances, Credits.

- A. <u>Variances</u>. The Board may upon good cause being shown grant variances from any of the provisions of this Chapter and may reduce or eliminate any of the charges and/or fees referred to herein upon the finding that unusual circumstances exist which would result in undue hardship or unfairness to the person or where the Board finds that it would be in the best interests of the District to waive any part or all of such charges and/or fees.
- B. <u>Connection Credits</u>. The Board, in order to encourage the use of the District sewer system instead of septic tanks and in order to facilitate connections to the District facilities as fairly as possible for all users, may allow a credit towards the Sewer Service Charge up to the amount of such fee in those instances where the future user is faced with abnormal or excessive additional costs either in construction of the local collector line or for payment of reimbursement for such lines.
- C. <u>Rehabilitation Credits</u>. For construction replacing former dwellings, commercial or industrial buildings, the connection charge shall be calculated on the same basis as provided in this chapter for new construction unless such replacement construction is commenced within two (2) years after the completion of demolition of the former building. In that case, a credit against such charge shall be allowed and shall be the equivalent of the pro-rata connection charge for the building being demolished, calculated on the basis of current

charges for new construction, provided, however, that in no case shall such credit exceed the current connection charge.

3.20.120 Agreements.

- A. This chapter does not alter any previous agreement between the District and any person concerning the subject matter herein discussed, if said agreement was made prior to the date of the applicable provision in this chapter or any applicable implementing Ordinance or Resolution.
- B. Except where a person and the District have entered into a valid lease agreement, all costs set forth herein must be paid for before any property may be connected to the District's facilities.
- C. Notwithstanding anything in this section to the contrary, if the Board makes a finding on evidence presented to it that any person in good faith entered into a contract in reliance on quotations given to him or her by the District based upon the charges and fees in effect prior to the effective date of this chapter, then the Board may reduce the charges and fees for that person to the amounts which were in effect prior to the effective date of this chapter.

TITLE 4

SEWERS REGULATIONS

Chapters:

- 4.10 Sewers
- 4.20 California Plumbing Code Adopted

CHAPTER 4.10 SEWERS

Sections:	
4.10.010	Connections to Sewer Lines, Permit Required.
4.10.020	Connection through adjoining property.
4.10.030	Residential sewer in undedicated street.
4.10.040	Septic Tank or Cesspool Discharges Prohibited.
4.10.050	Discharge of objectionable materials—Regulations.
4.10.060	Discharge of corrosive harmful wastes.
4.10.070	Rain and surface water prohibited.
4.10.080	Automobile washing areas regulated.
4.10.090	Opening manhole prohibited.
4.10.100	Discharge into sewer manholes regulated.
4.10.110	Cleaning manholes.
4.10.120	Maintenance of residential connections.
4.10.130	Commercial Waste Disposal—Permit required.
4.10.140	Commercial Waste Disposal—Permit application.
4.10.150	Commercial Waste Disposal—Limitations.
4.10.160	Commercial Waste Disposal—Acts prohibited.
4.10.170	Commercial Waste Disposal—Permit term.
4.10.180	Commercial Waste Disposal—Permit transfer.
4.10.190	Commercial Waste Disposal—Compliance tests and
	inspections.
4.10.200	Sewer closing procedure.
4.10.210	Connection Approvals.

4.10.010 Connections to Sewer Lines, Permit Required. No connection to any of the District sewer lines shall be made unless a permit shall first have been issued by the District for connection. No connection pursuant to any such permit shall be made at any other place than that designated therein. Where additional fixtures in excess of the original fixture units are added to existing buildings or structures or reconnected to the sewer lines of the District and such additional fixtures will be making a use of said sewer lines, then in such event said additional fixtures shall not make use of said District sewer lines unless a permit shall first have been issued by the District for such additional fixtures.

4.10.020 Connection through adjoining property.

- A. No connection from any building or other structure shall be made to any public sewer, if such connection or any portion thereof is in, under, across or upon any lot other than the lot on which said building or structure is located.
- B. If a lot requiring a sewer connection is so situated that access to the public sewer is not possible except across some other lot, a sewer connection may be placed in a recorded easement which includes the right-of-way and maintains such connection and is appurtenant to the lot to be served by such sewer connection.

- **4.10.030 Residential sewer in undedicated street.** No person shall connect any sewer which has been or may hereafter be, constructed in any street, highway, alley, right-of-way or other public place prior to the dedication and acceptance of such street, highway, alley, right-of-way or other public place by the City or County on behalf of the public, unless such sewer first mentioned shall have been laid under the supervision and/or to the satisfaction of the General Manager and in accordance with all City or County regulations applicable thereto.
- **4.10.040 Septic Tank or Cesspool Discharges Prohibited.** No person shall connect or discharge into the District sewer lines any sewage, affluent or other matter from any septic tank or cesspool or to any building thereto.
- **4.10.050 Discharge of objectionable materials—Regulations.** Except as otherwise provided in this Chapter, it is unlawful to place, deposit or discharge, either directly or indirectly, into any District sewer or into any sewer connection or on or upon any street, alley or public place or upon any private property or any other place in such a manner that the same will be permitted to run into any such District sewer, any of the following substances:
- A. Any oil, petroleum, gasoline, naphtha, liquid asphaltum or petroleum product, or any fatty matter, benzene, fuel, or other flammable or explosive liquid, solid or gas;
- B. Dead animals, fish, fruit or vegetable matter in any form.
- C. Any commercial waste other than domestic sewage that will not readily disintegrate in the sewage treatment plant or that will cause or tend to cause obstructions in the sewer system or the sewage treatment plant or interfere with or tend to interfere with the efficient and successful operation of the system or the plant, or cause a potential hazard or objectionable odor;
- D. Any chemicals or wastes destructive to masonry or portland cement concrete;
- E. Grease, except in quantities commonly contained in domestic sewage, or commercial waste which may contain more than two hundred (200) parts per million, by weight, of fat, oil or grease;
- F. Any effluent of a temperature exceeding one hundred forty degrees Fahrenheit (140°), or that would cause the temperature of wastewater entering the headworks of any wastewater treatment plant to exceed one hundred four degrees Fahrenheit (104°);
- G. Any radioactive waste, which exceeds the limits specified in Title 17, Chapter 5, Subchapter 4, Group 3, Article 5, Section 30287 of the California Code of Regulations;
- H. Any commercial waste, including but not limited to mineral salts, molds or wastes resulting from their manufacture and other products which will tend to sterilize activated sludge, trickling filter slimes, or slime growth on artificial or natural slow sand and filters;
- I. Any solids or viscous substances of such size or in such quantity that may cause obstruction to the flow in the sewer or to be detrimental to proper wastewater treatment plant operation;

- J. Any wastes with odors of such strength that the discharge of the wastes to any wastewater treatment plant results in, as determined by the District, an odor violation of the treatment plant's waste discharge requirements, where without the discharge no odor violation would have been anticipated;
- K. Any waste containing substances that may precipitate, solidity or become viscous at temperatures between fifty (50°) degrees and one hundred (100°) degrees Fahrenheit;
- L. Any waste capable of passing through the waste water treatment works and producing discoloration of treatment plant effluent;
- M. Any water added for purposes of diluting wastes which would otherwise exceed applicable maximum concentration limitations;
- N. Any waste which may create a fire or explosion hazard in the wastewater collection or treatment system;
- O. Any waste prohibited by federal standards from being discharged to the sewer system.
- P. Any ashes, sand, mud, straw, shavings, metal, glass, rags, feathers, tar, plastic, wood, paunch manure, rags, earth or stone dust or any other solid or viscous substance capable of causing obstruction of the flow in sewers or other interference with the proper operation of the sewage works;
- Q. Any commercial waste containing a toxic or poisonous substance in sufficient quantity to injure or interfere with any sewage treatment process, constitute a hazard to humans or animals, or create any hazard in the receiving waters of the sewage treatment plant;
- R. Any noxious or malodorous gas or substance capable of creating a public nuisance;
- S. Any liquid or vapor having a temperature higher than 85 degrees Fahrenheit unless properly treated for scale inhibition;
- **4.10.060 Discharge of corrosive harmful wastes.** Before any person may discharge alkalies, acids or other corrosive or harmful wastes into the public sewer, he or she shall reduce the biochemical oxygen demand (BOD) and control the pH to the extent which the District finds adequate, taking all circumstances into consideration. In all cases the wastewater discharge shall have a pH within the range of 6.0 to 9.5.
- **4.10.070 Rain and surface water prohibited.** No person shall connect, any roof drain, yard drain or other conduit used for carrying off rain or surface water, to any District sewer or sewer leading thereto. No person shall cause or permit any indirect connection to the District sewer or house sewer leading thereto by means of which rain or surface waters are permitted to enter the public sewer.
- **4.10.080** Automobile washing areas regulated. No person engaged in washing motor vehicles or other equipment exclusive or incidental to any other business, shall permit any

water or effluent from such operations to flow into any District sewer unless the washing area is equipped with an approved sand and grease control device. Such washing areas shall be roofed over and shall be so constructed as to prevent any water from flowing over any street or public property, and to prevent any storm or surface water from entering any District sewer.

- **4.10.090 Opening manhole prohibited.** No person shall open or enter, or cause to be opened or entered, any manhole in any District sewer to dispose of solid waste or other deleterious substances, or storm or surface waters, or for any other like purpose.
- **4.10.100 Discharge into sewer manholes regulated.** The discharge of wastes into sewer manholes without the written permission of the District is prohibited.
- **4.10.110 Cleaning manholes.** When wastewater is discharged into a specified manhole under permission from the District, it shall be discharged through a pipe or hose in such a manner that none of the effluent is left adhering to the sides or shelf of the manhole, and if any such effluent is inadvertently allowed to adhere to the sides or shelf of the manhole, the manhole shall be thoroughly cleaned with clean water.
- **4.10.120 Maintenance of residential connections.** All residential connections and appurtenances thereto now existing or hereafter constructed, shall be maintained by the owner of the property served in a safe and sanitary condition and all devices or safeguards which are required by this title for the operation thereof shall be maintained in good working order.
- **4.10.130** Commercial Waste Disposal—Permit required. No person shall discharge or deposit any commercial waste into or upon any area in the District, or into any underground or surface waters in the District where such commercial waste is or may be deposited upon or may be carried through or over any area of the District except in conformity with the provisions of this chapter, and unless the person shall have first secured, in the manner hereinafter provided, a permit so to do from the District.
- **4.10.140 Commercial Waste Disposal—Permit application.** Applications for permits required hereunder shall be filed with the General Manager upon printed forms to be prescribed and supplied by him or her. The General Manager may require any additional information, including plans and specifications which he or she may deem necessary for the proper disposition of the application.
- 4.10.150 Commercial Waste Disposal—Limitations. The General Manager may incorporate in any permit issued pursuant to this chapter, such limitations or conditions as may be reasonably necessary to effectuate the purpose of this chapter and may from time to time, review the limitations or conditions which have been incorporated in any permit theretofore issued, giving consideration to changed conditions, and may, whenever in his or her judgment it is advisable or required in order to maintain the waters of the District free from pollution, alter, revise, modify, delete or add further limitations or conditions applicable to any permit theretofore issued. No such alteration, revision, modification, deletion or addition of limitations or conditions shall be effective, however, until notice in writing thereof shall have been served upon the permittee in the manner provided by Section 1.20.060.

- **4.10.160** Commercial Waste Disposal—Acts prohibited. A permit issued under this chapter does not authorize any act or acts forbidden by any law, rule, regulation or order of any public agency or department and such fact shall be so stated on the face of all permits issued.
- **4.10.170** Commercial Waste Disposal—Permit term. A permit for the disposal of commercial waste shall be valid until suspended or revoked in the manner hereinafter provided.
- **4.10.180** Commercial Waste Disposal—Permit transfer. The General Manager may transfer a permit to the successor in interest of a permittee upon the filing by the successor in interest of a written application therefor, together with such evidence of transfer of title or interest as the General Manager may require; provided, however, a permit shall not be transferable from one location to another. The General Manager shall immediately notify by first class mail, the person that requested a transfer of a permit of the action taken.
- 4.10.190 Commercial Waste Disposal—Compliance tests and inspections. For the purpose of securing compliance with this chapter, the General Manager shall make periodic tests of samples of commercial waste obtained from the place or places of discharge or deposit, and such other tests deemed necessary for proper administration hereof. For purpose of making such tests or inspections, the General Manager or his or her duly authorized deputies or agents shall be permitted at all reasonable hours to enter any premises or place where commercial waste is being or is proposed to be discharged or deposited, or where there may be a violation of this chapter.
- 4.10.200 Sewer closing procedure. Whenever the use of a sewer is discontinued by reason of connection to another sewer or by reason of moving, wrecking or burning of a building, or for any other reason, such sewer shall be sealed at the property line or easement line or at the District sewer. Whenever the General Manager shall find that a sewer has not been sealed as required herein, he or she shall serve notice and post the property to that effect. Unless the sewer has been sealed as required within ten (10) days after the posting of such notice, the General Manager is authorized to have such sewer sealed, and the costs thereof shall be reimbursed to the District by the property owner within thirty (30) days after the District shall render an invoice for the same.
- **4.10.210 Connection Approvals.** The General Manager may suspend, condition, or deny any or all applications for connections or permits for additional fixtures as provided under Section 4.10.010 of this Code where the General Manager determines that such action is necessary to remain within the aggregate operation capacity of the sanitary sewer system available to the affected property for which the connection or permit is sought or to meet the discharge standards of the sanitary sewer system imposed by the California Regional Water Quality Control Board for the Santa Ana Region. The decision of the General Manager to suspend, condition, or deny an application shall be subject to appeal to the District Board as provided in Section 2.10.050.

CHAPTER 4.20 CALIFORNIA PLUMBING CODE ADOPTED

Sections:

4.20.010 Adoption of California Plumbing Code as Adopted by City.

4.20.010 Adoption of California Plumbing Code as Adopted by City. Pursuant to California Health and Safety Code § 6491.2, the Chapter, Section and Part Numbers of the California Plumbing Code as adopted by the City and codified at Chapters 18.04 and 18.24 of the Garden Grove Municipal Code are hereby adopted by reference and made a part hereof, provided that whenever the term "administrative authority" is used in the code, it shall be construed to mean the Board, or its authorized representative.

TITLE 5

SOLID WASTE REGULATIONS

Chapters: 5.10

5.10 Solid Waste

5.20 Franchises

CHAPTER 5.10 SOLID WASTE

Sections:

5.10.010	Collection Authority.
5.10.020	Collection Service Required.
5.10.030	Solid Waste Containers.
5.10.040	Self-Haulers.
5.10.050	Handling and Storage of Solid Waste and
	Recyclable Materials.
5.10.060	Frequency of Solid Waste Removal.
5.10.070	Removal of Heavy Objects.
5.10.080	Tampering with Solid Waste Prohibited.
5.10.090	Recyclable Materials as Franchisee or District
	Property.
5.10.100	Recycling by Private Individuals or Organizations.
5.10.110	Special Pickup—Bulky Items.
5.10.120	Placement of Containers for Collection.
5.10.130	Time of Container Placement.
5.10.140	Removal of Empty Containers.
5.10.150	Littering Prohibited.
5.10.160	Public Nuisance.
5.10.170	Hazardous Waste Disposal Prohibited.
5.10.180	Procedures for Disposing of Hazardous Waste.
5.10.190	Sanitary Maintenance Required.
5.10.200	Unlawful Containers - Notice of Violation.
5.10.210	General Penalty—Infraction.
5.10.220	Franchisee Remedies.

5.10.010 Collection Authority.

- A. The District shall provide for the collection and disposal of solid waste from all premises within the District either by granting one or more franchises to a public or private entity or entities for such collection and disposal or by such other methods as the Board may authorize.
- B. Except as otherwise provided herein, the District and its duly authorized agents and employees, or franchisee(s) and their duly authorized agents and employees, shall have the exclusive right to gather, collect and dispose of solid waste from all premises within the District in accordance with the provisions of this Code, except that self-haulers registered in accordance with this chapter shall have the right, in a lawful manner, to dispose of solid waste generated from their own activities.

C. The General Manager shall have the charge and supervision of such collection and disposal and shall approve the routes and days thereof. When such routes and/or days of collection are established or changed, the franchisee, or, if none, the General Manager, shall give appropriate notice thereof to the public.

5.10.020 Collection Service Required.

- A. <u>Arrangements for Removal of Solid Waste Mandatory</u>. Except as otherwise provided in this title, every owner, tenant, occupant or person in charge or control of every commercial or residential premises where solid waste is generated or accumulates shall either (1) subscribe to solid waste handling services with a franchisee or the District, as applicable; or (2) obtain and maintain registration as a self-hauler pursuant to this Chapter in connection with said premises.
- B. Exception; Vacant Premises. The above requirement to provide for solid waste handling services shall not apply in connection with any residential premises at which all dwelling units are vacant, or commercial premises that are completely vacant; provided, however, that this exception shall only apply during the time period such premises are vacant and following receipt of written notice by the District and/or franchisee, as applicable, that such premises have been vacated. Any person seeking to avail himself or herself of the exception provided herein shall bear the burden of providing reasonable evidence to District and/or franchisee, pursuant to such regulations or guidelines as the General Manager is hereby authorized to develop or approve, demonstrating the premises are vacant. Premises shall not be deemed vacant for purposes of this exception during such period of time that such premises are unoccupied due only to a temporary absence of the owner(s) or occupant(s), such as a period during which the owner(s) or occupant(s) are merely away on vacation.

5.10.030 Solid Waste Containers.

- A. Every owner, occupant or person in possession, charge or control of any premises within the District shall deposit or cause to be deposited all solid waste generated or accumulated on such premises, and intended for collection and disposal, in sealed, watertight bins, carts, rolloff boxes or other containers that are either (1) provided by, or acceptable to, a franchisee; or (2) approved by the General Manager for self-hauling purposes pursuant to this chapter. No owner, occupant or person in possession, charge or control of any premises shall utilize a bin, cart, rolloff box or other container not in conformance with the requirements hereof for the collection, accumulation or storage of solid waste.
- B. For all residential premises, up to three carts, colored brown for green waste, black for non-recyclable materials and green for recyclable materials, will be furnished by the District or a franchisee without charge. Additional carts may be requested, but may be subject to an additional charge.

It is intended that solid waste generated at residential premises will be separated according to its character and placed in the applicable colored cart. In order to assist owners and occupants of residential premises to appropriately separate solid waste generated at such premises, the following is a list of examples of the types of acceptable and unacceptable

material to be placed in each color cart. This list is not intended to be exhaustive and shall be subject to change by the District or its franchisee at any time and to changes in applicable law.

GREEN CONTAINER—	BLACK CONTAINER—	BROWN CONTAINER—
Acceptable	Acceptable	Acceptable
AEROSOL CANS	ANIMAL/FOOD WASTE	GRASS/LEAVES
(completely empty)	BATHROOM WASTES	PRUNINGS (except palm
ALUMINUM & TIN CANS	CARPET/FLOORING	fronds)
ALUMINUM FOIL	CAR PARTS	TWIGS/SMALLBRANCHE
BEVERAGE CANS	CAT LITTER	S (4 inches or less in
BOTTLE CAPS	CIGARETTE BUTS	diameter; 3 feet or less in
BROCHURES	DIRT/CEMENT/ROCK (do	length)
CARDBOARD	not fill more than ¼ of	VEGETATION
CEREAL BOXES	container)	WOOD
COMPUTERPAPER	DISPOSABLE DIAPERS	WEEDS
DRINK BOXES	DRINKING GLASSES	
EGG CARTONS	FOOD WASTE	
FOAM CUPS AND	FREEZER /	
PLATES (unsoiled)	REFRIGERATOR FOOD	
FOOD CANS	BOXES	
FROZEN FOOD BOXES	FURNITURE	
GLASS BOTTLES AND	GLASS AND CERAMIC	
JARS	PLATES/CUPS	
JUICE CARTONS	LIGHT BULBS (no	
JUNK MAIL & COUPONS	hazardous florescent bulbs)	
LAUNDRY BOTTLES	MIRRORS	
LEDGER PAPER	PALM FRONDS	
MAGAZINES	OLD CLOTHES/SHOES	
METAL COAT HANGERS	PLASTIC TOYS	
MILK-TYPE CARTONS	RAGS/SPONGES	
NEWSPAPERS	SOILED PAPER PLATES	
PAINT CANS (empty only,	TOOTHPASTE TUBES /	
dry cans, lids off)	PUMPS	
PAPER/PAPER TUBES	WAXED PAPER	
PIZZA BOXES	WINDOW GLASS	
PLASTIC (#1-6) PLASTIC BOTTLES /		
CONTAINERS PLASTIC CUPS/UTENSILS		
PLASTIC CUPS/UTENSILS PLASTIC MILK JUGS		
PHONE BOOKS		
USED ENVELOPES		
WRAPPING PAPER		
WANT INOTAL DIC		
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GREEN CONTAINER—	BLACK CONTAINER—	BROWN CONTAINER—
Not Acceptable	Not Acceptable	Not Acceptable
AEROSOL CANS (non-	BULKY ITEMS	ANIMAL/FOOD WASTE
empty)	CONSTRUCTION	CONSTRUCTION DEBRIS
WAXED/CARBON PAPER	DEBRIS	DIRT/ROCKS
FOOD/LIQUID WASTE	LARGE APPLIANCES	PALM FRONDS
TRASH & GREEN WASTE	RECYCLABLE	PLASTIC BAGS
HAZARDOUS WASTE	MATERIALS	RUGS/FLOORING/METAL
	GREEN WASTE	RECYCLABLES & TRASH
	HAZARDOUS WASTE	HAZARDOUS WASTE

- C. Container lids shall remain closed at all times that the container is unattended. If the solid waste contained within a bin, cart, rolloff box or other container exceeds the actual capacity of the container, then a larger container or multiple containers must be utilized. The owner, tenant, occupant and/or person or entity in control of a premises shall be responsible for the clean-up of any solid waste spilled, dumped or scattered as a result of a container overflow.
- D. It is unlawful for any person to share, place solid waste in, or to otherwise use the bin, cart, rolloff box or other container of another person or business. Notwithstanding anything contained herein to the contrary, the sharing of containers shall be permitted under the following conditions:
 - 1. The owner, property manager or person in charge or control of a premises upon which a multi-family dwelling or multi-family residential facility exists may arrange for bins, carts, rolloff boxes or other containers for shared use by the occupants, tenants or persons in possession of the dwelling units on such premises.
 - 2. The occupants of a single commercial building or contiguous and adjacent commercial building may share a bin, cart, rolloff box or other container for solid waste handling services at a common location, subject to approval of the General Manager, which may be delegated to a franchisee. Approval by the General Manager shall be based upon (a) the type of solid waste generated by each commercial premises; and (b) the number of containers and frequency of solid waste collection needed to protect the public health, welfare and safety.
- E. It is unlawful to use any bin, cart, rolloff box or other container furnished by the District or a franchisee for any purpose other than the collection, accumulation and storage of solid waste; or to convert or alter such containers for other uses; or to intentionally damage such containers.

5.10.040 Self-Haulers.

A. Self-haulers registered and operating in accordance with this chapter are only permitted to collect, transport and dispose of solid waste generated by and upon the self hauler's own premises. Under no circumstances may a self-hauler collect, transport or dispose of solid waste generated upon premises that are not owned, operated or controlled by the self-hauler. Notwithstanding any other provision of this chapter, registered self-haulers shall not

be permitted to share, place solid waste in, or to otherwise use the bin, cart, rolloff box, or other container of another person or business.

- B. Registration. All self-haulers shall comply with the following registration requirements:
 - 1. Each self-hauler shall obtain a registration application form from the General Manager. Self-haulers must renew their registrations at the commencement of each fiscal year. Initial applications following the adoption of these regulations must be submitted to the General Manager on or before September 30, 2010.
 - 2. The application to register for self-hauling, whether upon initial application or renewal, shall include the following: (a) a list of all bins, carts, rolloff boxes and other containers to be used by the self hauler; (b) a list of all transport and disposal equipment to be used by the self hauler; (c) a written explanation of where all solid waste will be delivered for disposal and diversion; (d) a written plan explaining to the reasonable satisfaction of the General Manager how not less than fifty percent of solid waste collected will be diverted from disposal in compliance with AB 939; and (e) any other information deemed necessary by the General Manager to ensure protection of public health, safety and sanitary needs.
 - 3. Renewal applications shall additionally include: (a) receipts from self-hauling activities undertaken in the prior year demonstrating that the applicant has effectively diverted at least fifty percent of all solid waste generated at its premises from landfills in a manner that complies with the requirements of AB 939; and (b) receipts from self-hauling activities undertaken in the prior year demonstrating that the applicant has delivered solid waste generated at its premises to appropriate disposal or recycling facilities at least as frequently as collection is required for such self-hauler by the General Manager.
 - 4. The General Manager shall approve the application if it meets the requirements of this section, and if the equipment, containers, diversion plan and disposal plan meet with his or her reasonable satisfaction, and if evidence of past diversion and disposal requirements demonstrate the applicant has complied with the fifty-percent diversion requirement and otherwise complied with all laws related to disposal of solid waste.
- C. Containers. Each self-hauler shall provide its own bins, carts, rolloff boxes or other containers. Bins, carts, rolloff boxes or other containers utilized by a self hauler must conform to industry standards for solid waste disposal and must be approved by the General Manager in writing prior to issuance of a self-hauler registration. In addition, any containers utilized by a self hauler shall comply with the following requirements:
 - 1. All containers shall be maintained in good repair, and any question as to the meaning of this standard shall be resolved by the General Manager;
 - 2. All containers shall be maintained in a sealed, watertight condition;

- 3. Self-haulers shall remove any graffiti that appears on containers within twenty-four hours after becoming aware of it.
- D. Collection and Transport Equipment. Collection and transport equipment, including but not limited to transport trucks and vehicles, utilized by a self-hauler must be approved by the General Manager in writing prior to issuance of a self-hauler registration.
- E. Non-Commercial Venture. It is the intent of this chapter to prevent and proscribe self-hauling activities undertaken as a commercial enterprise. Self-haulers must obtain all equipment, including containers and collection and transportation equipment, at a fair market value that does not include any hauling services, "free" or otherwise. A self-hauler may utilize its own employees to undertake self-hauling activities, but under no circumstance may a self-hauler utilize an independent contractor or any other person or entity for waste disposal services other than a franchisee.
- F. Other Recycling Obligations. Self-haulers shall recycle all recyclable materials not otherwise addressed by this section to a degree and in a manner consistent with standards generally applicable to the solid waste disposal industry and as required by state law.
- G. Collection Frequency. Unless otherwise specifically provided in this chapter, self-haulers shall remove solid wastes from their premises at least once per week. However, upon application to the District for registration as a self-hauler, the General Manager may determine a different frequency for solid waste collection, transport and disposal from the self-hauler's premises. This determination shall be based upon the nature of the premises, the type of solid waste generated by the premises, and the collection capacity of the self-hauler as demonstrated by information in the application.
- H. Hazardous and Special Wastes. Unless lawfully and currently licensed under applicable state, federal and local laws, no self-hauler shall engage in the collection, transport or disposal of hazardous waste or special wastes.
- I. Revocation. The General Manager may revoke prior approval of a self-hauler registration if the registrant either (1) fails to divert at least fifty percent of all solid waste generated at its premises from landfills in a manner that complies with the requirements of AB 939; or (2) fails to deliver solid waste generated at its premises to appropriate disposal or recycling facilities at least as frequently as collection is required for such self-hauler by the General Manager.
- 5.10.050 Handling and Storage of Solid Waste and Recyclable Materials. Solid waste and recyclable materials shall be placed directly into solid waste and recyclable materials containers respectively, except as hereinafter provided:
- A. Garbage shall first be drained and wrapped to eliminate odor, leakage and fly and rodent infestation before being placed in solid waste containers.

- B. Waste and manure from animals, except that generated from farms or stables, shall first be placed in moisture-resistant bags, securely sealed to prevent leakage, odor, fly and rodent infestation, before being placed in solid waste containers.
- C. Untreated medical waste shall be stored, transported and disposed of in accordance with the provisions of the Medical Waste Management Act, California Health and Safety Code Section 117600 *et seq.*, as it may be amended, the regulations adopted and promulgated pursuant to such statutes, and any applicable ordinances, regulations, or requirements of the Orange County Health Care Agency, as the same may be amended from time to time.
- D. Ashes and dust shall be placed in disposable bags securely sealed to prevent leakage before being placed in solid waste containers.
- E. Grass clippings, cuttings, leaves and other smaller vegetation including shrubs, brush and tree trimmings cut into short lengths shall be placed in approved containers designated for green waste.
- F. Boxes and crates shall be dismantled or flattened. Boxes and crates constructed of recyclable materials shall be placed in approved containers designated for recyclable materials.
- G. Construction and demolition waste or manure from farms and stables shall be stored in approved containers in a manner so as not to create a nuisance and at a location approved by the franchisee or the General Manager.
- H. It shall be unlawful for a person occupying or having control of any premises to introduce refuse, contaminated material or any materials which are not recyclable into a solid waste container designed for recyclable materials.
- I. Every person occupying or having control of any premises shall insure that a sufficient number of approved containers are available to properly store all solid waste, including recyclable materials and green waste, generated at said premises.
- J. Any solid waste that does not reasonably fit within a container (such as furniture or other large bulky items) must be covered and protected, as by a tarp, netting or other secured material, in order to prevent the scattering of debris by natural forces such as wind or animals. Bulky items shall be removed from the premises at which they are generated pursuant to Section 5.10.110 or otherwise in accordance with the provisions of this title.
- K. No person shall burn any solid waste within the District, except in an approved incinerator or other device for which a permit has been issued by the building official, fire marshal, and/or other public agency official having jurisdiction, and which complies with all applicable local, state, and/or federal permit requirements, laws, rules and regulations.
- L. Any person who generates solid waste in connection with the construction of a new building, a building addition, remodel, or the demolition of any structure for which a building permit is required, shall either make arrangements for solid waste handling service

with the use of containers from a franchisee, be registered to self-haul such solid waste in the manner required by this Chapter, or make arrangements in accordance with Section 5.20.030(C).

- 5.10.060 Frequency of Solid Waste Removal. With the exception of vacant premises meeting the provisions of Section 5.10.020.B, above, each owner, tenant, occupant or person in charge of commercial or residential premises where solid waste, green waste or recyclable material accumulates shall cause said containers to be emptied and all solid waste shall be removed at least once each calendar week, except that food processing and food serving establishments shall cause said containers to be emptied of garbage at least three times each calendar week. The General Manager may provide written notice to the owner, occupant, or person in charge of any residential or commercial premises that the above minimum removal requirements are not sufficient to satisfy public health and safety needs or avoid the creation of a public nuisance due to unique circumstances at such premises and may direct that solid waste be removed by the owner, occupant, or person in charge of any premises so notified on a more frequent schedule and/or that additional or larger containers be utilized.
- **5.10.070 Removal of Heavy Objects.** Each owner, tenant, occupant or person in charge of any premises shall at least once each calendar month collect and dispose of all waste material and debris, such as discarded automobile bodies, similar heavy or bulky objects and all other waste not specifically defined herein which may accumulate on such premises.
- **5.10.080 Tampering with Solid Waste Prohibited.** No person other than the owner thereof, his or her agents or employees, an officer, employee, or authorized agent of the District, or the agents or employees of a franchisee, shall enter, tamper, or meddle with green waste, recycling or solid waste containers or the contents thereof or remove the contents of any such container or remove any such container from the location where the same shall have been placed by the owner thereof or the owner's agent. This includes both segregated and non-segregated recyclables at commercial and residential premises.
- **5.10.090** Recyclable Materials as Franchisee or District Property. Once recyclable materials are placed in a designated container for such purpose at a designated recycling collection location for collection by a franchisee or the District, the recyclable materials shall become the property of the franchisee or the District, as applicable.
- **5.10.100** Recycling by Private Individuals or Organizations. Nothing in this chapter shall limit the right of an individual person, organization or other entity to donate, sell or otherwise dispose of recyclable materials, provided that any such disposal is in accordance with the provisions of this title or of other applicable law.

5.10.110 Special Pickup—Bulky Items.

A. <u>Household Bulky Item Collection Program</u>. The Household Bulky Item Collection Program entitles residents of each single family dwelling within the District who subscribe to solid waste handling services with a franchisee to collection of bulky items generated by such residents. Residents of each residential premises may schedule with the franchisee three free bulky item collections within a calendar year. The program shall be limited to ten

- (10) items maximum per scheduled collection. Requested bulky item collections in excess of three (3) per year may be subject to a charge. Reservations must be made in advance. Items must be placed at the curb or other location acceptable to the franchisee on the day scheduled for pickup. Items that are to be collected must be bulky, household items only, unable to be serviced by the normal automated curbside collection. Items eligible for collection are heavy discards, such as appliances, furniture, water heaters, large toys and tree trimmings. Items not accepted include automobile parts, tree stumps, earth, turf, sod, sand, clay, gravel, concrete, refuse from building or construction, and hazardous or toxic waste. Certain types of bulky items requiring special handling may be subject to an additional charge. All loose items eligible for collection must be bagged, bundled or tied. All bagged items may not weigh more than fifty (50) pounds or measure more than four (4) feet in length and eighteen (18) inches in diameter.
- B. <u>Commercial Bulky Item Collection</u>. The owners, occupants, or persons in charge of commercial premises within the District, including MFRFs, who subscribe to solid waste handling services with a franchisee shall also be entitled to arrange for collection of bulky items generated at such premises by a franchisee. Such commercial bulky item collections shall be subject to reasonable charges and limits established by the franchisee.

5.10.120 Placement of Containers for Collection.

- A. Generally. Except as otherwise agreed upon with the franchisee and/or determined by the General Manager, where rolloff boxes are used, or where collection locations in commercial or MFRF complexes have been approved by the District, all collection of solid waste, recyclable materials, green waste and garbage from commercial and residential premises shall be made from the gutter along the street adjacent to the premises, or the alley in the rear of each premise, provided, however, that no solid waste shall be picked up in any alley that has a width of less than fifteen (15) feet or where a truck with an eight (8) foot bed cannot pass with at least three and one-half (3 ½) feet of clearance on each side of the truck bed. Containers may be placed in the parkway next to the curb on arterial streets or as determined by the General Manager. The General Manager may also approve alternate locations which are readily accessible.
- B. <u>Obstructions</u>. Containers must be placed three (3) feet away from any obstruction such as fire plug, mailbox, fence post or lamp post. There must be one (1) foot between each container and a minimum distance of three (3) feet from any vehicle.
- **5.10.130 Time of Container Placement.** Except as otherwise determined by the General Manager, all solid waste must be placed at the street as provided herein only between the hours of 4 p.m. of the day prior to collection and by 6:00 a.m. on the day of collection.
- **5.10.140 Removal of Empty Containers.** After containers have been emptied by the franchisee they shall be removed no later than 10:00 p.m. on the day of such collection by the owner, tenant, occupant or person in charge of every commercial or residential premises and placed and kept in an area not visible from the street.

5.10.150 Littering Prohibited.

- A. It shall be unlawful for any person to throw, place, scatter or deposit any solid waste, medical waste, or hazardous waste in, upon or below the land of another, or upon any public property or right-of-way, except as herein authorized, or to throw, place, scatter or deposit any such waste in, upon or below the surface of any premises in such a manner that the same is or may become decayed, putrid or a nuisance or may otherwise endanger the public health or safety.
- B. It shall be unlawful for any person to place, deposit or dump, or cause to be placed, deposited or dumped, or cause or allow to overflow any sewage, sludge, cesspool, waste water, or septic tank effluent, or allow the accumulation of human excreta or any garbage, solid waste materials, debris, rubbish, scrap iron, organic residues resulting from commercial canning or processing of food products, dead animals, manure, combustible materials, discarded automobiles and similar heavy, bulky objects or any other waste in or upon any public property not designated or set aside for such purpose by the Board or any other competent authority or upon any private property into or upon which the public is admitted by easement, license or otherwise.

5.10.160 Public Nuisance.

- A. The accumulation and existence of garbage, solid waste, refuse or green waste on any premises, public or private, within the confines of the District, and/or the keeping of solid waste in containers other than those prescribed by this chapter, is hereby declared to be a public nuisance. No person who owns, controls, or occupies any premises within the District shall cause, permit, or allow any such nuisance to exist thereon.
- B. It is unlawful, and a public nuisance, for any person to occupy or inhabit any property within the District for which arrangements have not been made and kept in full force and effect for solid waste handling services in a manner consistent with the provisions hereof.

5.10.170 Hazardous Waste Disposal Prohibited. It shall be unlawful for any person to place or cause to be placed material deemed to be hazardous waste in any container to be picked up with solid waste designated to be deposited at a Class III landfill. As a way of example, prohibited material includes, but is not limited to the following:

CHLORINE	POISON	LACQUER
ACETONE	ADHESIVES	AUTO/FURNITURE
AEROSOL CANS (non-empty)	GASOLINE	POLISH
AMMUNITION	SHELLAC	TREATED WOOD
EXPLOSIVES	LYE	SOLVENT
ANTI-FREEZE	OIL	PESTICIDES
GASOHOL	AMMONIA	WEED KILLER
PAINT	HOUSEHOLD CLEANERS	POOL CHEMICALS
PAINT THINNER	CHEMICAL DRAIN	DRUGS
VARNISH	CLEANERS	ACID
BATTERIES	FERTILIZER	BIOLOGICAL WASTE
FLORESCENT LIGHT BULBS	ASBESTOS	RADIOACTIVE WASTE

AND BALLAST	TIRES	ELECTRONIC WASTE
COMPRESSED GAS	DRUMS	UNIVERSAL WASTE
CYLINDERS		

5.10.180 Procedures for Disposing of Hazardous Waste.

- A. Each owner, tenant, occupant, or person in charge of any premises in the District shall, at least once every ninety (90) days unless more frequent disposal is required, dispose of all hazardous waste which has accumulated at such premises. Hazardous waste shall not be placed for regular collection but shall be disposed of as hereinafter specified or in a lawful manner in accordance with Chapter 6.5 of Division 20 of the California Health and Safety Code and/or other applicable law.
- B. Group I materials such as caustics, toxic acids, chemicals, paints and liquids shall be disposed of by the owner, tenant, occupant or person in charge of any premises upon which such materials have accumulated only at an approved Class I disposal site. The waste must be in its original container and labeled clearly. The containers must be sound and not leaking. Glass containers must be protected from breakage.
- C. Radioactive materials shall be disposed of by the owner, tenant, occupant or person in charge of any premises upon which such materials have accumulated under the supervision of the Orange County Health Department.
- D. Explosives or highly flammable material, including small arms ammunition, war souvenirs, or black powder shall be disposed of by, or under the supervision of, the Orange County Fire Authority.
- E. Abandoned, inoperative or dismantled vehicles or major component parts thereof shall be disposed of by a licensed dismantler or towing company.
- F. Dead animals shall be disposed of by, or under the supervision of, the Orange County Animal Shelter.
- 5.10.190 Sanitary Maintenance Required. Each owner, tenant, occupant or person in charge of all commercial and residential premises shall keep each container maintained thereon for the deposit of solid waste in a clean and sanitary condition. When the General Manager determines that the owner, tenant, occupant or person in charge of any premises is not maintaining the containers thereon in a sanitary manner, said owner, tenant, occupant or person in charge shall be notified by Registered Mail to correct the problem within ten (10) days from the receipt of said notice. If the person fails to take action on the matter within the prescribed time allowed, the General Manager shall order the franchisee to provide such service. The containers shall be exchanged and sanitized thereafter as needed with a minimum frequency of four (4) times per year. Except as otherwise provided in an agreement between the District and a franchisee, the expense for exchanging and sanitizing the container shall be borne by the owner, tenant, occupant or person in charge.

5.10.200 Unlawful Containers - Notice of Violation.

A. <u>Unauthorized Containers</u>. No person other than the District or its authorized representative, a franchisee or its authorized representative, an authorized self-hauler, or person otherwise authorized to collect or transport solid waste pursuant to the provisions of this title shall place or leave standing any container on any public or private property within the District for the purpose of providing solid waste handling services.

B. Removal of Unlawfully Placed Container.

- 1. The General Manager may cause the posting of a notice to remove, as described below, in a conspicuous place on any container placed on any public or private property within the District in violation of this title.
- 2. Notices to remove posted pursuant to the provisions of this chapter shall specify the nature of the violation and shall state that the container must be removed within twenty-four (24) hours or it may be removed and stored by the District, and the contents disposed of, at the expense of the owner thereof. The notice shall indicate the time that it was posted and shall include the name and telephone number of a person designated by the District to hear any appeal or challenge to the requirement that the container be removed, and, further shall indicate that any appeal or challenge of the order for removal must occur within twenty-four (24) hours of the posting of the notice. The posting of a notice to remove shall constitute constructive notice to the owner and user(s) of the container of the requirement to remove the container.
- 3. If the container is not removed or an appeal received within twenty-four (24) hours after the notice to remove is posted, the General Manager may direct the removal and storage of the container. The owner of the container shall be responsible to reimburse the District for the actual cost of removal, storage and disposal. All amounts due to the District for the cost of removal, storage and disposal must be paid before the container may be returned to the owner. Such amounts shall constitute a debt owed by the owner to the District, and the owner shall be liable to the District in an action brought by the District for the recovery of such amounts.
 - a. The owner may contest and request a hearing to appeal the District's claim that the container was illegally placed or left standing by giving notice to the District within ten (10) calendar days of receipt of notification from the District that the container was impounded. The General Manager shall establish a procedure for such a hearing and the method for requesting such a hearing shall be included on the notice to remove. Where the owner asserts that the placement or use of the container was for a legitimate recycling activity or other activity not proscribed by this Code, the owner shall provide the District with information to substantiate that assertion. Said information shall be submitted with the notice from the owner and shall include, at a minimum, the following:

- (i) A description of the materials of value deposited in the container and an estimate of their value;
- (ii) The address, telephone number and contact person of the facility or facilities with whom the owner has arranged for the contents to be disposed of, processed or recycled, and proof of that arrangement;
- (iii) Evidence that the facility or facilities where the contents are destined to be disposed of, processed or recycled carries all requisite approvals, permits, or other forms of authorization required by any governmental agency having jurisdiction, to conduct disposal, processing or recycling activities;
- (iv) If the materials consist of recyclable materials, a declaration from the customer receiving service, signed under penalty of perjury, that the customer paid no broker's, consultant's or other fee or consideration in any form or amount to the service provider, or to any other person, in exchange for service, and that the contents of the container were either donated or sold by the customer to the service provider/owner;
- (v) The District shall have the right to request such additional information as may be necessary or useful in determining the validity of the owner's contest.
- b. If the District, acting through the General Manager or his designee, determines, in the exercise of reasonable discretion, that the owner has supplied evidence sufficient to support its contention that it was engaged in a legitimate recycling activity involving donated or sold materials, the container shall be returned to the owner without any charge for removal or storage of same.
- 4. If the identity of the owner of a container that has been removed by the District is known to the General Manager, the General Manager shall promptly cause notice to be mailed to the owner to claim the stored property. If the container is not claimed within ninety-five (95) days after removal and notice to the owner, or ninety (90) days after removal if the identity of the owner is unknown to the Director, the container and its contents shall be deemed abandoned property and may be disposed of accordingly. Where the contents present imminent threat to public health and safety, as determined by the District, they may be processed or disposed of without awaiting the expiration of the ninety (90) day claim period.
- 5. After a container has once been removed by the District pursuant to a notice to remove, the owner thereof shall be deemed to have actual notice of the provisions of this title, including the prohibition against the placement of unauthorized containers. In the event of a subsequent placement of a container owned by the same owner, or an affiliate of the owner, the General Manager may immediately, without the posting of a notice to remove, direct the removal and storage of the unlawfully

placed container and shall, in such case, give notice to the owner to claim the container. In such event, the owner shall, subject to the provisions of subsection 3 of this section, be responsible to reimburse the District for the actual cost of such removal, storage and disposal, which cost shall be paid by the owner before the container may be returned to the owner. If the container is unclaimed after notice is mailed to the owner and the expiration of the period set forth in subsection 4 of this section, the container and its contents shall be deemed abandoned property and may be disposed of accordingly. The costs incurred by the District for removal, storage and disposal shall constitute a debt owed to the District by the owner, who shall be liable therefor in an action by the District for the recovery of such amounts.

- C. <u>Summary Abatement of containers of unidentified owners</u>. Notwithstanding any other provision of this Section to the contrary, the General Manager is authorized to direct the immediate removal, without notice, of any container placed on public or private property within the District in violation of this Section where the owner of the container is unidentified and cannot be ascertained from the owner or lessee of the property where the container is placed, and by an inspection of the container.
- **5.10.210 General Penalty—Infraction.** Unless otherwise specified, any violation of this Chapter 5.10 shall be deemed to be an infraction. In addition, the District's legal counsel is authorized to cite violators for a misdemeanor offense pursuant to the general penalty provisions of this Code as an alternate remedy at counsel's discretion.
- **5.10.220 Franchisee Remedies.** Nothing in this chapter shall be deemed to limit the right of a franchisee or the District to bring a civil action against any person who violates this chapter, nor shall a conviction for such violation exempt any person from a civil action brought by a franchisee or the District.

CHAPTER 5.20 FRANCHISES

Sections:

5.20.010	Granting of Franchises; Exclusive Contract.
5.20.020	Franchise Operation Fee.
5.20.030	Collecting Solid Waste Without Franchise Prohibited—
	Penalty.
5.20.040	Franchise Non-Transferable.
5.20.050	Franchisee Regulations.
5.20.060	Purpose for Franchisee Regulations.

5.20.010 Granting of Franchises; Exclusive Contract. The Board may by resolution or ordinance grant one or more franchises for solid waste handling services related to solid waste generated within the District and pursuant thereto, may, with or without inviting bids or proposals, enter into one or more franchise agreements or other contracts with one or more franchisees. The City may also be a party to any such agreements. Where such an agreement has been entered into between the District and a franchisee, the District may, without inviting bids or proposals, either prior to or after the expiration of such agreement, extend or renew the agreement for such period and on such terms and conditions as the Board may provide.

Effective May 17, 1989, the District provided for the collection and disposal of solid waste, green waste and recyclable material from all premises within the District by granting an exclusive contract and franchise for such collection and removal to Taormina Industries, Inc., dba Garden Grove Disposal, which exclusive franchise shall continue in effect in accordance with the terms of that certain agreement for solid waste handling services, effective July 1, 2010, between the District and Taormina Industries, Inc.'s successor in interest, Republic Waste Services of Southern California, LLC, dba Garden Grove Disposal. Except as otherwise provided herein or in said agreement, while any such agreement shall be in force, said franchisee shall have the exclusive right to gather, collect and remove solid waste, green waste and recyclable material from all premises within the District. No person, other than an authorized franchisee shall gather, collect or remove any solid waste, green waste or recyclable material from any premises or take any such waste from any container in which the same may be placed for collection or removal, or interfere with or disturb any such container, or remove any such container from any location where the same is placed, or remove the contents of any such container; provided that nothing in this chapter shall be deemed to prohibit the generators or the owners from personally collecting, conveying and disposing of solid waste in a manner consistent with this title and other applicable governing laws. Said license and privilege shall not be exclusive with respect to special removal needs created by demolition or construction projects for which the District or franchisee has no special disposal service available. To the extent that said license and privilege is exclusive, it shall be so only if the District or the franchisee shall be at all times ready, willing and able to collect, transport and dispose of all such solid waste.

5.20.020 Franchise Operation Fee. There is hereby imposed upon any person whose business is the collection of solid waste within the District an annual franchise fee in the amount specified by the District Board. This Section 5.20.020 is not intended to, and shall not,

preclude the imposition and collection by the District from a franchisee of consideration or cost reimbursements pursuant to the terms of a franchise agreement, whether denominated as franchise fees or otherwise, in addition to or in lieu of the franchise fee provided for in this Section 5.20.020.

5.20.030 Collecting Solid Waste Without Franchise Prohibited—Penalty.

It shall be unlawful for any person other than a franchisee (or its agents and employees) to collect any solid waste, green waste or recyclable material from any premises whatsoever, or otherwise provide solid waste handling services within the District, while there is in existence an exclusive franchise by the District to a person or persons to collect all solid waste, green waste or recyclable material from such premises. Every person who violates or infringes upon any exclusive franchise as heretofore set forth shall be guilty of a misdemeanor and shall be punishable pursuant to Section 6.10.010 of this Code. This prohibition shall not, however, apply to the following:

- A. Self-haulers registered in accordance with chapter 5.10.
- B. The owner, tenant or occupant of residential or commercial premises who has subscribed for and is receiving solid waste handling services with a franchisee, when such owner, tenant or occupant is hauling materials generated at his or her own premises to a lawful disposal or recycling facility. This exemption does not permit the hiring of any person or entity, other than a franchisee, to haul solid waste from one's own premises.
- C. The collection, transportation and disposal of construction and demolition debris by a contractor, handyman, repairman or other similar service provider as an incidental part of the services provided to its customers rather than as a hauling service, provided that such solid waste is not collected or transported by a third party hired for the primary purpose of collecting and transporting said materials, and further provided that such services comply with any ordinances, policies and regulations of the District or the City relating to the collection of such materials.
- D. The collection, transportation and disposal of yard waste, green waste and related solid waste by a gardener or landscaper as an incidental part of the gardening or landscaping services provided to its customers, rather than as a hauling service, provided that such solid waste is not collected or transported by a third party hired for the primary purpose of collecting and transporting said materials.
- E. Any person or entity collecting recyclable material sold or donated to it by the generator of the recyclable material; provided, however, to the extent permitted by law, if the generator is required to pay monetary or non-monetary consideration for the collection, transportation, transfer or processing of recyclable material, and the generator receives a reduction or discount in price therefor (or in other terms of the consideration the generator is required to pay), such transaction shall not be considered a sale or donation.
- F. Any District or City employee collecting or transporting solid waste to a disposal or recycling facility in the course and scope of their employment.

- G. The collection, transportation or disposal of any hazardous waste, universal waste; e-waste; biohazardous waste; untreated medical waste; infectious waste; dead animals or portions of dead animals; used cooking fats, oils, grease and similar waste; or other materials which do not constitute solid waste by the generator thereof.
- H. Any person otherwise authorized by law to collect, transport, and/or dispose of solid waste, green waste, or recyclable material within the District.
- **5.20.040 Franchise Non-Transferable.** No franchise issued pursuant to this chapter shall be transferable, except as otherwise provided in a franchise agreement between the District and Franchisee and pursuant to the terms thereof.
- **5.20.050 Franchisee Regulations.** Except as otherwise provided in a franchise agreement approved by the District Board, the following regulations apply to all those persons doing business within the District or residing therein who deposit or collect solid waste, green waste or recyclable materials:
- A. Every person doing business within the District for the purpose of collecting solid waste, green waste or recyclable materials shall be adequately covered by public liability insurance. For the purposes of this section, adequate public liability insurance shall be defined to mean a minimum combined single limit of \$10,000,000.00 per occurrence with a \$10,000,000.00 policy aggregate limit of public liability coverage (either commercial general liability or comprehensive general liability) and \$10,000,000.00 property damage coverage with the District named as an additional insured on the policy of insurance. Every person doing business within the District as aforesaid shall furnish the District with a Certificate of Insurance showing said District as an additional named insured on the policy of insurance. Such Certificate must be on file at the office of the District.
- B. Every person doing business within the District for the purpose of collecting solid waste, green waste or recyclable materials shall use waste-collecting vehicles with steel-enclosed bodies.
- C. Every person doing business in the District for the purposes of collecting solid waste, green waste or recyclable materials shall mark each vehicle and container with the name, address and telephone number of the person under which such business is conducted.
- D. Every person maintaining or using equipment within the boundaries of the District for the purposes of collecting or depositing solid waste, green waste or recyclable materials shall keep such equipment in good mechanical condition and in a neat and orderly manner.
- E. Every person doing business within the District for the purposes of collecting solid waste, green waste or recyclable materials shall not bring waste from outside the County on the vehicles collecting solid waste, green waste or recyclable materials within the District.
- F. Every person doing business within the District for the purposes of collecting solid waste, green waste or recyclable materials shall, after each collection, insure that the immediate area around such collection is left in a clean, neat and orderly manner without any garbage,

trash, rubbish or refuse left on the ground. In the event the District, by or through its agents, determines that such person has not left the area of collection in a neat, orderly and clean manner then the District shall after four hours notice to such person cause said collection area to be cleaned and placed in proper order. The cost of cleaning and placing said collection area in proper order shall be determined by the District and billed to the person failing to comply with this regulation. Non-payment of such bill within ten (10) days after mailing shall be sufficient cause for the District to revoke any and all rights and privileges to do business within the District.

- G. Every person doing business within the District for the purposes of collecting solid waste, green waste or recyclable materials shall provide sufficient containers to insure that between each collection of said solid waste, green waste or recyclable materials there shall not be deposited in said container waste that will exceed the height of the top of such container.
- H Any container in which garbage or food residue is deposited shall be provided with a lid to cover said container. Such lid shall be kept on said container at all times and shall be replaced on said container by such person collecting such garbage or food residue after each collection.
- I. Failure to comply with the regulations herein shall be sufficient cause for the District to revoke any and all rights and privileges to do business within the District.

5.20.060 Purpose for Franchisee Regulations. The purpose of this chapter is to provide the District with the necessary police power to regulate solid waste collection and disposal, and to insure that any and all franchises shall not be infringed upon by any person to protect the public health, welfare and safety.

TITLE 6

ENFORCEMENT

Chapters:

- **6.10** General Penalty
- **6.20** Code Enforcement
- **6.30** Payment and Enforcement of Fees

CHAPTER 6.10 GENERAL PENALTY

Sections:

6.10.010 General Penalty—Misdemeanor.
6.10.020 Infractions.
6.10.030 Public Nuisances—Injunctive Relief.

6.10.010 General Penalty—Misdemeanor. Section 6523 of the Health and Safety Code of the State of California provides that the violation of an ordinance, rule, or regulation of the District by any person is a misdemeanor punishable by fine not to exceed One Thousand Dollars (\$1,000.00), or imprisonment in the county jail not to exceed thirty (30) days, or by both such fine and imprisonment. The District hereby incorporates such code section herein and further declares that each and every connection, occupancy or use in violation of the ordinances, rules or regulations of the District shall be deemed a separate violation and each and every day or part of a day of violation of the ordinance, rule or regulation that continues shall be deemed a separate offense hereunder and shall be punishable as such.

6.10.020 Infractions.

- A. Whenever a violation or failure to comply with any mandatory requirement of this Code is expressly stated by this Code to be an infraction, that person shall be guilty of an infraction.
- B. Notwithstanding Section 6.10.010 herein, the District Counsel or prosecuting attorney is hereby authorized at his or her discretion to prosecute any person violating any provision or failing to comply with any mandatory requirement of this Code as an infraction.
- C. Any person convicted of an infraction shall be punishable by:
 - 1. A fine not exceeding \$100.00 for a first violation;
 - 2. A fine not exceeding \$200.00 for a second violation of the same provision of this Code within one year;
 - 3. A fine not exceeding \$500.00 for a third and subsequent violations of the same provision of this Code within one year.
- D. Each person shall be guilty of a separate offense for each and every day during any portion of which any violation of any provision of this Code is committed, continued or permitted by such person and shall be punishable accordingly.

6.10.030 Public Nuisances—Injunctive Relief. In addition to the penalties provided herein, any condition caused or permitted to exist in violation of any of the provisions of this Code is declared to be a public nuisance and the District Counsel or authorized legal representative may with approval of the Board commence an action for abatement thereof in the manner provided by law. A civil action may be filed, whether or not criminal proceedings have been commenced for the same conduct. Every day such condition continues shall be regarded as a new and separate offense.

CHAPTER 6.20 CODE ENFORCEMENT

Sections:

6.20.010	Maintenance inspections.
6.20.020	Sewage overflow—Authorized action by General
	Manager.
6.20.030	Disconnection authorized.
6.20.040	Cost Recovery for Violations.
6.20.050	Arrest Authority—City of Garden Grove Officers.
6.20.060	Arrest—Notice to Appear.
6.20.070	Arrest—Time and Place of Appearance.
6.20.080	Arrest—Release from Custody.
6.20.090	Arrest—Failure to Appear.
6.20.100	Arrest—Warrant for Arrest.
6.20.110	Arrest—Citations not required.
6.20.120	Notice of violation.
6.20.130	Continued violation—Activity cessation.
6.20.140	Permit suspension.
6.20.150	Permit—Revocation.
6.20.160	Permit—Revocation proceeding.

6.20.010 Maintenance inspections. The District may inspect as often as it deems necessary, every sewage pumping plant, sewage treatment plant, industrial liquid waste pretreatment plant, residential sewer, grease control device, dilution basin, neutralization basin, backwater trap or valve, or other similar appurtenances to ascertain whether such facilities are maintained and operated in accordance with the provisions of this Code. All persons shall permit the District, City or their representatives, to have access to all such facilities at all reasonable times.

6.20.020 Sewage overflow—Authorized action by General Manager. Whenever it comes to the attention of the General Manager that sewage is overflowing from any plumbing fixture which is located below the elevation of the rim of the nearest upstream main sewer manhole due to the backing up of sewage in the District sewer, or due to pressure in the District sewer, or due to any cause whatsoever, except a temporary stoppage in any such plumbing fixture, the General Manager may order and require the plumbing fixture to be plugged up, or capped, or may require that a back-water trap or backwater sewer valve be installed to prevent such overflow.

6.20.030 Disconnection authorized. The District may disconnect from the District sewer any commercial or residential connection which is constructed or connected without a permit or which is used contrary to the provisions of this Code. The General Manager shall make every reasonable effort to notify the owner or occupant of the premises affected by any proposed disconnection and may grant a reasonable time for elimination of the violation.

- **6.20.040 Cost Recovery for Violations.** Whenever any permittee or any other person causes obstruction, damage, or destruction of a public sewer, street, or public improvement, or is responsible in whole or in part for any spill or discharge of effluent in a manner that is not permitted under this Code, such permittee or person shall reimburse the District, the City of Garden Grove, and any other affected public agency for all costs, including reasonable administrative and overhead costs incurred for flushing, repairing, reconnection, or cleaning of such sewer, street, or public improvement within thirty days after the District, City, or affected public agency shall render an invoice for the same.
- **6.20.050** Arrest Authority—City of Garden Grove Officers. The District's code enforcement officers, code enforcement officers and police officers of the City of Garden Grove, shall have the power to arrest persons for violations of the District's regulations whenever the officers or the officers' designated employees have reasonable cause to believe that the person has committed the offense.
- **6.20.060 Arrest—Notice to Appear.** If any person is arrested for a violation of any provision of this code and such person is not immediately taken before a magistrate, as more fully set forth in the California Penal Code, the arresting officer shall prepare in duplicate a written notice to appear in court, containing the name and address of such person, the offense charged, and the time and place when such person shall appear in court.
- **6.20.070 Arrest—Time and Place of Appearance.** The time specified in the notice to appear must be at least five (5) days after the arrest. The place specified in the notice to appear shall be either:
- A. Before a judge of a justice court or a municipal court judge within the county in which the offense charged is alleged to have been committed, and who has jurisdiction of the offense and who is nearest and most accessible with reference to the place where the arrest is made; or
- B. Upon demand of the person arrested, before a judge of a municipal court having jurisdiction over such offense, at the county seat of the county in which such offense is alleged to have been committed; or
- C. Before a judge in the judicial district in which the offense is alleged to have been committed; or
- D. Before an officer authorized by the District to receive a deposit of bail.
- **6.20.080** Arrest—Release from Custody. The officer shall deliver one copy of the notice to appear to the arrested person; and the arrested person in order to secure release must give his written promise so to appear in court by signing the duplicate notice which shall be retained by the officer. Thereupon the arresting officer shall forthwith release the person arrested from custody. The officer shall as soon as practicable file the duplicate notice with the magistrate specified therein.

- **6.20.090 Arrest—Failure to Appear.** Any person willfully violating his written promise to appear in court is guilty of a misdemeanor and shall be punished by a fine not to exceed one thousand dollars or imprisonment in the county jail for a term not to exceed six months, or by both such fine and imprisonment, regardless of the disposition of the charge upon which he was originally arrested.
- **6.20.100 Arrest—Warrant for Arrest.** When a person signs a written promise to appear at the time and place specified in the written promise to appear and has not posted bail as provided in Section 853.1 of the California Penal Code, the magistrate shall issue and have delivered for execution a warrant for the person's arrest within twenty (20) days after his failure to appear as promised, or if such person promises to appear before an officer authorized to accept bail other than the magistrate and fails to do so on or before the date which he promised to appear, then, within twenty (20) days after the delivery of such written promise to appear by the officer to the magistrate having jurisdiction over the offense.
- **6.20.110** Arrest—Citations not required. Nothing contained in this chapter shall be deemed or construed to require any arresting officer to issue a citation instead of taking the person arrested before a magistrate as otherwise provided by law.
- **6.20.120 Notice of violation.** In addition to the enforcement authority herein, whenever the General Manager finds that any person is acting in violation of any provision of this code or of any permit issued hereunder, he or she may serve upon the person causing or suffering such violation to be committed, including the permittee, if a permit has been issued, a notice of violation. The notice shall state the act or acts constituting the violation and shall direct notice as the General Manager may deem reasonable.
- **6.20.130 Continued violation—Activity cessation.** Whenever the General Manager finds that the continued violation of any provision of this Code or of the conditions of any permit issued hereunder is so aggravated that the prevention of pollution of underground or surface waters requires the immediate cessation of the activities causing the violation, he or she may so direct in a notice of violation. A person who has been so notified shall immediately cease all such activities and shall not resume them until the General Manager determines that all of the violations charged in the notice have been corrected.

6.20.140 Permit suspension.

- A. In addition to the enforcement authority herein, the General Manager may suspend a permit by giving notice thereof to the permittee:
 - 1. When a permittee fails to rectify a violation within the time specified in a notice thereof; or
 - 2. When a violation is so aggravated as to require cessation of activities as provided in the preceding section.
- B. A permit suspended by the General Manager shall be reinstated by the General Manager when all of the violations charged in a notice thereof have been corrected.

- **6.20.150 Permit—Revocation.** In addition to the enforcement authority herein, the Board may, after notice and hearing as hereinafter provided, revoke a permit on any one or more of the following grounds:
- A. Fraud or deceit in obtaining a permit;
- B. Failure of a permittee to correct a violation within the time prescribed in a notice of violation;
- C. Willful violation of any provisions of this Code or a condition or limitation of a permit, or any lawful order of the General Manager.
- **6.20.160 Permit—Revocation proceeding.** Proceedings for the revocation of a permit may be initiated:
- A. By the General Manager by serving upon the permittee a copy of, and filing with the Secretary, a written recommendation of revocation setting forth the grounds therefore and requesting a hearing thereon before the Board;
- B. By the Board on its own motion or upon complaint of a third person, by serving or causing to be served upon the permittee and the General Manager a notice of intention to revoke, setting forth the grounds therefor and designating a time and place for hearing thereon.

CHAPTER 6.30 PAYMENT AND ENFORCEMENT OF FEES

Bill Payment.

Sections:

6.30.010

0.00010	
6.30.020	Reserved.
6.30.030	Returned Checks.
6.30.040	Aged Overdue Payment.
6.30.050	Service Termination Authority.
6.30.060	Notice—Hearing.
6.30.070	Reconnection—Reimbursement.
6.30.080	Habitation During Disconnection Declared a Public
	Nuisance.

owner shall be paid by the due date stated in the bill. For amounts unpaid by the due date, the District shall send bills bearing notification to the property owner concerned that if the bills are not paid within fifteen (15) days, they shall become delinquent and, pursuant to Division 5, Part 3, Chapter 6, Article 4 of the California Health and Safety Code (§§ 5470 et seq.), a basic penalty equal to ten percent (10%) of the charge shall be immediately imposed, and an additional penalty in the amount of one-half percent (½%) of the charge per month shall be imposed for each month that payment is delinquent thereafter. Charges which remain delinquent for a period of sixty (60) days shall become and constitute a lien against the property against which the charge is imposed, which lien shall become effective upon recordation with the County Recorder and when so recorded shall have the force, effect and priority of a judgment lien.

6.30.020 Reserved.

6.30.030 Returned Checks. A returned check charge in the amount specified by the District Board in the District Fee Resolution may be imposed for all checks made payable to the District which are returned from the bank for any reason whatsoever. This fee shall be payable each time a check is returned. Further, all provisions for collection of delinquent accounts as set forth in this chapter shall be applicable to the returned check charge.

6.30.040 Aged Overdue Payment. For any bills unpaid within two weeks after the end of the fiscal year, the District shall notify the property owner concerned that the Board shall review and approve as a charge against the property the delinquent amount, and the amount of the penalty and interest. The delinquent bill shall be filed with the County Auditor and, upon recordation by the County Recorder, shall constitute a lien against the property. The assessment shall be collected at the same time and in the same manner as are county property taxes and shall be subject to the same penalties and to the same procedure for foreclosure and sale as provided for ordinary county taxes.

6.30.050 Service Termination Authority. As a method of enforcing the provisions of this Code or any other resolution, ordinance, rule or regulation pertaining to the

collection or disposal of sewage or solid waste or where any charges or fees are due, the Board upon a 3/5 vote may authorize the termination of sewer service to any property.

6.30.060 Notice—Hearing. Prior to termination of sewage service, the Board shall notify in writing the owner, tenant, occupant or person in charge of such property that service is intended to be so terminated and conduct a hearing thereon. Such notice shall be mailed to the owner at the address shown on the records of the assessor of the County or is known to the District and a copy shall be delivered to the tenant, occupant, or person in charge thereof, or posted conspicuously on the property. The notice shall state the date of proposed termination of service and the reason therefor and the date the Board shall hold a hearing upon such intended termination. Such hearing shall not be held less than 10 days subsequent to the giving of notice as herein provided.

6.30.070 Reconnection—Reimbursement. Where service has been disconnected as provided herein the Board may require the person or persons making application for reestablishment of service to pay all expenses incurred by the District in causing such disconnection and re-connection before permission is granted re-establishing service to such property.

6.30.080 Habitation During Disconnection Declared a Public Nuisance. During any period of disconnection, the habitation of such disconnected premises by human beings shall constitute a public nuisance, whereupon the District shall cause proceedings to be brought for the abatement of the occupancy of said premises by human beings during the period of such disconnection. In such event and as a condition of re-connection there shall be paid to the District a reasonable attorney's fee and costs of suit arising in said action.

Appendix C-2 Stormwater Quality

6.40.010 Purpose

- A. The United States Congress passed the Clean Water Act (33 USC Section 1251 et seq., as amended, including Section 402(p) therein) as a mandate, in part, that municipal separate storm sewer systems, such as in Orange County, obtain permits to "effectively prohibit non-stormwater discharges into the storm sewers" and "require controls to reduce the discharge of pollutants to the maximum extent practicable...." This permitting authority has been delegated by the United States Environmental Protection Agency (EPA) to the State of California, which has authorized the State Water Resources Control Board and its local regulatory agencies, the Regional Water Quality Control Boards, to control non-point source discharges to California's waterways.
- B. The Santa Ana and San Diego Regional Water Quality Control Boards have addressed the obligation to implement the Clean Water Act by issuing Waste Discharge Requirements governing stormwater runoff for the County of Orange, Orange County Flood Control District, and the incorporated cities of Orange County. These permits shall be referred to collectively in this chapter as the National Pollution Discharge Elimination System Permit (NPDES) permits.
- C. The City is participating as a "co-permittee" under the NPDES permits in the development and adoption of an ordinance to accomplish the requirements of the Clean Water Act.
- D. Stormwater runoff is one step in the natural cycle of water. However, human activities, such as agriculture, construction, and the operation and maintenance of an urban infrastructure may result in undesirable discharges of pollutants and certain sediments, which may accumulate in local drainage channels and waterways and eventually may be deposited in the waters of the United States.
- E. The purpose of the ordinance codified in this chapter is to participate in the improvement of water quality and comply with federal requirements for the control of urban pollutants to stormwater runoff that enters the network of storm drains throughout Orange County. (2803 § 1, 2011; 2401 § 1, 1997)

6.40.020 Finding and Intent

- A. The City is authorized by Article XI, Section 5 and Section 7 of the State Constitution to exercise the police power of the state by adopting regulations promoting the public health, public safety and general prosperity.
- B. The City has determined that a legitimate local purpose is present in complying with the provisions of the NPDES permit.
- C. A reduction in stormwater-borne pollution will promote the public health and protect the general welfare of the locality by reducing the level of artificial and naturally occurring constituents, which may improve the quality of the waters in this region.
- D. The land use authority exercised by the City, pursuant to California Government Code Section 65300 et seq., requires regional planning and the adoption of policies protecting the environment through the imposition of reasonable conditions on the use of land.
- E. This chapter conforms to the policies and goals of the General Plan adopted by the City, pursuant to California Planning and Zoning Law, for the protection of the portions of watersheds located within Orange County by implementing measures to control erosion and prevent the pollution of streams and other waters.
- F. Certain provisions of this chapter may be coordinated with the local coastal program for inclusion in coastal development permits, pursuant to California Public Resources Code Section 30607, as mitigation for the negative effects of grading, construction, reconstruction, and changes to the intensity of use of land or water resources within the coastal zone.
- G. The Subdivision Map Act, California Government Code Section 66411 authorizes the City to regulate and control the design and improvement of subdivided lands and mitigate the burdens of proposed development by imposing reasonable conditions on map approval.

- H. California Constitution Article XI, Section 7 and Government Code Section 38660 authorize the City to establish appropriate conditions for the issuance of building permits, which require the installation of improvements reasonably related to the proposed use of property.
- I. Government Code Section 38771 authorizes the City to declare as public nuisances undesirable acts that may injure health or cause interference with the comfortable enjoyment of life or property and to provide for the abatement of the same.
- J. The City may commence civil actions, pursuant to Federal Clean Water Act Section 505(a), against any person or any governmental agency acting in violation of any condition of the NPDES permit.
- K. All industrial dischargers subject to the provisions of the State General Industrial Storm Water Permit and General Construction Activity Storm Water Permit (referred to collectively in this chapter as the "state general permits") must comply with the lawful requirements of the City, which regulate discharges of stormwater to the storm drain system within its jurisdiction.
- L. All industrial dischargers subject to the provisions of the state general permits are required to maintain stormwater pollution prevention plans on-site and make them available to the City for inspection.
- M. All dischargers subject to the provisions of the State General Construction Activity Storm Water Permit may be required by the City, with the concurrence of the Santa Ana Regional Water Board, to amend any stormwater pollution prevention plan.
- N. All industrial dischargers subject to the provisions of the State General Industrial Storm Water Permit are required to maintain a description of the required monitoring program on-site and make it available to the City for inspection.
- O. The City has jurisdiction over certain stormwater facilities and other watercourses within the City, and the water discharges into these facilities may be subject to the provisions of the State General Industrial Storm Water Permit; accordingly, the City may certify (but is not required to certify) in writing that regulated dischargers have developed and implemented effective stormwater pollution prevention plans and should not be required to collect and analyze stormwater samples for pollutants.
- P. The City has jurisdiction over certain stormwater facilities and other watercourses within the City, and these facilities may receive stormwater discharges from properties and activities regulated under the provisions of the state general permits, and the City may request that the regulated dischargers furnish information and records necessary to determine compliance with the state general permits.
- Q. The City has jurisdiction over certain stormwater facilities and other watercourses within the City, and these facilities may receive stormwater discharges from properties and activities regulated under the provisions of the state general permits, and the City may, upon presentation of credentials and other documents required by law:
- 1. Enter upon the discharger's premises where a regulated facility is located or where records must be kept under the conditions of the state general permits;
- 2. Access and copy, at reasonable times, any records that must be kept under the conditions of the state general permits;
 - 3. Inspect, at reasonable times, any facility or equipment related to or impacting stormwater discharge;
 - 4. Sample or monitor for the purpose of ensuring compliance with the state general permits.
- R. The enacting of this chapter is a condition of the NPDES permit, the requirements of which are exempt from the California Environmental Quality Act pursuant toPublic Resources Code Section 21000, et seq. (CEQA); and
- S. This chapter is subject to CEQA categorical exemption Classes 1 through 4, 6 through 9, 21 and 22, pursuant to the CEQA Guidelines, respectively, Title 14, California Code of Regulations Sections 15301, 15302, 15303, 15304, 15306, 15307, 15308, 15309, 15321, and 15322. (2803 § 1, 2011; 2401 § 1, 1997)

"Authorized inspector" means the City Manager and persons designated by and under his or her instruction and supervision, who are assigned to investigate compliance with, detect violations of, and/or take actions pursuant to this chapter.

"City" means the City of Garden Grove, Orange County, California.

"Co-permittee" means the County of Orange, the Orange County Flood Control District, and/or any one of the 31 municipalities, including the City of Garden Grove, which are responsible for compliance with the terms of the NPDES permit.

"DAMP" means the Orange County Drainage Area Management Plan, as the same may be amended from time to time.

"Development project guidance" means DAMP Chapter VII and the appendix thereto, entitled "Best Management Practices for New Development Including Non-residential Construction Projects," as the same may be amended from time to time.

"Discharge" means any release, spill, leak, pump, flow, escape, leaching (including subsurface migration or deposition to groundwater), dumping, or disposal of any liquid, semisolid, or solid substance.

"Discharge exception" means the group of activities not restricted or prohibited by this chapter, including only:

- Discharges composed entirely of stormwater; discharges subject to regulation under current EPA or Regional Water Quality Control Board issued NPDES permits, state general permits, or other waivers, permits, or approvals granted by an appropriate government agency; discharges from property for which best management practices set forth in the development project guidance are being implemented and followed; discharges to the stormwater drainage system from potable water line flushing, fire fighting activities, landscape irrigation systems, diverted stream flows, rising groundwater, and de minimis groundwater infiltration to the stormwater drainage system (from leaks in joints or connections or cracks in water drainage pipes or conveyance systems); discharges from potable water sources, passive foundation drains, air conditioning condensation and other building roof runoff; agricultural irrigation water runoff; water from crawl space pumps, passive footing drains, lawn watering, noncommercial vehicle washing; flows from riparian habitats and wetlands; dechlorinated swimming pool discharges; discharges of reclaimed water generated by a lawfully permitted water treatment facility; street wash waters when related to cleaning and maintenance by, or on behalf of, the City; discharges authorized pursuant to a permit issued under Section 6.40.080 hereof; discharges for which the discharger has reduced to the extent feasible the amount of pollutants in such discharge; and discharges authorized pursuant to federal or state laws or regulations.
- In any action taken to enforce this chapter, the burden shall be on the person who is the subject of such action to establish that a discharge was within the scope of this discharge exception.

"Enforcing attorney" means the City Attorney or District Attorney acting as counsel to the City of Garden Grove and his or her designee, which counsel is authorized to take enforcement action as described in this chapter. For purposes of criminal prosecution, only the District Attorney (and/or City Attorney), or his or her designee, shall act as the enforcing attorney.

"EPA" means the Environmental Protection Agency of the United States.

"Hearing officer" means the City Manager or his or her designee who shall preside at the administrative hearings authorized by this chapter and issue final decisions on the matters raised therein.

"Illicit connection" means any man-made conveyance or drainage system, pipeline, conduit, inlet, or outlet through which the discharge of any pollutant to the stormwater drainage system occurs or may occur. The term "illicit connection" shall not include legal nonconforming connections or connections to the stormwater drainage system that are hereinafter authorized by the agency with jurisdiction over the system at the location at which the connection is made.

"Industrial discharger" means industries whose Standard Industrial Classification (SIC) codes are identified by the State Water Resources Control Board as requiring coverage under the State's general industrial NPDES stormwater permit.

"Invoice for costs" means the actual costs and expenses of the City, including but not limited to administrative overhead, salaries and other expenses recoverable under state law, incurred during any inspection conducted pursuant to

Page 247 of 614

Section 6.40.060 or where a notice of noncompliance, administrative compliance order, or other enforcement option under Section 6.40.070 is utilized to obtain compliance with this chapter.

"Legal nonconforming connection" means connections to the stormwater drainage system existing as of the adoption of this chapter that were in compliance with all federal, state, and local rules, regulations, statutes, and administrative requirements in effect at the time the connection was established, including but not limited to any discharge permitted pursuant to the terms and conditions of an individual discharge permit issued pursuant to the Industrial Waste Ordinance, County Ordinance No. 703.

"New development" means all public and private residential (whether single-family, multi-unit, or planned unit development), industrial, commercial, retail, and other nonresidential construction projects, or grading for future construction, for which either a discretionary land use approval, grading permit, building permit, or nonresidential plumbing permit is required.

"Nonresidential plumbing permit" means a plumbing permit authorizing the construction and/or installation of facilities for the conveyance of liquids other than stormwater, potable water, reclaimed water, or domestic sewage.

"NPDES permit" means the currently applicable municipal discharge permit issued by the Regional Water Quality Control Board, Santa Ana Region, which permit establishes waste discharge requirements applicable to stormwater runoff in the City;

"Person" means any natural person as well as any corporation, partnership, government entity or subdivision, trust, estate, cooperative association, joint venture, business entity, or other similar entity, or the agent, employee, or representative of any of the above.

"Pollutant" means any liquid, solid, or semisolid substances, or combination thereof, including and not limited to:

- 1. Artificial materials (such as floatable plastics, wood products, or metal shavings).
- 2. Household waste (such as trash, paper, and plastics; cleaning chemicals; yard wastes; animal fecal materials; used oil and fluids from vehicles, lawn mowers, and other common household equipment).
- 3. Metals and nonmetals, including compounds of metals and nonmetals (such as cadmium, lead, zinc, copper, silver, nickel, chromium, cyanide, phosphorus, and arsenic), with characteristics that cause an adverse effect on living organisms.
- 4. Petroleum and related hydrocarbons (such as fuels, lubricants, surfactants, waste oils, solvents, coolants, and grease).
- 5. Animal wastes (such as discharge from confinement facilities, kennels, pens, and recreational facilities, including stables, show facilities, or polo fields).
 - 6. Substances having a pH less than 6.5 or greater than 8.6, or unusual coloration, turbidity, or odor.
- 7. Waste materials and wastewater generated on construction sites and by construction activities (such as painting and staining; use of sealants and glues; use of lime; use of wood preservatives and solvents; disturbance of asbestos fibers, paint flakes, or stucco fragments; application of oils, lubricants, hydraulic, radiator, or battery fluids; construction equipment washing; concrete pouring and cleanup; use of concrete detergents; steam cleaning or sand blasting; use of chemical degreasing or diluting agents; and use of super chlorinated water for potable water line flushing).
- 8. Materials causing an increase in biochemical oxygen demand, chemical oxygen demand, or total organic carbon.
 - 9. Materials that contain base/neutral or acid extractable organic compounds.
 - 10. Those pollutants defined in Section 1362(6) of the Federal Clean Water Act.
- 11. Any other constituent or material, including but not limited to pesticides, herbicides, fertilizers, fecal coliform, fecal streptococcus, or enterococcus, or eroded soils, sediment, and particulate materials, in quantities that will interfere with or adversely affect the beneficial uses of the receiving waters, flora, or fauna of the state.

"Prohibited discharge" means any discharge that contains any pollutant, from public or private property to:

1. The stormwater drainage system.

- 2. Any upstream flow that is tributary to the stormwater drainage system.
- 3. Any groundwater, river, stream, creek, wash, or dry weather arroyo, wetlands area, marsh, coastal slough.
- 4. Any coastal harbor, bay, or the Pacific Ocean.
- 5. The term "prohibited discharge" shall not include discharges allowable under the discharge exception.

"Significant reconstruction" means the rehabilitation or reconstruction of public or private residential (whether single-family, multi-unit, or planned unit development), industrial, commercial, retail, or other nonresidential structures, for which either a discretionary land use approval, grading permit, building permit, or nonresidential plumbing permit is required.

"State general permit" means the state general industrial stormwater permit, the state general construction permit, or any other state general permit that has been or will be adopted and the terms and requirements of any such permit. In the event the U.S. Environmental Protection Agency (EPA) revokes the in-lieu permitting authority of the State Water Resources Control Board, then the term "state general permit" shall also refer to any EPA administered stormwater control program for industrial and construction activities.

"Stormwater drainage system" means street gutter, channel, storm drain, constructed drain, lined diversion structure, wash area, inlet, outlet, or other facility that is a part of or tributary to the county-wide stormwater runoff system and owned, operated, maintained, or controlled by County of Orange, the Orange County Flood Control District, or any copermittee city, and used for the purpose of collecting, storing, transporting, or disposing of stormwater.

"Stormwater Pollution Prevention Plan (SWPPP)" means a plan to:

- 1. Help identify the sources of pollution that affect the quality of storm-water discharges and authorized non-stormwater discharges, and
- 2. To describe and ensure the implementation of BMPs to reduce or prevent pollutants in stormwater discharges and authorized non-stormwater discharges.

"Local Implementation Plan" means the City of Garden Grove National Pollutant Discharge Elimination System (NPDES) Stormwater Permit Local Implementation Plan as approved by the City Council on June 10, 2003, and as may be amended from time to time. (2803 § 1, 2011; 2603 § 1, 2003; 2401 § 1, 1997)

6.40.040 Prohibition on Illicit Connections and Prohibited Discharges

No person shall:

- A. Construct, maintain, operate, and/or utilize any illicit connection;
- B. Cause, allow, or facilitate any prohibited discharge;
- C. Act, cause, permit, or suffer any agent, employee or independent contractor, to construct, maintain, operate or utilize any illicit connection, or cause, allow, or facilitate any prohibited discharge. (2803 § 1, 2011; 2401 § 1, 1997)

6.40.050 Controls for Water Quality Management

A. NEW DEVELOPMENT AND SIGNIFICANT RECONSTRUCTION.

- 1. All new development and significant reconstruction within the City shall be undertaken in accordance with the DAMP, including but not limited to the development project guidance, the local development plan, and/or administrative rules and practices as may be adopted from time to time by the City Manager or his or her designee.
- 2. Prior to the issuance by the City of a grading permit, building permit, or nonresidential plumbing permit for any new development or significant reconstruction, the City shall review the project plans and impose terms, conditions and requirements on the project in accordance with Section 6.40.050(A)(1).
- 3. Compliance with the conditions and requirements of the DAMP shall not exempt any person from the requirement to independently comply with each provision of this chapter.

4. The owner of a new development or significant reconstruction project, or upon transfer of the property, its successors and assigns, shall implement and adhere to the terms, conditions, and requirements imposed pursuant to Section 6.40.050(A)(1) on a new development or significant reconstruction project.

Each failure by the owner of the property or its successors or assigns, to implement and adhere to the terms, conditions, and requirements imposed pursuant to Section6.40.050(A)(1) on a new development or significant reconstruction project shall constitute a violation of this chapter.

- B. COST RECOVERY. The City shall be reimbursed by the project applicant for all costs and expenses incurred by the City in the review of new development or significant development projects for compliance with the DAMP. The City may elect to require a deposit of estimated costs and expenses, and the actual costs and expenses shall be deducted from the deposit, and the balance, if any, refunded to the project applicant.
- C. LITTER CONTROL. No person shall discard any waste material, including but not limited to common household rubbish or garbage of any kind (whether generated or accumulated at a residence, business, or other location), upon any public property, whether occupied, open, or vacant, including but not limited to any street, sidewalk, alley, right-of-way, open area, or point of entry to the stormwater drainage system. (2803 § 1, 2011; 2603 § 2, 2003; 2401 § 1, 1997)

6.40.060 Inspections

A. SCOPE OF INSPECTIONS.

- 1. RIGHT TO INSPECT. Prior to commencing any inspection as authorized in this section, the authorized inspector shall obtain either the consent of the owner or occupant of the property or shall obtain an administrative inspection warrant or criminal search warrant.
- 2. ENTRY TO INSPECT. The authorized inspector may enter property to investigate the source of any discharge to any public street, inlet, gutter, storm drain, or the stormwater drainage system located within the jurisdiction of the City.
- 3. COMPLIANCE ASSESSMENTS. The authorized inspector may inspect property for the purpose of verifying compliance with this chapter, including but not limited to:
- a. Identifying products produced, processes conducted, chemicals used, and materials stored on or contained within the property;
 - b. Identifying point(s) of discharge of all wastewater, process water systems, and pollutants;
 - c. Investigating the natural slope at the location, including drainage patterns and man-made conveyance systems;
- d. Establishing the location of all points of discharge from the property, whether by surface runoff or through a storm drain system;
 - e. Locating any illicit connection or the source of prohibited discharge;
 - f. Evaluating compliance with any permit issued pursuant to Section 6.40.080 hereof; and
 - g. Investigating the condition of any legal nonconforming connection.
- 4. PORTABLE EQUIPMENT. For purposes of verifying compliance with this chapter, the authorized inspector may inspect any vehicle, truck, trailer, tank truck, or other mobile equipment.
- 5. RECORDS REVIEW. The authorized inspector may inspect all records of the owner or occupant of property relating to chemicals or processes presently or previously occurring on-site, including material and/or chemical inventories, facilities maps or schematics and diagrams, Material Safety Data Sheets, hazardous waste manifests, business plans, pollution prevention plans, state general permits, stormwater pollution prevention plans, monitoring program plans, and any other record(s) relating to illicit connections, prohibited discharges, a legal nonconforming connection, or any other source of contribution or potential contribution of pollutants to the stormwater drainage system.
- 6. SAMPLE AND TEST. The authorized inspector may inspect, sample, and test any area runoff, soils area (including groundwater testing), process discharge, materials within any waste storage area (including any container contents), and/or treatment system discharge for the purpose of determining the potential for contribution of pollutants to

the stormwater drainage system. The authorized inspector may investigate the integrity of all storm drain and sanitary sewer systems, any legal nonconforming connection, or other pipelines on the property using appropriate tests, including but not limited to smoke and dye tests or video surveys. The authorized inspector may take photographs or videotape, make measurements or drawings, and create any other record reasonably necessary to document conditions on the property.

7. MONITORING. The authorized inspector may erect and maintain monitoring devices for the purpose of measuring any discharge or potential source of discharge to the stormwater drainage system. (2803 § 1, 2011; 2401 § 1, 1997)

6.40.070 Enforcement

A. ADMINISTRATIVE REMEDIES.

- 1. NOTICE OF NONCOMPLIANCE. The authorized inspector may deliver to the owner or occupant of any property, or to any person responsible for an illicit connection or prohibited discharge a notice of noncompliance. The notice of noncompliance shall be delivered in accordance with Section 6.40.070(A)(5).
- a. The notice of noncompliance shall identify the provision(s) of this chapter or the applicable permit that has been violated. The notice of noncompliance shall state that continued noncompliance may result in additional enforcement actions against the owner, occupant, and/or person.
- b. The notice of noncompliance shall state a compliance date that must be met by the owner, occupant, and/or person, provided, however, that the compliance date may not exceed seven days unless the authorized inspector extends the compliance deadline where good cause exists for the extension.

2. ADMINISTRATIVE COMPLIANCE ORDERS.

- a. The authorized inspector may issue an administrative compliance order. The administrative compliance order shall be delivered in accordance with Section 6.40.070(A)(5). The administrative compliance order may be issued to:
- i. The owner or occupant of any property requiring abatement of conditions on the property that cause or may cause a prohibited discharge or an illicit connection in violation of this chapter.
- ii. The owner of property subject to terms, conditions, or requirements imposed on a project in accordance with Section 6.40.070(A)(1) to ensure adherence to those terms, conditions, and requirements.
- iii. A permittee subject to the requirements of any permit issued pursuant to Section 6.40.080 hereof to ensure compliance with the terms, conditions, and requirements of the permit.
 - iv. Any person responsible for an illicit connection or prohibited discharge.
 - b. The administrative compliance order may include the following terms and requirements:
- i. Specific steps and time schedules for compliance as reasonably necessary to eliminate an existing prohibited discharge or to prevent the imminent threat of a prohibited discharge, including but not limited to a prohibited discharge from any pond, pit, well, surface impoundment, holding, or storage area.
 - ii. Specific steps and time schedules for compliance as reasonably necessary to discontinue any illicit connection.
- iii. Specific requirements for containment, cleanup, removal, storage, installation of overhead covering, or proper disposal of any pollutant having the potential to contact stormwater runoff.
- iv. Any other terms or requirements reasonably calculated to prevent the imminent threat of or continuing violations of this chapter, including, but not limited to requirements for compliance with best management practices guidance documents promulgated by any federal, State of California or regional agency.
- v. Any other terms or requirements reasonably calculated to achieve full compliance with the terms, conditions, and requirements of any permit issued pursuant hereto.
 - 3. CEASE AND DESIST ORDERS.

- a. The authorized inspector may issue a cease and desist order. A cease and desist order shall be delivered in accordance with Section 6.40.070(A)(5). A cease and desist order may direct the owner or occupant of any property and/or other person responsible for a violation of this chapter to:
 - i. Immediately discontinue any illicit connection or prohibited discharge to the stormwater drainage system.
- ii. Immediately contain or divert any flow of water off the property, where the flow is occurring in violation of any provision of this chapter.
 - iii. Immediately discontinue any other violation of this chapter.
 - iv. Clean up the area affected by the violation.
- v. The authorized inspector may direct by cease and desist order that the owner of any property, or his or her successor-in-interest, whose property is subject to any conditions or requirements issued pursuant to Section 6.40.050(A)(1) or any permittee under any permit issued pursuant to Section 6.40.080 hereof: Immediately cease any activity not in compliance with the conditions or requirements issued pursuant to Section 6.40.050(A)(1), or the terms, conditions, and requirements of the applicable permit.
- 4. RECOVERY OF COSTS. The authorized inspector may deliver to the owner or occupant of any property, any permittee, or any other person who becomes subject to a notice of noncompliance or administrative order, an invoice for costs. An invoice for costs shall be delivered in accordance with Section 6.40.070(A)(5). An invoice for costs shall be immediately due and payable to the City for the actual costs incurred by the City in issuing and enforcing any notice or order.

If any owner or occupant, permittee, or any other person subject to an invoice for costs fails to either pay the invoice for costs or appeal successfully the invoice for costs in accordance with Section 6.40.070(A)(6), then the enforcing attorney may institute collection proceedings.

- 5. DELIVERY OF NOTICE. Any notice of noncompliance, administrative compliance order, cease and desist order, or invoice of costs to be delivered pursuant to the requirements of this chapter shall be subject to the following:
- a. The notice shall state that the recipient has a right to appeal the matter as set forth in Section 6.40.070(A)(6) through 6.40.070(A)(10).
 - b. Delivery shall be deemed complete upon:
 - i. Personal service to the recipient;
 - ii. Deposit in the U.S. mail, postage pre-paid for first class mail; or
 - iii. Facsimile service with confirmation of receipt.
- c. Where the recipient of notice is the owner of the property, the address for notice shall be the address from the most recently issued equalized assessment roll for the property or as otherwise appears in the current records of the City.
- d. Where the owner or occupant of any property cannot be located after the reasonable efforts of the authorized inspector, a notice of noncompliance or cease and desist order shall be deemed delivered after posting on the property for a period of 10 business days.
- 6. ADMINISTRATIVE HEARING FOR NOTICES OF NONCOMPLIANCE, ADMINISTRATIVE COMPLIANCE ORDERS, INVOICES FOR COSTS AND ADVERSE DETERMINATIONS. Except as set forth in subsection (A)(8) of this section, any person receiving a notice of noncompliance, administrative compliance order, a notice of legal nonconforming connection, an invoice for costs, or any person who is subject to any adverse determination made pursuant to this chapter, may appeal the matter by requesting an administrative hearing. Notwithstanding the foregoing, these administrative appeal procedures shall not apply to criminal proceedings initiated to enforce this chapter.
- 7. REQUEST FOR ADMINISTRATIVE HEARING. Any person appealing a notice of noncompliance, an administrative compliance order, a notice of legal nonconforming connection, an invoice for costs or an adverse determination shall, within 30 days of receipt thereof, file a written request for an administrative hearing, accompanied by an administrative hearing fee as established by separate City Council resolution, with the office of the City Clerk, with a copy of the request for administrative hearing mailed on the date of filing to the City Manager. Thereafter, a hearing on the matter shall be held before the hearing officer within 45 business days of the date of filing of the written request

unless, in the reasonable discretion of the hearing officer and pursuant to a written request by the appealing party, a continuance of the hearing is granted.

- 8. ADMINISTRATIVE HEARING FOR CEASE AND DESIST ORDERS AND EMERGENCY ABATEMENT ACTIONS. An administrative hearing on the issuance of a cease and desist order or following an emergency abatement action shall be held within five business days following the issuance of the order or the action of abatement, unless the hearing (or the time requirement for the hearing) is waived in writing by the party subject to the cease and desist order or the emergency abatement. A request for an administrative hearing shall not be required from the person subject to the cease and desist order or the emergency abatement action.
- 9. HEARING PROCEEDINGS. The authorized inspector shall appear in support of the notice, order, determination, invoice for costs, or emergency abatement action, and the appealing party shall appear in support of withdrawal of the notice, order, determination, invoice for costs, or in opposition to the emergency abatement action. Except as set forth in Section 6.40.030 (definition of "discharge exception"), the City shall have the burden of supporting any enforcement or other action by a preponderance of the evidence. Each party shall have the right to present testimony and other documentary evidence as necessary for explanation of the case.
- 10. FINAL DECISION AND APPEAL. The final decision of the hearing officer shall issue within 10 business days of the conclusion of the hearing and shall be delivered by first-class mail, postage prepaid, to the appealing party. The final decision shall include notice that any legal challenge to the final decision shall be made pursuant to the provisions of Code of Civil Procedure Sections 1094.5 and 1094.6 and shall be commenced within 90 days following issuance of the final decision. The administrative hearing fee paid by a prevailing party in an appeal shall be refunded.

Notwithstanding this section, the final decision of the hearing officer in any proceeding determining the validity of a cease and desist order or following an emergency abatement action shall be mailed within five business days following the conclusion of the hearing.

- 11. CITY ABATEMENT. In the event the owner of property, the operator of a facility, a permittee, or any other person fails to comply with any provision of a compliance schedule issued to such owner, operator, permittee, or person pursuant to this chapter, the authorized inspector may request the enforcing attorney to obtain an abatement warrant or other appropriate judicial authorization to enter the property, abate the condition, and restore the area. Any costs incurred by the City in obtaining and carrying out an abatement warrant or other judicial authorization may be recovered pursuant to Section 6.40.070(B)(4).
- B. NUISANCE. Any condition in violation of the prohibitions of this chapter, including but not limited to the maintenance or use of any illicit connection or the occurrence of any prohibited discharge, shall constitute a threat to the public health, safety, and welfare, and is declared and deemed a nuisance pursuant to Government Code Section 38771.
- 1. COURT ORDER TO ENJOIN OR ABATE. At the request of the City Manager, the enforcing attorney may seek a court order to enjoin and/or abate the nuisance.
- 2. NOTICE TO OWNER AND OCCUPANT. Prior to seeking any court order to enjoin or abate a nuisance or threatened nuisance, the City Manager shall provide notice of the proposed injunction or abatement to the owner and occupant, if any, of the property where the nuisance or threatened nuisance is occurring.
- 3. EMERGENCY ABATEMENT. In the event the nuisance constitutes an imminent danger to public safety or the environment, the City Manager may enter the property from which the nuisance emanates, abate the nuisance, and restore any property affected by the nuisance. To the extent reasonably practicable, informal notice shall be provided to the owner or occupant prior to abatement. If necessary to protect the public safety or the environment, abatement may proceed without prior notice to or consent from the owner or occupant thereof and without judicial warrant.
- a. An imminent danger shall include, but is not limited to, exigent circumstances created by the dispersal of pollutants, where the same presents a significant and immediate threat to the public safety or the environment.
- b. Notwithstanding the authority of the City to conduct an emergency abatement action, an administrative hearing pursuant to Section 6.40.070(A)(8) hereinabove shall follow the abatement action.
- 4. REIMBURSEMENT OF COSTS. All costs incurred by the City in responding to any nuisance, all administrative expenses, and all other expenses recoverable under state law, shall be recoverable from the person(s) creating, causing, committing, permitting, or maintaining the nuisance.

 Page 253 of 614

5. NUISANCE LIEN. All costs shall become a lien against the property from which the nuisance emanated and a personal obligation against the owner thereof in accordance with Government Code Sections 38773.1 and 38773.5. The owner of record of the property subject to any lien shall be given notice of the lien prior to recording as required by Government Code Section 38773.1.

At the direction of the City Manager, the enforcing attorney is authorized to collect nuisance abatement costs or enforce a nuisance lien in an action brought for a money judgment or by delivery to the County Assessor of a special assessment against the property in accord with the conditions and requirements of Government Code§38773.5.

C. CRIMINAL SANCTIONS.

- 1. PROSECUTOR. The enforcing attorney may act on the request of the City Manager to pursue enforcement actions in accordance with the provisions of this chapter.
- 2. INFRACTIONS. Any person who may otherwise be charged with a misdemeanor under this chapter may be charged, at the discretion of the enforcing attorney, with an infraction punishable by a fine of not more than \$250.00 for a first violation, \$500.00 for a second violation, and a fine not exceeding \$1,000.00 for each additional violation occurring within one year.
- 3. MISDEMEANORS. Any person who negligently or knowingly violates any provision of this chapter, undertakes to conceal any violation of this chapter, continues any violation of this chapter after notice thereof, or violates the terms, conditions, and requirements of any permit issued pursuant to this chapter, shall be guilty of a misdemeanor punishable by a fine of not more than \$1,000.00 or by imprisonment for a period of not more than six months, or both.
- D. CONSECUTIVE VIOLATIONS. Each day in which a violation occurs and each separate failure to comply with either a separate provision of this chapter, an administrative compliance order, a cease and desist order, or a permit issued pursuant to this chapter, shall constitute a separate violation of this chapter punishable by fines or sentences issued in accordance with this chapter.
- E. NONEXCLUSIVE REMEDIES. Each and every remedy available for the enforcement of this chapter shall be nonexclusive and it is within the discretion of the authorized inspector or enforcing attorney to seek cumulative remedies, except that multiple monetary fines or penalties shall not be available for any single violation of this chapter.

F. CITATIONS.

- 1. Pursuant to Penal Code Section 836.5, the authorized inspector shall have the authority to cause the arrest of any person committing a violation of this chapter. The person shall be released and issued a citation to appear before a magistrate in accordance with Penal Code Sections 853.5, 853.6, and 853.9, unless the person demands to be taken before a magistrate. Following issuance of any citation the authorized inspector shall refer the matter to the enforcing attorney.
- 2. Each citation to appear shall state the name and address of the violator, the provisions of this chapter violated, and the time and place of appearance before the court, which shall be at least 10 business days after the date of violation. The person cited shall sign the citation giving his or her written promise to appear as stated therein. If the person cited fails to appear, the enforcing attorney may request issuance of a warrant for the arrest of the person cited.
- G. VIOLATIONS OF OTHER LAWS. Any person acting in violation of this chapter also may be acting in violation of the Federal Clean Water Act or the State Porter-Cologne Act and other laws and also may be subject to sanctions including civil liability. Accordingly, the enforcing attorney is authorized to file a citizen suit pursuant to the Federal Clean Water Act Section 505(a), seeking penalties, damages, and orders compelling compliance, and other appropriate relief. The enforcing attorney may notify EPA Region IX, the Santa Ana Regional Water Quality Control Board, or any other appropriate state or local agency, of any alleged violation of this chapter.
- H. INJUNCTIONS. At the request of the City Manager, the enforcing attorney may cause the filing in a court of competent jurisdiction of a civil action seeking an injunction against any threatened or continuing noncompliance with the provisions of this chapter.

Order for Reimbursement. Any temporary, preliminary, or permanent injunction issued pursuant hereto may include an order for reimbursement to the City of all costs incurred in enforcing this chapter, including costs of inspection, investigation, and monitoring, the costs of abatement undertaken at the expense of the City, costs relating to restoration of the environment and all other expenses as authorized by law.

I. OTHER CIVIL REMEDIES.

- 1. The City Manager may cause the enforcing attorney to file an action for civil damages in a court of competent jurisdiction seeking recovery of:
- a. All costs incurred in enforcement of this chapter, including but not limited to costs relating to investigation, sampling, monitoring, inspection, administrative expenses, all other expenses as authorized by law, and consequential damages;
 - b. All costs incurred in mitigating harm to the environment or reducing the threat to human health; and
 - c. Damages for irreparable harm to the environment.
- 2. The enforcing attorney is authorized to file actions for civil damages resulting from any trespass or nuisance occurring on public land or to the stormwater drainage system from any violation of this chapter where the same has caused damage, contamination or harm to the environment, public property, or the stormwater drainage system.
- 3. The remedies available to the City pursuant to the provisions of this chapter shall not limit the right of the City to seek any other remedy that may be available by law. (2803 § 1, 2011; 2401 § 1, 1997)

6.40.080 Permits

A. DISCHARGE PERMIT PROCEDURE.

- 1. PERMIT. On application of the owner of property or the operator of any facility, which property or facility is not otherwise subject to the requirements of a state general permit or a national pollution discharge elimination system permit regulating stormwater discharges, the City Manager may issue a permit authorizing the release of non-stormwater discharges to the stormwater drainage system if:
- a. The discharge of material or constituents is reasonably necessary for the conduct of otherwise legal activities on the property; and
- b. The discharge will not cause a nuisance, impair the beneficial uses of receiving waters, or cause any reduction in established water quality standards.
- 2. APPLICATION. The applicant shall provide all information requested by the City Manager for review and consideration of the application, including but not limited to specific detail as to the activities to be conducted on the property, plans and specifications for facilities located on the property, identification of equipment or processes to be used on-site and other information as may be requested in order to determine the constituents, and quantities thereof, which may be discharged if permission is granted.
- 3. PERMIT ISSUANCE. The permit shall be granted or denied by the City Manager or his or her designated representative, no later than 60 business days following the completion and acceptance of the application as determined by the City Manager.

The applicant shall be notified in person or by first-class mail, postage prepaid, of the action taken.

- 4. PERMIT CONDITIONS. The permit may include terms, conditions, and requirements to ensure compliance with the objectives of this chapter and as necessary to protect the receiving waters, including but not limited to:
- a. Identification of the discharge location on the property and the location at which the discharge will enter the stormwater drainage system;
 - b. Identification of the constituents and quantities thereof to be discharged into the stormwater drainage system;
- c. Specification of pollution prevention techniques and structural or nonstructural control requirements as reasonably necessary to prevent the occurrence of potential discharges in violation of this chapter;
 - d. Requirements for self-monitoring of any discharge;
- e. Requirements for submission of documents or data, such as technical reports, production data, discharge reports, self-monitoring reports, and waste manifests; and

- f. Other terms and conditions appropriate to ensure compliance with the provisions of this chapter and the protection of receiving waters, including requirements for compliance with best management practices guidance documents approved by any federal, State of California or regional agency.
- 5. GENERAL PERMIT. In the discretion of the City Manager, the permit may, in accordance with the conditions identified in Section 6.40.080(A)(4), be prepared as a general permit applicable to a specific category of activities. If a general permit is issued, any person intending to discharge within the scope of the authorization provided by the general permit may do so by filing an application to discharge with the City Manager. No discharge within the scope of the general permit shall occur until such application is so filed.

Notwithstanding the foregoing in Section 6.40.080(A)(5), the City Manager, in his or her discretion, may eliminate the requirement that an application for a general permit be filed for any specific activity for which a general permit has been issued.

- 6. PERMIT FEES. The permission to discharge shall be conditioned upon the applicant's payment of the City's costs, in accordance with a fee schedule adopted by separate resolution, as follows:
- a. For individually issued permits, the costs of reviewing the permit application, preparing and issuing the permit, and the costs reasonably related to administrating this permit program; and
- b. For general permits, the costs of reviewing the permit application, that portion of the costs of preparing the general permit that is reasonably attributable to the permittee's application for the general permit, and the costs reasonably related to administering the general permit program. Notwithstanding the foregoing, no permit fee shall be charged for a general permit issued pursuant to Section 6.40.080(A)(5)(a).
 - B. PERMIT SUSPENSION, REVOCATION, OR MODIFICATION.
 - 1. The City Manager may suspend or revoke any permit when it is determined that:
- a. The permittee has violated any term, condition or requirement of the permit or any applicable provision of this chapter;
- b. The permittee's discharge or the circumstances under which the discharge occurs have changed so that it is no longer appropriate to except the discharge from the prohibitions on prohibited discharge contained within this chapter; or
 - c. The permittee fails to comply with any schedule for compliance issued pursuant to this chapter; or
- d. Any regulatory agency, including the EPA or a Regional Water Quality Control Board having jurisdiction over the discharge, notifies the City that the discharge should be terminated.
 - 2. The City Manager may modify any permit when it is determined that:
 - a. Federal or state law requirements have changed in a manner that necessitates a change in the permit; or
- b. The permittee's discharge or the circumstances under which the discharge occurs have changed so that it is appropriate to modify the permit's terms, conditions, or requirements; or
- c. A change to the permit is necessary to ensure compliance with the objectives of this chapter or to protect the quality of receiving waters.
- 3. The permittee, or in the case of a general permit, each person who has filed an application pursuant to Section 6.40.080(A)(5), shall be informed of any change in the permit terms and conditions at least 60 days prior to the effective date of the modified permit. In the case of a general permit issued pursuant to Section 6.40.080(A)(5)(a), any change in the permit terms and conditions shall be published in newspaper of general circulation within the City at least 60 days prior to the effective date of the modified permit.
- 4. The determination that a permit shall be denied, suspended, revoked, or modified may be appealed by a permittee pursuant to the same procedures applicable to appeal of an administrative compliance order in this chapter. In the absence of a judicial order to the contrary, the permittee may continue to discharge pending issuance of the final administrative decision by the hearing officer.
- C. PERMIT ENFORCEMENT PENALTIES. Any violation of the terms, conditions, and requirements of any permit issued by the City Manager shall constitute a violation of this chapter and subject the violator to the administrative, civil, and criminal remedies available under this chapter.

 Page 256 of 614

- D. Compliance with the terms, conditions, and requirements of a permit issued pursuant to this chapter shall not relieve the permittee from compliance with all federal, state, and local laws, regulations and permit requirements, applicable to the activity for which the permit is issued.
- 1. LIMITED PERMITTEE RIGHTS. Permits issued under this chapter are for the person or entity identified therein as the "permittee" only, and authorize the specific operation at the specific location identified in the permit. The issuance of a permit does not vest the permittee with a continuing right to discharge.
 - 2. TRANSFER OF PERMITS. No permit issued to any person may be transferred to allow:
- a. A discharge to the stormwater drainage system at a location other than the location stated in the original permit; or
- b. A discharge by a person other than the person named in the permit, provided however, that the City may approve a transfer if written approval is obtained, in advance, from the City Manager. (2803 § 1, 2011; 2401 § 1, 1997)

6.40.090 Interagency Cooperation

- A. The City intends to cooperate with other agencies with jurisdiction over stormwater discharges to ensure that the regulatory purposes underlying stormwater regulations promulgated pursuant to the Clean Water Act (33 USC Section 1251 et seq.) are met.
- B. The City may, to the extent authorized by law, elect to contract for the services of any public agency or private enterprise to carry out the planning approvals, inspections, permits, and enforcement authorized by this chapter. (2803 § 1, 2011; 2401 § 1, 1997)

6.40.100 Miscellaneous

- A. COMPLIANCE DISCLAIMER. Full compliance by any person or entity with the provisions of this chapter shall not preclude the need to comply with other local, state, or federal statutory or regulatory requirements, which may be required for the control of the discharge of pollutants into stormwater and/or the protection of stormwater quality.
- B. SEVERABILITY. If any provision of this chapter or the application of the chapter to any circumstance is held invalid, the remainder of the chapter or the application of the chapter to other persons or circumstances shall not be affected. (2803 § 1, 2011; 2401 § 1, 1997)

6.40.110 Judicial Review

The provisions of Sections 1094.5 and 1094.6 of the Code of Civil Procedure set forth the procedure for judicial review of any act taken pursuant to this chapter. Parties seeking judicial review of any action taken pursuant to this chapter shall file such action within 90 days of the occurrence of the event for which review is sought. (2803 § 1, 2011; 2401 § 1, 1997)



ORDINANCE NO. 6

AN ORDINANCE OF THE BOARD OF DIRECTORS OF THE GARDEN GROVE SANITARY DISTRICT ADOPTING FATS, OILS AND GREASE CONTROL REGULATIONS APPLICABLE TO FOOD SERVICE ESTABLISHMENTS

WHEREAS, pursuant to the County Sanitary District Act , Health & Safety Code §§ 4700 et seq., the Garden Grove Sanitary District ("District") has the authority to adopt ordinances relating to the provision of sewer services and facilities, and regulations of those services and facilities; and

WHEREAS, the Regional Water Quality Control Board ("RWQCB") for the Santa Ana Region adopted Order R8-2002-0014, which prescribes general waste discharge requirements prohibiting sanitary sewer overflows ("SSOs") by sewer collection agencies; and

WHEREAS, in Order R8-2002-0014, the RWQCB found that one of the leading causes of SSOs within the Santa Ana Region, which encompasses the District's service area is "grease blockages;" and

WHEREAS, SSOs often caused by discharge of wastewater containing high levels of fat, oils and grease ("FOG"), suspended solids, pathogenic organisms, and other pollutants, may result in the temporary failure to meet applicable water quality objectives, pose a threat to the public health, adversely affect aquatic life, and impair the public recreational use and aesthetic enjoyment of surface waters within the District's service area; and

WHEREAS, the 2000-2001 Orange County Grand Jury ("Grand Jury") conducted a survey among 35 wastewater collection and treatment agencies in Orange County and concluded that one of the leading causes of SSOs and sewage spills is sewer lines clogged from the accumulation of FOG discharged from Food Service Establishments; and

WHEREAS, the Grand Jury further concluded that more effective methods of minimizing grease discharges into the sewer system must be developed and implemented to reduce the discharge of FOG to the sewer system in order to prevent sewer blockages and SSOs; and

WHEREAS, Order No. R8-2002-0014 requires the District to monitor and control SSOs and to develop a FOG Control Program by December 30, 2004; and

WHEREAS, in light of the overwhelming evidence that FOG is a primary cause of SSOs, the District desires to implement a FOG Control Program to prevent SSOs; and

WHEREAS, the foregoing findings indicate that a FOG Control Program is required for Food Service Establishments within the District's jurisdiction to comply with waste discharge regulations and prevent the harmful effects of SSOs; and

WHEREAS, the Board of Directors finds that specific enforcement provisions must be adopted to govern discharges of wastewater to the District's system by Food Service Establishments.

NOW, THEREFORE, the Board of Directors does hereby ordain as follows:

Section I. <u>Amendment To Code Of Regulations.</u>

Chapter 4.30, entitled "Regulations Controlling the Discharge of Fats, Oils, and Grease From Food Service Establishments", is hereby added to Title 4, "Sewer Regulations" of the Garden Grove Sanitary District Code of Regulations (2004 Edition) to read as follows:

"Chapter 4.30. Regulations Controlling the Discharge of Fats, Oils

And Grease From Food Service Establishments.

Section 4.30.010. PURPOSE AND POLICY

- A. The purpose of this Ordinance is to facilitate the maximum beneficial public use of the District's sewer services and facilities while preventing blockages of the sewer lines resulting from discharges of FOG to the sewer facilities, and to specify appropriate FOG discharge requirements for Food Service Establishments.
- B. This Ordinance shall be interpreted in accordance with the definitions set forth in Section 16. The provisions of this Ordinance shall apply to the direct or indirect discharge of all wastewater or waste containing FOG carried to the sewer facilities of the District.
- C. To comply with Federal, State, and local policies and to allow the District to meet applicable standards, provisions are made in this Ordinance for the regulations of wastewater or waste containing FOG discharges to the sewer facilities.
- D. This Ordinance establishes quantity and quality standards on all wastewater and/or waste discharges containing FOG, which may alone or collectively cause or contribute to FOG accumulation in the sewer facilities causing or potentially causing or contributing to the occurrence of SSOs.

Section 4.30.020. FOG DISCHARGE REQUIREMENT

No person, firm, corporation, or other entity shall operate a Food Service establishment so as to discharge or cause to be discharged into the sanitary sewer

collection system FOG that: (1) exceeds a concentration level adopted by the Board; or, (2) that may accumulate and/or cause or contribute to blockages in the sewer system or at the sewer system lateral which connects the Food Service Establishment to the sanitary sewer collection system.

Section 4.30.030. PROHIBITIONS

Any person, firm, corporation, or other entity is prohibited from operating a Food Service Establishment by:

- A. Installing food grinders in the plumbing system of new construction of Food Service Establishments. All food grinders shall be removed from all existing Food Service Establishments within 180 days of the effective date of this Ordinance, unless the FOG Control Program Manager has authorized the grinder to remain.
- B. Introducing any additives into a Food Service Establishment's wastewater system for the purpose of emulsifying FOG, unless otherwise permitted by specific written authorization of the FOG Control Program Manager.
- C. Disposing waste cooking oil into drainage pipes. All waste cooking oils shall be collected and stored properly in receptacles such as barrels or drums for recycling or other acceptable methods of disposal.
- D. Discharging wastewater from dishwashers to any grease trap or grease interceptor.
- E. Discharging wastewater with temperatures in excess of 140°F to any grease control device.
- F. Introducing biological additives for grease remediation or as a supplement to grease control device maintenance without prior authorization from the FOG Control Program Manager.
- G. Discharging wastes from toilets, urinals, washbasins, and other fixtures containing fecal materials to sewer lines intended for grease control device service, or vice versa.
- H. Discharging any waste, including FOG and solid materials removed from the grease control device, to the sewer system. Grease removed from grease control devices shall be waste hauled periodically as part of the operation and maintenance requirements for grease interceptors and traps.

Section 4.30.040. BEST MANAGEMENT PRACTICES REQUIRED

Any person, firm, corporation, or other entity operating a Food Services Establishment shall implement Best Management Practices as prescribed in this ordinance for the purpose of controlling and limiting the discharge of FOG to the sanitary sewer collection system.

Section 4.30.050. FOG PRETREATMENT/BEST MANAGEMENT PRACTICES

Any person, firm, corporation, or other entity operating a Food Service Establishment (FSE), or a property owner of a parcel containing multiple FSEs, may be required to install, operate and maintain an approved type and adequately sized grease interceptor in accordance with the provisions of this section. The grease interceptor shall be adequate to separate and remove FOG contained in wastewater discharges from Food Service Establishments prior to discharge to the sewer system. Fixtures, equipment, and drain lines located in the food preparation and clean up areas of Food Service Establishments that are sources of FOG discharges except for dish washing machines shall be connected to the grease interceptor. Compliance shall be established as follows:

A. New Construction of Food Service Establishments

New construction of Food Service Establishments shall include and install grease interceptors prior to commencing discharges of wastewater to the sanitary sewer collection system.

B. Existing Food Service Establishments/Commercial Properties

Existing FSE operators, or property owners with multiple FSEs, shall install a grease control device where the FOG Program Manager has found and determined that a FSE, has been responsible for, or otherwise contributed to, one or more SSO(s) following the enactment of this ordinance.

Where the FOG Program Manager has determined that an owner's lateral line requires cleaning to avoid an imminent threat of an SSO spill, the Manager is authorized to issue an order to the owner to immediately clean the subject lateral line.

The Program Manager shall issue his/her order in writing to the applicable party and shall designate a reasonable period of time period for corrective action.

C. Best Management Practice Requirements.

Food Service Establishment Operators and affected Property Owners shall comply with the following Best Management Practice standards:

1. BMP (Non-Structural) - Food Grinders (garbage disposal devices) shall immediately be removed from the FSEs plumbing system to prevent the discharge of food debris into the FSEs sewer drain system. This requirement will lead to controlling and limiting the introduction of FOG into the district's sanitary sewer collection system.

- 2. BMP (Non-Structural) The District's approved SSO prevention-training program shall be instituted and continuously maintained. The training program shall consists of those tasks set forth in the training materials adopted by the Program Manager and made available to each FSE
- 3. BMP (Structural)- Grease trap devices shall be installed and maintained so as to prevent odors, cross-contamination, sewer back-ups or SSOs.

operator and property owner affected by this ordinance.

- 4. BMP (Non-Structural)- Grease rendering containers shall be installed and Maintained.
- 5. BMP (Non-Structural)- Document record keeping shall be maintained consisting of: 1) employee training records; 2) grease control dev ice (trap or interceptor) maintenance and cleaning records; 3) on property SSO records; 4) plumbing maintenance records; 5) rendering grease disposal records. Documents consist of, but are not limited to logs, records, letters, blue prints, equipment specification and operation, receipts, and manifests. Such records are deemed to be environmental records and shall be retained for a minimum of 5 years.

Section 4.30.060. APPEALS/INTERCEPTOR REQUIREMENT.

Where the FOG Control Program Manager has determined to require the installation of a grease interceptor, the responsible party may appeal said determination in accordance with the following procedure and criteria:

The Appellant can establish that:

- 1. There is no adequate space for installation and/or maintenance of a grease interceptor.
- 2. There is no adequate slope for gravity flow between kitchen plumbing fixtures and the grease interceptor and/or between the grease interceptor and the private collection lines or the public sewer.

The appellant may submit an appeal from the grease interceptor requirement to the FOG Control Program Manager. The operator bears the burden of presenting sufficient facts in the application to justify falling within one or more of the above stated criteria.

The FOG Program Manager shall forthwith render a written decision on the appeal within ten (10) working days. If the Manager requires more information, the Manager is authorized to request additional needed information prior to making a

final determination on the application. In the event that the Program Manager grants an approval of the appeal, the Manager's determination shall specify the terms and conditions of the waiver thereof.

The appellant may further appeal an adverse decision by the Program Manager within fifteen (15) calendar days from date of the written decision by filing a written appeal with the District Board Secretary. The appeal shall be heard by the General Manager, or his designee, as soon as reasonably practicable. A written notice of decision shall be mailed to the appellant within 10 business days from date of the appeal hearing. The decision of the General Manager, or designee, shall be final and binding.

The above stated appeal provisions shall also be applicable to revocation of waiver approvals.

Section 4.30.070 COMMERCIAL PROPERTIES

Property owners of commercial properties or their official designee(s) shall be responsible for the installation and maintenance of the grease interceptor serving multiple Food Service Establishments that are located on a single parcel.

Section 4.30.080. SEWER SYSTEM OVERFLOWS, PUBLIC NUISANCE, ABATEMENT

If the District must act immediately to contain and clean up an SSO caused by blockage of a private or public sewer lateral or system serving a Food Service Establishment , or at the request of the property owner or operator of the Food Service Establishment, or because of the failure of the property owner or Food Service Establishment to abate the condition causing immediate threat of injury to the health, safety, welfare, or property of the public, the District's costs for such abatement may be entirely borne by the property owner or operator of the Food Service Establishment, and individual(s) as a responsible officer or owner of the Food Service Establishment(s) and may constitute a debt to the District and become due and payable upon the District's request for reimbursement of such costs.

Section 4.30.090. DRAWING SUBMITTAL REQUIREMENTS

Upon request by the District:

A. Operators of Food Service Establishments may be required to submit two copies of facility site plans, mechanical and plumbing plans, and details to show all sewer locations and connections. The submittal shall be in a form and content acceptable to the District for review of existing or proposed grease control device, grease interceptor, monitoring facilities, metering facilities, and operating procedures. The review of the plans and procedures shall in no way relieve the Food Service Establishments of the responsibility of modifying the facilities or

procedures in the future, as necessary to produce an acceptable discharge, and to meet the requirements of this Ordinance or any requirements of other Regulatory Agencies; and a schematic drawing of the FOG control device, grease interceptor or other pretreatment equipment, piping and instrumentation diagram, and wastewater characterization report.

B. The District may require the drawings be prepared by a California Registered Civil, Chemical, Mechanical, or Electrical Engineer.

Section 4.30.100. GREASE INTERCEPTOR REQUIREMENTS

- A. Food Service Establishment operators shall provide wastewater acceptable to the District, under the requirements and standards established herein before discharging to any public sewer. Any Food Service Establishment required to pretreat wastewater shall install, operate, and maintain an approved type and adequately sized grease interceptor necessary to maintain compliance with the objectives of this Ordinance.
- B. Grease interceptor sizing and installation shall conform to the current edition of the California Plumbing Code. Grease interceptors shall be constructed in accordance with the design approved by the FOG Control Program Manager and shall have a minimum of two compartments with fittings designed for grease retention.
- C. The grease interceptor shall be installed at an exterior location where it shall be at all times easily accessible for inspection, cleaning, and removal of accumulated grease.
- D. Access manholes, with a minimum diameter of 24 inches, shall be provided over each grease interceptor chamber and sanitary tee. The access manholes shall extend at least to finished grade and be designed and maintained to prevent water inflow or infiltration. The manholes shall also have readily removable covers to facilitate inspection, grease removal, and wastewater sampling activities.
- E Grease Interceptors shall be maintained in efficient operating condition by periodic removal of the full content of the interceptor which includes wastewater, accumulated FOG, floating materials, sludge and solids.
- F All existing and newly installed grease interceptors shall be maintained in a manner consistent with a maintenance frequency approved by the FOG Control Program Manager pursuant to this section.
- G No FOG that has accumulated in a grease interceptor shall be allowed to pass into any sewer lateral, sewer system, storm drain, or public right of way.
- H. Food Service Establishment operators with grease interceptors may be required to submit data and information necessary to establish the maintenance frequency of grease interceptors.

- I. The maintenance frequency for all Food Service Establishments with a grease interceptor shall be determined in one of the following methods:
- 1. Grease interceptors shall be fully pumped out and cleaned at a frequency such that the combined FOG and solids accumulation does not exceed 25% of the total liquid depth of the grease interceptor. This is to ensure that the minimum hydraulic retention time and required available volume is maintained to effectively intercept and retain FOG discharged to the sewer system.
- 2. All Food Service Establishments with a Grease Interceptor shall maintain their grease interceptor not less than every 6 months. Grease interceptors shall be fully pumped out and cleaned quarterly when the frequency described in (1) has not been established. The maintenance frequency shall be adjusted when sufficient data have been obtained to establish an average frequency based on the requirements described in (1) and guidelines adopted pursuant to the FOG Control Program. The District may change the maintenance frequency at any time to reflect changes in actual operating conditions in accordance with the FOG Control Program. Based on the actual generation of FOG from the Food Service Establishment, the maintenance frequency may increase or decrease.
- 3. A Food Service Establishment operator may submit a request to the FOG Control Program Manager requesting a change in the maintenance frequency at any time. The operator has the responsibility to demonstrate that the requested change in frequency reflects actual operating conditions based on the average FOG accumulation over time and meets the requirements described in (1).
- 4. If the grease interceptor, at any time, contains FOG and solids accumulation that does not meet the requirements described in (1), the Food Service Establishment operator shall be required to have the grease interceptor serviced immediately such that all fats, oils, grease, sludge, and other materials are completely removed from the grease interceptor. If deemed necessary, the FOG Control Program Manager may also increase the maintenance frequency of the grease interceptor from the current frequency.

Section 4.30.110. GREASE TRAP REQUIREMENTS

- A. Food Service Establishment operators may be required to install grease traps in the waste line leading from drains, sink, and other fixtures or equipment where grease may be introduced into the sewer system in quantities that can cause blockage.
- B. Prior to receiving a City of Garden Grove Plumber's Permit, an applicant shall submit to the FOG Control Program Manager a stamped and signed copy of installation plans indicating that the Orange County Health Care Agency has approved the grease trap location.

- C. Sizing and installation of grease traps shall conform to the current edition of the California Plumbing Code.
- D. Grease traps shall be maintained in efficient operating conditions by removing accumulated grease at a frequency approved by the FOG Control Program Manager.
- E. Grease traps shall be maintained free of all food residues and any FOG waste removed during the cleaning and scraping process.
- F. Grease traps shall be inspected periodically to check for leaking seams and pipes, and for effective operation of the baffles and flow-regulating device. Grease traps and their baffles shall be maintained free of all caked-on FOG and waste. Removable baffles shall be removed and cleaned during the maintenance process.
- G. Dishwashers and food grinder units shall not be connected to or discharged into any grease trap.

Section 4.30.120. MONITORING FACILITIES REQUIREMENTS

- A. The District may require the Food Service Establishments to construct and maintain in proper operating condition at the Food Service Establishment's sole expense, flow monitoring, constituent monitoring and/or sampling facilities.
- B. The location of the monitoring or metering facilities shall be subject to approval by the FOG Control Program Manager.
- C. Food Service Establishments may be required to provide immediate, clear, safe and uninterrupted access to the FOG Control Program Manager or inspectors to the Food Service Establishment's monitoring and metering facilities.
- D. Food Service Establishments may also be required by the FOG Control Program Manager to submit waste analysis plans, contingency plans, and meet other necessary requirements to ensure proper operation and maintenance of the grease control device and compliance with this Ordinance.
- E. No Food Service Establishment shall increase the use of water or in any other manner attempt to dilute a discharge as a partial or complete substitute for treatment to achieve compliance with this Ordinance and the FOG Wastewater Discharge Permit.

Section 4.30.130. INSPECTION AND SAMPLING CONDITIONS

- A. The FOG Control Program Manager may inspect or order the inspection and sample the wastewater discharges of any Food Service Establishment to ascertain compliance with this Ordinance. The owner shall allow the District access to the Food Service Establishment premises, during normal business hours, for purposes of inspecting the Food Service Establishment's grease control devices or interceptor, reviewing the manifests, receipts and invoices relating to the cleaning, maintenance and inspection of the grease control devices.
- 1. Right to Inspect. Prior to commencing any inspection as authorized in this section, the authorized inspector shall obtain either the consent of the owner or occupant of the property or shall obtain an administrative inspection warrant or criminal search warrant.
- 2. Entry to Inspect. The authorized inspector may enter property to investigate the source of any discharge to any public street, inlet, gutter, storm drain or the stormwater drainage system located within the jurisdiction of the city.
- 3. Compliance Assessments. The authorized inspector may inspect property for the purpose of verifying compliance with this ordinance, including but not limited to (i) identifying products produced, processes conducted, chemicals used and materials stored on or contained within the property, (ii) identifying point(s) of discharge of all wastewater, process water systems and pollutants, (iii) investigating the natural slope at the location, including drainage patterns and man-made conveyance systems, (iv) establishing the location of all points of discharge from the property, whether by sanitary sewer collection system, surface runoff or through a storm drain system, (v) locating any illicit connection or the source of prohibited discharge, (vi) evaluating compliance with any permit issued pursuant to Article 3 hereof.
- 4. Records Review. The authorized inspector may inspect all records of the owner or occupant of property relating to FOG Best Management Practices to include related chemicals or processes presently or previously occurring on-site, facilities maps or schematics and diagrams, pumping and/or grease hauler manifests or receipts pollution prevention plans, monitoring program plans and any other record(s) relating to unauthorized connections, prohibited discharges, or any other source of contribution or potential contribution of pollutants to the stormwater drainage system.
- 5. Sample and Test. The authorized inspector may inspect, sample and test any area runoff, soils area (including groundwater testing), process discharge, materials within any waste storage area (including any container contents), and/or treatment system discharge for the purpose of determining the potential for contribution of pollutants to the stormwater drainage system. The authorized inspector may investigate the integrity of all storm drain and sanitary sewer systems, any legal nonconforming connection or other pipelines on the property using appropriate tests, including but not limited to smoke and dye tests or video surveys. The authorized inspector may take photographs or videotape, make measurements or

drawings, and create any other record reasonably necessary to document conditions on the property.

Section 4.30.140. NOTIFICATION OF SPILL

- A. When material discharged to the sewer has the potential to cause or result in sewer blockages or SSOs, the discharger shall immediately notify the local Health Department, City or County, and the District.
- B. Confirmation of this notification shall be made in writing to the FOG Control Program Manager no later than five (5) working days from the date of the incident. The written notification shall state the date of the incident, the reasons for the discharge or spill, what steps were taken to immediately correct the problem, and what steps are being taken to prevent the problem from recurring.
- C. Such notification shall not relieve the discharger of any expense, loss, damage or other liability which may be incurred as a result of damage or loss to the District or any other damage or loss to person or property; nor shall such notification relieve the discharger of any fees or other liability which may be imposed by this Ordinance or other applicable law.

Section 4.30.150. ENFORCEMENT

A. Criminal Sanctions/General Penalty.

It is unlawful for any person, firm or corporation to violate any provision of this ordinance, including a failure of any party to comply with an order of the Program Manager. A violation of this ordinance shall constitute a misdemeanor; except that notwithstanding any other requirement of this ordinance, any violation constituting a misdemeanor herein, in the discretion of the District's legal counsel, or other authorized enforcement officer, may be charged and prosecuted as an infraction.

Any person, firm, corporation convicted of a misdemeanor shall be punished by a fine of note more than one thousand dollars (\$1,000) or by imprisonment in the county jail for a period of not more than six (6) months, or by both such fine and imprisonment. Any person charged and convicted of an infraction under the provisions of this code is punishable pursuant to the fine schedule set forth in Government Code section 36900.

Each such person, firm, corporation shall be guilty of a separate offense for each and every day, during any portion of which, any violation of this code is committed, continued, or permitted by any such person, firm, corporation.

B. Nuisances/Civil Relief.

Any condition in violation of this Ordinance, including but not limited to the maintenance or use of any illicit connection or the occurrence of any prohibited discharge, shall constitute a threat to the public health, safety and welfare, and is declared and deemed a nuisance pursuant to Government Code section 38771.

Any continuing or repetitive violation of this ordinance is declared to be a public nuisance and the district's legal counsel or authorized legal representative is authorized to file an appropriate civil action, whether or not criminal proceedings have been commenced for the subject offense.

C. Costs of Abatement.

Pursuant to Health and Safety Code section 6523.3, the District is entitled to recover its costs incurred in taking any action to correct a violation of this ordinance. Such costs shall be added to any sewer service charge payable by any person violating this ordinance. The district shall have such remedies for the collection of such costs as it has for the collection of sewer service charges.

Section 4.30.160. DEFINITIONS

- A. Unless otherwise defined herein, terms related to water quality shall be as adopted in the latest edition of Standard Methods for Examination of Water and Wastewater, published by the American Public Health Association, the American Water Works Association and the Water Environment Federation. The testing procedures for waste constituents and characteristics shall be as provided in 40 CFR 136 (Code of Federal Regulations).
- B. Other terms not herein defined are defined as being the same as set forth in the latest adopted applicable editions of the California Codes applicable to building construction.
- C. Subject to the foregoing provisions, the following definitions shall apply in this Ordinance:

Best Management Practices(Structural and Non-Structural) Schedules of activities, prohibitions of practices, maintenance procedures, installation of equipment, and other management practices to control and limit the introduction of FOG to sewer facilities.

Board

The Board of Directors of the District.

Change in Operations

Any change in the ownership, food types, or operational procedures that have the potential to increase the amount of FOG generated and/or discharged by Food Service Establishments in an amount that alone or collectively causes or creates a potential for SSOs to occur.

Composite Sample

A collection of individual samples obtained at selected intervals based on an increment of either flow or time. The resulting mixture (composite sample) forms a representative sample of the waste stream discharged during the sample period. Samples will be collected when a wastewater discharge occurs.

Discharger

Any person who discharges or causes a discharge of wastewater directly or indirectly to a public sewer and/or stormwater drain system. Discharger shall mean the same as User.

District

The Garden Grove Sanitary District.

Sewer Facility or System

Any property belonging to the District used in the treatment, reclamation, reuse, transportation, or disposal of wastewater.

Effluent

Any liquid outflow from the Food Service Establishment that is discharged.

Fats, Oils, and Grease ("FOG")

Any substance such as a vegetable or animal product that is used in, or is a by product of, the cooking or food preparation process, and that turns or may turn viscous or solidifies with a change in temperature or other conditions.

FOG Control Program

The FOG Control Program required by and developed pursuant to RWQCB Order No. R8-2002-0014, Section (c)(12)(viii).

> FOG Control Program Manager

The individual designated by the District to administer the FOG Control Program. The FOG Control Program Manager is responsible for all determinations of compliance with the program.

Food Service Establishment

Facilities defined in California Uniform Retail Food Service Establishments Law (CURFFL) Section 113785, and any commercial entity within the boundaries of the District, operating in a permanently constructed structure such as a room, building, or place, or portion thereof, maintained, used, or operated for the purpose storing, preparing, serving, otherwise manufacturing, packaging, or handling food for sale to other entities, or for consumption by the public, its members or employees, and which has any process or device that uses or produces FOG, or grease vapors, steam, fumes, smoke or odors that are required to be removed by a Type I or Type II hood, as defined in CURFFL Section 113785. A limited food preparation establishment is not considered a Food Service Establishment when engaged only in reheating, hot holding or assembly of ready to eat food products and as a result, there is no wastewater discharge containing a significant amount of FOG. A limited food preparation establishment does not include any operation that changes the form, flavor, or consistency of food.

Food Grinder

Any device installed in the plumbing or sewage system for the purpose of grinding food waste or food preparation by-products for the purpose of discharging it into the sanitary sewer collection system.

Grease Control Device

Any grease interceptor, grease trap or other mechanism, device, or process, which attaches to, or is applied to, wastewater plumbing fixtures and lines, the purpose of which is to trap or collect or treat FOG prior to it being discharged into the sewer system. "Grease control device" may also include any other proven method to reduce FOG subject to the approval of the District.

Grease Interceptor

A multi-compartment device that is constructed in different sizes and is generally required to be located, according to the California Plumbing Code, underground between a Food Service Establishment and the connection to the sewer system. These devices primarily use gravity to separate FOG from the wastewater as it moves from one compartment to the next. These devices must be cleaned, maintained, and have the FOG removed and disposed of in a proper manner on regular intervals to be effective.

Grease Trap

A grease control device that is used to serve individual fixtures and have limited effect and should only be used in those cases where the use of a grease interceptor or other grease control device is determined to be impossible or impracticable.

General Manager

The individual duly designated by the Board of Directors of the District to administer this Ordinance.

Grab Sample

A sample taken from a waste stream on a onetime basis without regard to the flow in the waste stream and without consideration of time.

Hot Spots

Areas in sewer lines that have experienced sanitary sewer overflows resulting in the need for frequent maintenance and cleaning.

Inflow Water entering a sewer system through a

direct stormwater runoff connection to the sanitary sewer, which may cause an almost

immediate increase in wastewater flows.

Infiltration Water entering a sewer system, including

sewer service connections, from the ground through such means as defective pipes, pipe

joints, connections, or manhole walls.

Inspector A person authorized by the District to inspect

any existing or proposed wastewater generation, conveyance, processing, and

disposal facilities.

Interceptor A grease interceptor.

Interference Any discharge which, alone or in conjunction

with discharges from other sources, inhibits or disrupts the District's sewer system, treatment processes or operations; or is a cause of violation of the District's NPDES or Waste Discharge Requirements or prevents lawful

sludge use or disposal.

Local Sewering Agency Any public agency or private entity responsible

for the collection and disposal of wastewater to the District's sewer facilities duly authorized under the laws of the State of California to

construct and/or maintain public sewers.

NPDES The National Pollutant Discharge Elimination

System; the permit issued to control the discharge of liquids or other substances or solids to surface waters of the United States as

detailed in Public Law 92-500, Section 402.

New Construction Any structure planned or under construction for

which a sewer connection permit has not been

issued.

Person Any individual, partnership, firm, association,

corporation or public agency, including the State of California and the United States of

America.

Prohibited Discharge

Any discharge which contains any pollutant, from public or private property to (i) the stormwater drainage system; (II) any upstream flow, which is tributary to the stormwater drain system; (III) any groundwater, river, stream, creek, wash or dry weather arroyo, wetlands area, march, coastal slough, or (iv) any coastal harbor, bay or the pacific Ocean.

Public Agency

The State of California and/or any city, county, special district, other local governmental authority or public body of or within this State.

Public Sewer

A sewer owned and operated by the District, or other local Public Agency, which is tributary to the District's sewer facilities.

Regulatory Agencies

Regulatory Agencies shall mean those agencies having regulatory jurisdiction over the operations of the District, including, but not limited to:

- a) United States Environmental Protection Agency, Region IX, San Francisco and Washington, DC (EPA).
- b) California State Water Resources Control Board (SWRCB).
- c) California Regional Water Quality Control Board, Santa Ana Region (RWQCB).
- d) South Coast Air Quality Management District (SCAQMD).
- e) California Department of Health Services (DOHS).

Remodeling

A physical change or operational change causing generation of the amount of FOG that exceed the current amount of FOG discharge to the sewer system by the Food Service Establishment in an amount that alone or collectively causes or create a potential for SSOs to occur; or exceeding a cost of \$50,000 to a Food Service Establishment that requires a building permit, and involves any one or combination of the following: (1) Under slab plumbing in the food processing area, (2) a 30% increase in the net public seating area, (3) a 30% increase in the size of the kitchen area, or (4) any change in the size or type of food preparation equipment.

Sample Point

A location approved by the District, from which wastewater can be collected that is representative in content and consistency of the entire flow of wastewater being sampled.

Sampling Facilities

Structure(s) provided at the user's expense for the District or user to measure and record wastewater constituent mass, concentrations, collect a representative sample, or provide access to plug or terminate the discharge.

Sewer System Overflow (SSO)

A sanitary sewer system overflow (SSO), or sewage spill, is each instance of a discharge of sewage from a sanitary sewer system.

Sewage

Wastewater.

Sewer Facilities or System

Any and all facilities used for collecting, conveying, pumping, treating, and disposing of wastewater and sludge.

Sewer Lateral

A building sewer as defined in the latest edition of the California Plumbing Code. It is the wastewater connection between the building's wastewater facilities and a public sewer system.

Sludge

Any solid, semi-solid or liquid decant, subnate or supernate from a manufacturing process, utility service, or pretreatment facility.

Stormwater Drainage

System

Manifest

Practices

Street gutter, channel, storm drain, constructed drain, lined diversion structure, wash area, inlet, outlet or other facility, which is part of or tributary to the county-wide stormwater runoff system and owned, operated, maintained or controlled by County of Orange, the Orange County Flood Control District or any city, and used for the purpose of collecting, storing, transporting or disposing of stormwater.

User Any person who discharges or causes a

discharge of wastewater directly or indirectly to a public sewer system. User shall mean the

same as Discharger.

Waste Sewage and any and all other waste

substances, liquid, solid, gaseous radioactive, associated with human habitation or of human or animal nature, including such wastes placed within containers of whatever

nature prior to and for the purpose of disposal.

That receipt which is retained by the generator of wastes for disposing recyclable wastes or

liquid wastes as required by the District.

Minimization Plans or programs intended to reduce or Waste

> eliminate discharges to the sewer system or to conserve water, including, but not limited to, product substitutions, housekeeping practices, inventory control, employee education, and other steps as necessary to minimize

wastewater produced.

Waste hauler Any person carrying on or engaging in

vehicular transport of waste as part of, or incidental to, any business for that purpose.

Wastewater The liquid and water-carried wastes of the

> community and all constituents thereof, whether treated or untreated, discharged into

or permitted to enter a public sewer.

Wastewater Constituents and Characteristics

The individual chemical, physical, bacteriological, and other parameters, including volume and flow rate and such other parameters that serve to define, classify or measure the quality and quantity of wastewater.

Section II. Effective Date

This Ordinance shall take effect immediately upon its adoption and a summary shall be published in a newspaper of general circulation as provided by law.

Adopted this 26th day of October 2004.

/s/ BRUCE A. BROADWATER
PRESIDENT

ATTEST:

<u>/s/ RUTH E. SMITH</u> SECRETARY

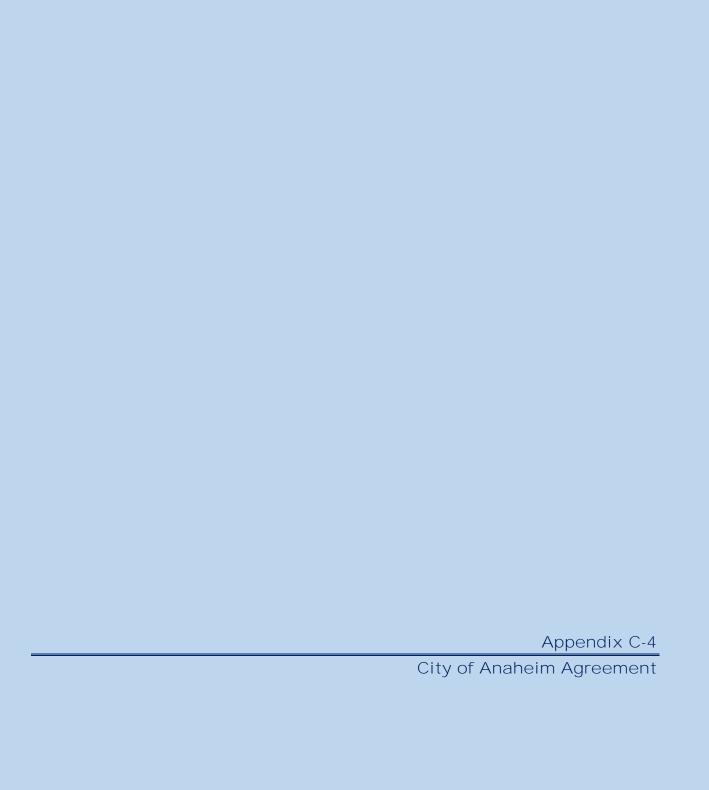
STATE OF CALIFORNIA)
COUNTY OF ORANGE) ss:
CITY OF GARDEN GROVE)

I, RUTH E. SMITH, Secretary of the Garden Grove Sanitary District, hereby certify that the foregoing Ordinance was duly adopted by the Board of the Garden Grove Sanitary District at a meeting held on the 26th day of October 2004, by the following vote:

AYES: MEMBERS: (5) DALTON, LEYES, ROSEN, TRAN, BROADWATER

NOES: MEMBERS: (0) NONE ABSENT: MEMBERS: (0) NONE

<u>/s/ RUTH E. SMITH</u> SECRETARY





CITY OF ANAHEIM, CALIFORNIA

CIVIC CENTER, 200 South Anaheim Boulevard, Third Floor Anaheim, California 92805

Telephone: 714/999-5169

July 23, 1986

Garden Grove Sanitary District Attention: President and Board of Directors 11391 Acacia Parkway P.O. Box 1437 Garden Grove, California 92642

Gentlemen:

Enclosed herewith is a completely executed copy of the Agreement between Garden Grove Sanitary District and the City of Anaheim.

The execution of said Agreement was approved by motion of the City Council of the City of Anaheim at their meeting held July 15, 1986.

Very truly yours,

JACK L. WHITE CITY ATTORNEY

Enclosure

cc: City Clerk

John Roche, Maintenace Dept.

1419V



CITY OF ANAHEIM, CALIFORNIA 92803

OFFICE OF THE CITY CLERK

STATE OF CALIFORNIA)	
COUNTY OF ORANGE)	SS•
CITY OF ANAHEIM)	

I, LEONORA N. SOHL, City Clerk of the City of Anaheim, do hereby certify that, upon a motion duly made and seconded, the attached Agreement for Joint Use and Maintenance of Sewerage Facilities was approved by the City Council of the City of Anaheim at a regular meeting of said City Council held on the 8th day of July, 1986.

IN WITNESS WHEREOF, I have hereunto set my hand and affixed the official seal of the City of Anaheim this 8th day of July, 1986.

CITY CLERK OF THE CITY OF ANAHEIM

(SEAL)

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AGREEMENT FOR JOINT USE AND MAINTENANCE OF SEWERAGE FACILITIES

•	THIS AGRE	EEMENT FOR	JOINT USE	AND MAI	NTENANCE (OF SE	WERAGE
FACILI	TIES, dated	solely for	identifi	cation t	his 8th	_ day	ο£
J	uly	, 1986, i	s made an	d entere	d into by	and	between
the							
		ANAHEIM, a ter referre			tion,		
	A N	•					

GARDEN GROVE SANITARY DISTRICT, a public body, corporate and politic, hereinafter referred to as "DISTRICT,"

D

WITNESSETH:

WHEREAS, by Resolution No. 86-37, the Local Agency Formation Commission of Orange County (LAFCO) approved Reorganization No. 82 detaching approximately 1,163 acres of property within the City of Anaheim (CITY) from the Garden Grove Sanitary District (DISTRICT); and

WHEREAS, pursuant to the detachment, DISTRICT transferred to CITY all fixed assets and facilities of DISTRICT in the detaching area; and

WHEREAS, Resolution No. <u>\$6-37</u> calls for CITY to retain capacity rights in certain DISTRICT facilities to transport waste water from the detaching areas to the Orange County Sanitation District's facilities; and

WHEREAS, because capacity rights in certain DISTRICT facilities will be shared by DISTRICT and CITY, it is in the best interests of both parties to enter into an agreement to provide for the cost sharing of maintenance, repair and replacement of existing 061986

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PROMISES, COVENANTS AND CONDITIONS HEREIN CONTAINED, THE PARTIES HERETO AGREE AS FOLLOWS:

SHARED SEWER'S CAPACITY Α.

- DISTRICT hereby grants to CITY capacity rights in amounts as will be established below, the locations of which are shown in Exhibit "A" attached hereto and made a part hereof by this reference. DISTRICT and CITY agree to use said sewers only to transport wastewater from those portions of the detaching area of CITY within the tributary area shown as crosshatched or shaded in Exhibit "A."
- When DISTRICT determines by field measurements that 2. 18 a portion of a shared sewer is flowing at capacity, as defined. below, it shall immediately notify CITY in writing, setting forth 19||the limits, the measured flow, and the depth of the peak flow. The 201 shared sewers or portions thereof shall be deemed to be at capacity when the measured daily peak flow has a depth equal to seventy-five percent (75%) of the sewer diameter.

Upon determination and notification that a sewer is 25 at capacity, both parties shall take actions necessary to cease. 26 issuance of any additional sewer connection permits to any tributary sewer or to appropriately condition issuance of the permits to mitigate additional outflow. The cessation of issuance Page 283 of 614 061986

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1 | of sewer connection permits shall continue in force until 2 | additional sewer capacity has been constructed as provided for herein. Any conditionally issued permit shall provide that any outflow shall not increase the amount of total outflow in the particular shared sewer.

- CITY's percentage of capacity in the shared sewers 7||is based upon the current level of outflow of the detaching area 8 and anticipated increased outflow based upon the current land use 9 designations and densities of the detaching area. In the event 10 | CITY approves any development which will change the land use 11 designation or permit a higher density which would create an 12 increased outflow over that currently existing or anticipated, CITY 13 agrees to impose a condition of approval on that development so as 14 to mitigate the impact of the increased outflow on the shared sewer.
- 4. DISTRICT also recognizes that changes in land use 16 and increased densities in its service area can impact the Therefore, DISTRICT agrees that 17 capacities of the shared sewers. 18 | for any development in its service area which would increase 19 densities or change land use so as to create an increased outflow 20 | into any shared sewer over that currently existing or is anticipated, it will impose a condition upon any connection permit 22 to its system so as to mitigate the impact of increased outflow on a shared sewer.

MAINTENANCE, REPAIR AND REPLACEMENT OF SHARED SEWERS В.

Attached hereto and made a part hereof by the 1. 26 reference is Exhibit B which lists each shared sewer and the agreed percentage of current use by DISTRICT and CITY. As shown on Exhibit "B," DISTRICT and CITY share capacities in each shared Page 284 of 614 -3-061986

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sewer in different ratios based upon the respective land areas and land uses currently existing in the areas served by each shared DISTRICT and CITY agree to share the cost of maintenance sewer. and upkeep of the shared sewers based upon the ratios of each shared sewer as shown on Exhibit "B." DISTRICT shall be responsible for the regular inspection, upkeep, maintenance and repair of the shared sewers and shall, on a regular interval acceptable to DISTRICT and CITY, invoice CITY for its percentage of that cost based upon the ratios set forth in Exhibit "B" and the schedule of costs set for in Exhibit "C" which is attached hereto and made a part hereof by this reference.

When DISTRICT determines that a portion of a shared sewer is in need of extraordinary repair, it shall immediately notify CITY in writing, setting forth a description and schedule of repair or replacement and the estimated cost thereof. Unless the work is required to abate an immediate public health problem DISTRICT and CITY shall work together to arrange for financing in Work required to abate an immediate the normal budgetary process. public health problem shall be commenced as reasonably practicable. DISTRICT agrees to consult with CITY, whenever practicable, before beginning emergency repairs. The cost of repair or replacement of each shared line shall be apportioned to each party as set forth in Exhibit "B." The total cost shall include engineering, administration and construction expenses. Prior to starting the repair or replacement work, DISTRICT shall 26||bill CITY for its apportioned share. CITY shall promptly deposit the billed amount. Upon completion of the work and payment of all costs, DISTRICT shall submit a report setting forth all costs Page 285 of 614 061986

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- If, within thirty (30) days after notification, CITY 3. disagrees with the necessity or estimated cost or apportionment of the cost of the repair or replacement, it shall so notify the other party in writing. If the parties are unable to agree upon the need or cost of the repair or replacement, either party may initiate legal proceedings to determine each party's rights and obligations.
- Nothing in this Agreement shall prohibit CITY from 4. constructing alternative connections of the facilities in the detaching area to existing CITY-owned sewers, thereby eliminating the necessity for CITY's use of some or all of the shared sewers. If CITY chooses to make such connections, it shall give DISTRICT 1311reasonable notice of its intentions, along with an anticipated date Upon cessation of the need of CITY for use of any of completion. shared sewer, the parties shall amend this Agreement to delete or modify the exhibit of shared sewers, or as otherwise appropriate. If CITY chooses to withdraw all or part of the detaching area from service or a shared sewer at or after receipt of a notice of need for extraordinary repairs as set forth above, it may do so in lieu of contributing to the cost of repairs not yet made, provided that the alternate connection is complete and the area served by the shared sewer no longer discharges outflow into the shared sewer on or before the time the extraordinary repairs are complete. If at all practicable, CITY shall coordinate its alternate sewer connection with DISTRICT's extraordinary repairs.

Page 286 of 614

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All repair and replacement work shall be done in 5. accordance with applicable laws, ordinance and charter provisions related to public works projects.

GENERAL PROVISIONS С.

- Each party hereto agrees to indemnify, defend and hold harmless the other contracting party, its officers, agents, employees and representatives from and against all claims, demands and actions in connection with the negligent or willful misconduct of the indemnifying party, its officers, agents, employees and representatives in the performance of this Agreement.
- This writing constitutes the entire agreement 2. between the parties with respect to the subject matter hereof, and 13 supersedes all oral or written representations or written agreements which may have been entered into between the parties. 15|| No modification or revision shall be of any force or effect, unless the same is in writing and executed by the parties hereto.

If any provision of this Agreement shall be held invalid, such invalidity shall not affect the other provisions hereof, and to this extent, the provisions of this Agreement are intended to be and shall be deemed severable. The parties shall agree, if reasonably practicable, upon provisions which are equivalent from an economic point of view to replace any provision which is determined to be invalid.

Notices and communication concerning this Agreement 3. shall be sent to the following addresses:

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Page 287 of 614

DISTRICT ANAHEIM 1 Garden Grove Sanitary District City of Anaheim 2 Attention: President and City Clerk Attention: Board of Directors 200 S. Anaheim Boulevard 3 11391 Acacia Parkway Anaheim, California 92805 P.O. Box 1437 4 Garden Grove, California 5 The effective date of this Agreement shall be the later of 6 the effective date of Reorganization No. 82 or the date of final execution of this Agreement. 8 IN WITNESS WHEREOF, the parties hereto have caused this 9 Agreement to be executed on the dates hereinafter respectively set 10 forth. 11 CITY OF ANAHEIM, a municipal 12 corporation 13 14 ATTEST: DATE OF EXECUTION: 15 16 17 "CITY" 18 GARDEN GROVE SANITARY DISTRICT, 19 prporate and a public bod politic 20 21 DATE OF EXECUTION: 22 Secretary 23 "DISTRICT" 24 APPROVED AS TO FORM: 25 THE ANAMEIM CLAY ATTORNEY

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SHARED SEWERS	LENGTH
Chapman Avenue - 9th Street to Jetty Drive (9600'+)	9600'
Haster Street - Chapman Avenue to Simmons Avenue (1300'+)	1300'
West Street - Orangewood Avenue to 150' N/o Rickey Avenue (1000'+)	1000'
Jacalene Lane - Orangewood Avenue to 150' N/o Rickey Avenue (1000'+)	1000'
Chapman Avenue - Euclid Avenue to Waverly Drive (2150' <u>+</u>)	2150'
Loara Street - Chapman Avenue to 1300' N/o Chapman Avenue (1300'+)	1300'
Della Lane - Chapman Avenue to 200' S/o Ord Way (1300'+)	1300'
Chapman Avenue - Magnolia Avenue to Brookhurst Street (5200'+)	5200'
Brookhurst Street - Chapman Avenue to Katella Avenue (5200'+)	5200
Katella Avenue - Magnolia Avenue to Endry Street (2000'+)	2600'
Decker Street - Endry Street to 150' E/o Jean Street (1200'+)	1200'
Crestwood Lane - Endry Street to 150' E/o Jean Street (1150'+)	1150
Pacific Avenue - Magnolia Avenue to Brookhurst Street (5100' <u>+</u>)	5100'
Cerritos Avenue - Gilbert Avenue to Brookhurst Street (2600'+)	26001
Gilbert Street - Cerritos Avenue to Mystic Lane (3300'+)	3300'
Endry Street - Katella Avenue to Crestwood Lane (1150'+)	1150'
Waverly Drive - Chapman Avenue to 150' S/o Lorane Way (2000'+)	20001
Cerritos - Magnolia Avenue to 1150' Easterly (1150'+)	1150'

TOTAL LENGTH OF SHARED SEWERS

48,300 1 289 of 614

SHARED SEWERS - MAINTENANCE COST REIMBURSEMENT

Percentage of flow for shared sewers is based upon overall percentage of Anaheim's flow compared to the total of Anaheim's flow plus Garden Grove Sanitary District's flow.

Anaheim's percentage of flow is defined as the calculated flow derived from that area within the City of Anaheim formerly a part of the Garden Grove Sanitary District tributary to the shared sewer.

District's percentage of flow is defined as the calculated flow derived from the Garden Grove Sanitary District tributary to the shared sewer.

G.G.S.D. Flow - 3,096,053

Anaheim Flow - 2,042,045

TOTAL FLOW - 5,138,098 GAL/DAY (GPD)

Anaheim Share

$$\frac{2,042,045}{5,138,098} = 39.75$$
%

Garden Grove Sanitary District Share

$$\frac{3,096,053}{5,138,098} = 60.25$$

Flow Outside City of Anaheim (Garden Grove Sanitary District Area)

ZONING	NO.ACRES	FLOW COEFFICIENTS GPD/ACRE	GPD
Low Density Residential	1,412.92	1550	2,190,026
Medium Density Residential	128.10	3880	497,028
Commercial	122.37	3230	395,255
Recreational/ Open Space	68.72	200	13,744
TOTALS	1,732.11		3,096,053

Flow Inside City of Anaheim (Formerly part of Garden Grove Sanitary District)

ZONING	NO.ACRES	FLOW COEFFICIENTS GPD/ACRE	GPD
Low Density Residential	910.33	1550	1,411,011
Medium Density Residential	48.22	3880	187,094
Commercial	133.02	3230	429,654
Recreational/ Open Space	71.43	200	14,286
TOTALS	1,163.00		2,042,045

MAINTENANCE COST

48,300 L.F. of Shared Sewers

Maintenance Cost @ \$.06/lineal foot (1986)

(Maintenance cost to be adjusted annually per C.P.I. - All Urban Customers - Los Angeles - Long Beach - Anaheim average)

Total Maintenance Cost

$$(48,300) (.06) = \frac{$2,898}{}$$

Anaheim Share

$$(.3975) \quad (\$2,898) \qquad = \quad \underbrace{\$1,152}_{[1,63]} \quad {}_{[1,63]} e^{i(3)^2}$$

Garden Grove Sanitary District Share

$$(.6025) (\$2,898) = \frac{\$1,746}{}$$

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AGREEMENT FOR JOINT USE AND MAINTENANCE OF SEWERAGE FACILITIES

THIS AGREEMENT FOR JOINT USE AND MAINTENANCE OF SEWERAGE FACILITIES, dated solely for identification this 8th day of July 1986, is made and entered into by and between the CITY OF ANAHEIM, a municipal corporation, hereinafter referred to as "CITY." N

> GARDEN GROVE SANITARY DISTRICT, a public body, corporate and politic, hereinafter referred to as "DISTRICT,"

WITNESSETH:

WHEREAS, by Resolution No. 86-37, the Local Agency Formation Commission of Orange County (LAFCO) approved Reorganization No. 82 detaching approximately 1,163 acres of property within the City of Anaheim (CITY) from the Garden Grove Sanitary District (DISTRICT); and

WHEREAS, pursuant to the detachment, DISTRICT transferred to CITY all fixed assets and facilities of DISTRICT in the detaching area; and

WHEREAS, Resolution No. 86-37 calls for CITY to retain capacity rights in certain DISTRICT facilities to transport waste water from the detaching areas to the Orange County Sanitation District's facilities; and

WHEREAS, because capacity rights in certain DISTRICT facilities will be shared by DISTRICT and CITY, it is in the best interests of both parties to enter into an agreement to provide for the cost sharing of maintenance, repair and replacement of existing 061986

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NOW, THEREFORE, FOR AND IN CONSIDERATION OF THE MUTUAL PROMISES, COVENANTS AND CONDITIONS HEREIN CONTAINED, THE PARTIES HERETO AGREE AS FOLLOWS:

Α. SHARED SEWER'S CAPACITY

- DISTRICT hereby grants to CITY capacity rights in amounts as will be established below, the locations of which are shown in Exhibit "A" attached hereto and made a part hereof by this reference. DISTRICT and CITY agree to use said sewers only to transport wastewater from those portions of the detaching area of CITY within the tributary area shown as crosshatched or shaded in Exhibit "A."
- 2. When DISTRICT determines by field measurements that a portion of a shared sewer is flowing at capacity, as defined. below, it shall immediately notify CITY in writing, setting forth the limits, the measured flow, and the depth of the peak flow. The shared sewers or portions thereof shall be deemed to be at capacity when the measured daily peak flow has a depth equal to seventy-five percent (75%) of the sewer diameter.

Upon determination and notification that a sewer is 25 at capacity, both parties shall take actions necessary to cease. issuance of any additional sewer connection permits to any tributary sewer or to appropriately condition issuance of the permits to mitigate additional outflow. The cessation of issuance Page 294 of 614 -2-

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of sewer connection permits shall continue in force until additional sewer capacity has been constructed as provided for herein. Any conditionally issued permit shall provide that any outflow shall not increase the amount of total outflow in the particular shared sewer.

- CITY's percentage of capacity in the shared sewers 3. is based upon the current level of outflow of the detaching area and anticipated increased outflow based upon the current land use designations and densities of the detaching area. In the event CITY approves any development which will change the land use designation or permit a higher density which would create an increased outflow over that currently existing or anticipated, CITY agrees to impose a condition of approval on that development so as to mitigate the impact of the increased outflow on the shared sewer.
- DISTRICT also recognizes that changes in land use 4. 16 and increased densities in its service area can impact the capacities of the shared sewers. Therefore, DISTRICT agrees that for any development in its service area which would increase densities or change land use so as to create an increased outflow into any shared sewer over that currently existing or is anticipated, it will impose a condition upon any connection permit to its system so as to mitigate the impact of increased outflow on 23 a shared sewer.

MAINTENANCE, REPAIR AND REPLACEMENT OF SHARED SEWERS В.

Attached hereto and made a part hereof by the reference is Exhibit B which lists each shared sewer and the agreed percentage of current use by DISTRICT and CITY. As shown on Exhibit "B," DISTRICT and CITY share capacities in each shared Page 295 of 614 -3-061986

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When DISTRICT determines that a portion of a shared 2. sewer is in need of extraordinary repair, it shall immediately notify CITY in writing, setting forth a description and schedule of repair or replacement and the estimated cost thereof. Unless the work is required to abate an immediate public health problem DISTRICT and CITY shall work together to arrange for financing in the normal budgetary process. Work required to abate an immediate public health problem shall be commenced as reasonably 19 practicable. DISTRICT agrees to consult with CITY, whenever practicable, before beginning emergency repairs. The cost of repair or replacement of each shared line shall be apportioned to each party as set forth in Exhibit "B." The total cost shall include engineering, administration and construction expenses. Prior to starting the repair or replacement work, DISTRICT shall bill CITY for its apportioned share. CITY shall promptly deposit the billed amount. Upon completion of the work and payment of all costs, DISTRICT shall submit a report setting forth all costs Page 296 of 614

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incurred together with either a bill, or a refund for the difference between the actual apportioned cost and the deposit.

- 3. If, within thirty (30) days after notification, CITY disagrees with the necessity or estimated cost or apportionment of the cost of the repair or replacement, it shall so notify the other party in writing. If the parties are unable to agree upon the need or cost of the repair or replacement, either party may initiate legal proceedings to determine each party's rights and obligations.
- Nothing in this Agreement shall prohibit CITY from 4. constructing alternative connections of the facilities in the detaching area to existing CITY-owned sewers, thereby eliminating the necessity for CITY's use of some or all of the shared sewers. If CITY chooses to make such connections, it shall give DISTRICT reasonable notice of its intentions, along with an anticipated date Upon cessation of the need of CITY for use of any of completion. shared sewer, the parties shall amend this Agreement to delete or modify the exhibit of shared sewers, or as otherwise appropriate. If CITY chooses to withdraw all or part of the detaching area from service or a shared sewer at or after receipt of a notice of need for extraordinary repairs as set forth above, it may do so in lieu of contributing to the cost of repairs not yet made, provided that the alternate connection is complete and the area served by the shared sewer no longer discharges outflow into the shared sewer on or before the time the extraordinary repairs are complete. all practicable, CITY shall coordinate its alternate sewer connection with DISTRICT's extraordinary repairs.

Page 297 of 614

5. All repair and replacement work shall be done in accordance with applicable laws, ordinance and charter provisions related to public works projects.

C. GENERAL PROVISIONS

- 1. Each party hereto agrees to indemnify, defend and hold harmless the other contracting party, its officers, agents, employees and representatives from and against all claims, demands and actions in connection with the negligent or willful misconduct of the indemnifying party, its officers, agents, employees and representatives in the performance of this Agreement.
- 2. This writing constitutes the entire agreement between the parties with respect to the subject matter hereof, and supersedes all oral or written representations or written agreements which may have been entered into between the parties. No modification or revision shall be of any force or effect, unless the same is in writing and executed by the parties hereto.

If any provision of this Agreement shall be held invalid, such invalidity shall not affect the other provisions hereof, and to this extent, the provisions of this Agreement are intended to be and shall be deemed severable. The parties shall agree, if reasonably practicable, upon provisions which are equivalent from an economic point of view to replace any provision which is determined to be invalid.

3. Notices and communication concerning this Agreement shall be sent to the following addresses:

Page 298 of 614

OFFICE OF THE CITY ATTORNEY CITY OF ANAHEIM 200 S. ANAHEIM BOULEVARD, SUITE 356 ANAHEIM, CALIFORNIA 92805 [714] 999-5169

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ANAHEIM

City of Anaheim Attention: City Clerk 200 S. Anaheim Boulevard Anaheim, California 92805

DISTRICT

Garden Grove Sanitary District Attention: President and Board of Directors 11391 Acacia Parkway P.O. Box 1437 Garden Grove, California 92642

CITY OF ANAHEIM, a municipal

The effective date of this Agreement shall be the later of the effective date of Reorganization No. 82 or the date of final execution of this Agreement.

IN WITNESS WHEREOF, the parties hereto have caused this Agreement to be executed on the dates hereinafter respectively set forth.

corporation

	By Mayor
DATE OF EXECUTION:	ATTEST: Sall
Juny 1: 10	City Clerk "CITY"
	GARDEN GROVE SANITARY DISTRICT, a public body, corporate and politic
DATE OF EXECUTION:	By Columbia
	Secretary

APPROVED AS TO FORM:

OFFICE OF THE ANAMEIM CLAY ATTORNEY

Date / G/23/84

JWF4 Em / 5323M

Page 299 of 614

	EXHIBIT "B"
SHARED SEWERS	LENGTH
Chapman Avenue - 9th Street to Jetty Drive (9600'+)	9600'
Haster Street - Chapman Avenue to Simmons Avenue (1300'+)	1300'
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Brookhurst Street - Chapman Avenue to Katella Avenue (5200'+)	5200 °
Katella Avenue - Magnolia Avenue to Endry Street (2000'+)	2600'
Decker Street - Endry Street to 150' E/o Jean Street (1200'+)	1200'
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Pacific Avenue - Magnolia Avenue to Brookhurst Street (5100'+)	5100'
Cerritos Avenue - Gilbert Avenue to Brookhurst Street (2600'+)	2600 ¹
Gilbert Street - Cerritos Avenue to Mystic Lane (3300'+)	3300'
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TOTAL LENGTH OF SHARED SEWERS

48,300 age 300 of 614

SHARED SEWERS - MAINTENANCE COST REIMBURSEMENT

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District's percentage of flow is defined as the calculated flow derived from the Garden Grove Sanitary District tributary to the shared sewer.

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Anaheim Flow - 2,042,045

TOTAL FLOW - 5,138,098 GAL/DAY (GPD)

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Garden Grove Sanitary District Share

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Anaheim Share

 $(.3975) ($2,898) = \underline{$1,152}$

Garden Grove Sanitary District Share

 $(.6025) (\$2,898) = \underbrace{\$1,746}_{}$



Orange, California 92666

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EXEMPT PER GOV'T code 6103

AGREEMENT

THIS AGREEMENT, entered into this ball day of the day o

WITNESSETH:

WHEREAS, the DISTRICT currently operates and maintains sewer lines within the corporate boundaries of the CITY, more particularly described as Area "A" and Area "B" as shown on the map of Exhibit "B", hereto attached and made a part of. WHEREAS, said sewer lines shall be relinguished to the CITY by the DISTRICT as prescribed by the Orange County Board of Supervisors in Resolution No. 84-1806 , marked Exhibit"A", hereto attached and made a part of. WHEREAS, the subject area is now classified as a low density residential area. WHEREAS, the Ultimate Land Use Plan of the Orange County Sanitation District designates the subject area as high density residential. NOW, THEREFORE, IT IS AGREED by and between the CITY and DISTRICT as follows: ONE YEAR AFTER THE FILING of the Notice of Completion of Orange County Reorganization No. 66 by the County, the DISTRICT shall relinquish subject sewer lines to the CITY. The DISTRICT shall remain responsible for the maintenence and operation of said lines until acceptance of the lines by the CITY. AFTER ACCEPTANCE of subject sewer lines, the CITY shall become responsible

Page 305 of 614

for the maintenence and operation of said lines, and the CITY shall relieve

- the DISTRICT of all responsibility for future maintenence of the subject 2. lines.
- 3. THE CITY HEREBY GRANTS TO THE DISTRICT, capacity rights of 140,000 gallons 3. per day for the lines in Area "C" of Exhibit "B" for current capacities 5. at peak flows.
- 4. THE CITY also hereby waives any cash payment for said capacity rights and 7. future maintenence of said lines.
- 5. THE DISTRICT hereby grants to the CITY capacity rights of 280,000 gallons per 8. 9. day for the lines in Area "A" and Area "B" of Exhibit "B", in addition to the flow from Area "C" for current capacities at peak flows. 10.
- 11. 6. THE DISTRICT also hereby waives any cash payment for said capacity rights 12. and future maintenence of said lines.

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- 7. THE DISTRICT hereby agrees to construct an adequate sewer line at the southern-13. most intersecting point of Area "A" and Area "B" in order to connect Area"B" into the Orange County Sanitation District trunk sewer at the intersection of Chapman Avenue and Lewis Street. The cost of engineering, administration, and construction of said line shall be paid by the DISTRICT. After visual inspection of the existing lines by the CITY, the DISTRICT agrees to perform the necessary repairs, if any, to restore the lines to proper operation.
 - 8. THE DISTRICT also hereby agrees to construct the abovementioned line and make the abovementioned repairs prior to acceptance of the lines by the CITY.
- 9. THE CITY agrees that upon completion of said line, the capacity rights of 22. the CITY be reduced to 205,000 gallons per day, not including the flow from 23. Area "C". 24.
 - 10. THE CITY further agrees to place a condition of approval upon any future development along the southern boundary of Area "A" to construct a new sewer along the frontage of the development which would reverse the flow back to the Orange County Sanitation District trunk sewer at Chapman Avenue and Lewis ST.

- 11. IT IS AGREED by and between the CITY and the DISTRICT that upon completion of each segment of sewer line and as the flow into the DISTRICT'S line dimenishes, that the capacity rights in said line be reduced accordingly by separate instrument.
- 12. IT IS FURTHER AGREED by and between the CITY and the DISTRICT that the capacity rights granted to the DISTRICT for Area "C" be reserved after Area "A" and Area "B" have been removed from the DISTRICT'S sewer system, until which time as Area "C" is removed from the system or the lines relinquished to the City of Anaheim.

IN WITNESS WHEREOF, THE CITY OF ORANGE has caused this agreement to be executed by the Mayor of the City Council on the day and year above first written and attested to by the Clerk of the City.

CITY OF ORANGE, a funicipal corporation

By:

OAMES BEAM, mayor

STATE OF CALIFORNIA)
COUNTY OF ORANGE)
SS

On this	day of	, i	n the year	1985, before	me,
Marilyn Jens	en, City Clerk	of the City	of Orange,	, personally a	appeared
James Beam	, persona	lly known to	o me to be	the person wh	ho executed
this instrum	ent as <u>Mayor of</u>	the City o	f Orange	_, and acknowl	ledged to
me that the	City of Orange	·execu	ted the sam	me.	

Marilyn Jenken, City Clerk of Orange

public corporation 3. By: 4 Mai Roben 5 6 7. Cates, STATE OF CALIFORNIA))ss 8 COUNTY OF ORANGE 9. STATE OF CALIFORNIA COUNTY OF _ . . Orange On.... June 7, 1985 , before me, the undersigned, a Notary Public in and for tate, said State, personally appeared _ Ronald D. Cates known to me (or proved to me on the basis of the oath of ... ${f a}$ credible witness who is personally known to me) to be the person whose name is subscribed to the within instrument, as tory a witness thereto, who being by me duly sworn, deposed and said: That he/she resides in 1712 Birchfield Dr. he Tustin, California ... that he/she was present and saw Robert H. Main, President and uted Sheldon S. Singer, Secretary personally Garden Grove Sanitary District known to him/lier to be the same person(s) described in and who OFFICIAL SEAL dged executed the within instrument, as a party(ies) thereto, sign, seal LUPE CHANGALA-GARCIA NOTARY PUBLIC-CALIFORNIA and deliver the same and that said party(ies) duly acknowledged in the presence of said affiant, that he/she/they executed the **ORANGE COUNTY** same, and that said affiant. Thereupon at the party's(ies') request, My Commission Expires Aug. 23, 1988 subscribed his/her name as a witness thereto. 'ficial seal. WITNESS my hand and official seal? (This area for official notarial seal) sail State ŻU, 21 22 23 24 25

GARDEN GROVE SANITARY DISTRICT,

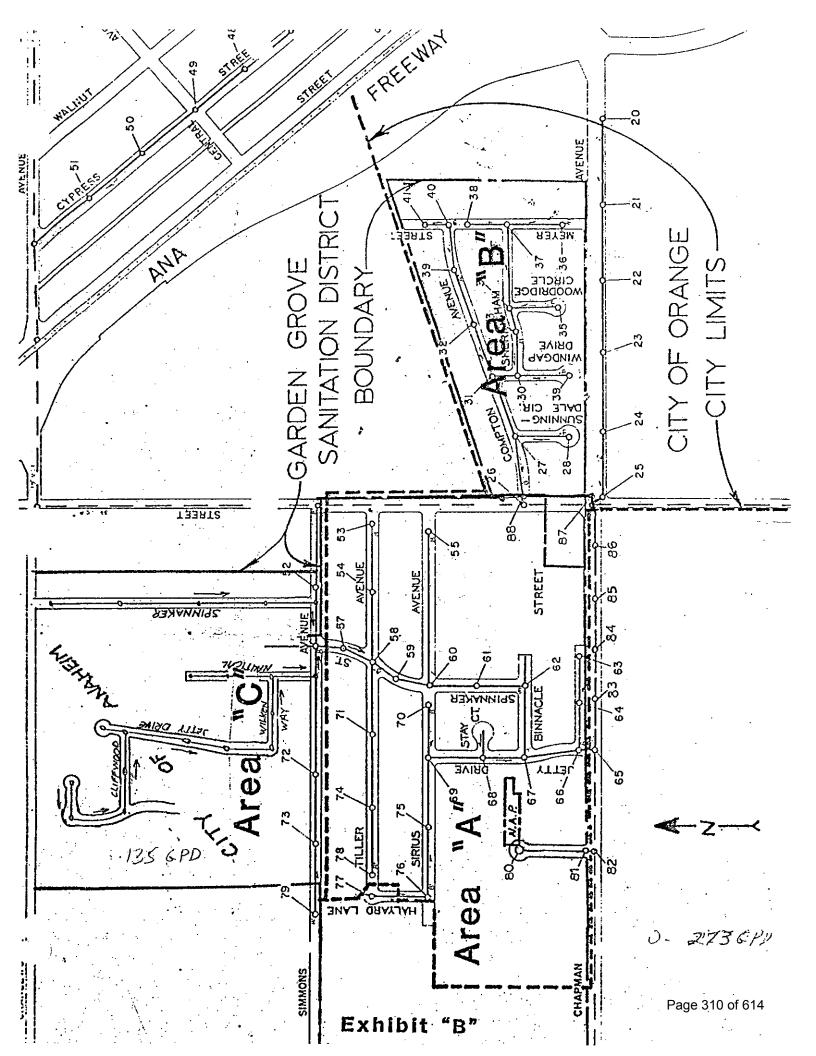
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1.	GARDEN GROVE SANITARY DISTRICT,
2.	a public corporation
3.	By: Alt H. Main
4.	Robert H. Main, president
5.	By: College S
6.	Sheldon S. Singer, secretary
7.	By: Land O Cate
8.	Ronald D. Cates, Witness STATE OF CALIFORNIA) COUNTY OF ORANGE) SS
9.	•
10.	On this day of , 1985, before me,
11.	, a notary public in and for said State,
12.	personally appearedand,
13.	personally known to me (or proved to me on the basis of satisfactory
4.	evidence) to be the President and Secretary, respectively, of the
.5.	Garden Grove Sanitary District, the public corporation that executed
16.	the within instrument on behalf of said corporation and acknowledged
17.	to me that such corporation executed the same.
18.	My commission expires
19.	
20.	Notary Public in and for sail State
21.	
22.	Approved as to form:
23.	Lene K. Minskew
24.	(Assistant) City Attorney
25.	
26.	•



RECORDING REQUESTED BY

and mail to:

CITY OF ORANGE - Subdivision Section

300 East Chapman Avenue

Orange, California 92666

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EXEMPT PER GOV'T code 6103

AGREEMENT

THIS AGREEMENT, entered into this bally day of fully, 1985, by and between the CITY OF ORANGE, a municipal corporation, hereinafter referred to as "CITY", and the GARDEN GROVE SANITARY DISTRICT, a public corporation, hereinafter referred to as "DISTRICT".

WITNESSETH:

WHEREAS, the DISTRICT currently operates and maintains sewer lines within the corporate boundaries of the CITY, more particularly described as Area "A" and Area "B" as shown on the map of Exhibit "B", hereto attached and made a part of.

WHEREAS, said sewer lines shall be relinquished to the CITY by the DISTRICT as prescribed by the Orange County Board of Supervisors in Resolution

No. 84-1806, marked Exhibit"A", hereto attached and made a part of.

WHEREAS, the subject area is now classified as a low density residential area.

WHEPEAS, the Ultimate Land Use Plan of the Orange County Sanitation District designates the subject area as high density residential.

NOW, THEREFORE, IT IS AGREED by and between the CITY and DISTRICT as follows:

1. ONE YEAR AFTER THE FILING of the Notice of Completion of Orange County Reorganization No. 66 by the County, the DISTRICT shall relinquish subject sewer lines to the CITY. The DISTRICT shall remain responsible for the maintenence and operation of said lines until acceptance of the lines by the CITY.

AFTER ACCEPTANCE of subject sewer lines, the CITY shall become responsible for the maintenance and operation of said lines, and the CITY shall re Page 311 of 614

the DISTRICT of all responsibility for future maintenence of the subject lines.

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- 3. 3. THE CITY HEREBY GRANTS TO THE DISTRICT, capacity rights of 140,000 gallons per day for the lines in Area "C" of Exhibit "B" for current capacities at peak flows.
- 4. THE CITY also hereby waives any cash payment for said capacity rights and 7. future maintenence of said lines.
 - 5. THE DISTRICT hereby grants to the CITY capacity rights of 280,000 gallons per day for the lines in Area "A" and Area "B" of Exhibit "B", in addition to the flow from Area "C" for current capacities at peak flows.
- 6. THE DISTRICT also hereby waives any cash payment for said capacity rights and future maintenence of said lines. 12.
 - 7. THE DISTRICT hereby agrees to construct an adequate sewer line at the southernmost intersecting point of Area "A" and Area "B" in order to connect Area"B" into the Orange County Sanitation District trunk sewer at the intersection of Chapman Avenue and Lewis Street. The cost of engineering, administration, and construction of said line shall be paid by the DISTRICT. After visual inspection of the existing lines by the CITY, the DISTRICT agrees to perform the necessary repairs, if any, to restore the lines to proper operation.
 - 8. THE DISTRICT also hereby agrees to construct the abovementioned line and make the abovementioned repairs prior to acceptance of the lines by the CITY.
- 22. 9. THE CITY agrees that upon completion of said line, the capacity rights of the CITY be reduced to 205,000 gallons per day, not including the flow from 23. 24. Area "C".
 - 10. THE CITY further agrees to place a condition of approval upon any future development along the southern boundary of Area "A" to construct a new sewer along the frontage of the development which would reverse the flow back to the Orange County Sanitation District trunk sewer at Chapman Avenue and Lewis ST.

(2)

- 11. IT IS AGREED by and between the CITY and the DISTRICT that upon completion of each segment of sewer line and as the flow into the DISTRICT'S line dimenishes, that the capacity rights in said line be reduced accordingly by separate instrument.
- 12. IT IS FURTHER AGREED by and between the CITY and the DISTRICT that the capacity rights granted to the DISTRICT for Area "C" be reserved after Area "A" and Area "B" have been removed from the DISTRICT'S sewer system, until which time as Area "C" is removed from the system or the lines relinquished to the City of Anaheim.

IN WITNESS WHEREOF, THE CITY OF ORANGE has caused this agreement to be executed by the Mayor of the City Council on the day and year above first written and attested to by the Clerk of the City.

CITY OF ORANGE, a municipal corporation

By:

ORMES BEAM, mayor

STATE OF CALIFORNIA)
COUNTY OF ORANGE)

On this	day of	, in the year	1985, before me,
Marilyn Jen	sen, City Clerk o	f the City of Orange	personally appeared
James Beam	, personal.	ly known to me to be	the person who executed
this instru	ment as Mayor of	the City of Orange	_, and acknowledged to
me that the	City of Orange	executed the sa	ame.

Marilyn Jensen, Crty Clerk of Orange

SINSTRUMENT IS A CORRECT COPY OF THE OR'
FILE IN THIS OFFICE.

ATTEST

LINDA D. ROBERTS

Clerk of the Board of Supervisors

County of Orenoe.

By Sharley Selection DEPUTY

RESOLUTION OF THE BOARD OF SUPERVISORS OF ORANGE COUNTY, CALIFORNIA

December 18, 1984

On motion of Supervisor Riley, duly seconded and carried, the following Resolution was adopted:

WHEREAS, the Local Agency Formation Commission of Orange County has approved TRANGE COUNTY DISTRICT REORGANIZATION 500 and has directed this Board to initiate proceedings in compliance with said Resolution; and

WHEREAS, said Reorganization involves the Garden Grove Sanitary District, which district is located within Orange County; and

WHEREAS, said Reorganization proposes the detachment of territory a legal description of which is attached hereto, from the Garden Grove Sanitary District; and

WHEREAS, said proposed Reorganization is subject to certain terms and conditions contained in the Local Agency Formation Commission's Resolution No. 84-85 as follows:

- a. The fixed assets of the Garden Grove Sanitary District located within the city limits of Orange shall be transferred to the City of Orange.
- b. The fixed assets of the Garden Grove Sanitary District located within the city limits of Santa Ana shall be transferred to the City of Santa Ana.

Resolution No. 84-1806 Proposed Hrg/O.C. Dist. Reorg. No. 66

DEC 2 6-1984 5 of 61

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c. Commencing with the first year that the reorganization is effective for property tax purposes as provided in Government Code Section 54902, all property tax revenues which would have been allocated to the Garden Grove Sanitary District from the area in the corporate limits of Orange, had it remained in the District, shall be allocated to the City of Orange.

- d. Commencing with the first year that the reorganization is effective for property tax purposes as provided in Government Code Section 54902, all property tax revenues which would have been allocated to the Garden Grove Sanitary District from the area in the corporate limits of Santa Ana, had it remained in the District, shall be allocated to the City of Santa Ana.
- e. Funds accumulated in reserve by the Garden Grove Sanitary
 District for the purpose of capital improvements or maintenance
 thereof shall be allocated to the City of Orange based on the proportion of property tax revenues generated within the City of Orange and allocated to the District as a percentage of the total property tax revenues of said District.
- f. Funds accumulated in reserve by the Garden Grove Sanitary
 District for the purpose of capital improvements or maintenance
 thereof shall be allocated to the City of Santa Ana based on the
 proportion of property tax revenues generated within the City of Santa
 Ana and allocated to the District as a percentage of the total property
 tax revenues of said District.
- g. That upon completion of said reorganization detaching territory within the cities of Orange and Santa Ana from the Garden Grove Sanitary District, said territories shall be relieved from the liability for payment of all or any part of principal or interest or any Page 316 of 614

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other amounts which may be due or become due on account of all or any part of any bonded indebtedness, contracts, or obligations, including, but not by way of limitation, any judgment or judgments against the Garden Grove Sanitary District, and that said territory be relieved from the levying or fixing and the collection of any taxes or assessments as may be made for the payment thereof.

- h. The City of Orange shall be granted certain capacity rights pertaining to the transfer of sewage from city facilities owned and operated by the Garden Grove Sanitary District for the purpose of disposal into Orange County Sanitation District facilities in the amount of 280,000 gallons per day.
- i. The City of Santa Ana shall be granted capacity rights so long as capacity is available in the shared sewers described in the "Agreement For Joint Use of Sewerage Facilities" executed between the City of Santa Ana and the Garden Grove Sanitary District.
- j. The Garden Grove Sanitary District shall be liable and pay the applicable State Board of Equalization filing and processing fee necessary to complete the proposed reorganization.
- k. Any election called upon the question of confirming an order for the reorganization shall be called, held and conducted upon such reorganization only within the territory affected by such reorganization.
- 1. The effective date of the reorganization shall be one year from the date of recordation of the certificate of completion by the Executive Officer of the Local Agency Formation Commission.

and

WHEREAS, said proposal was initiated by resolution of the Orange County Board of Supervisors, at the request of the cities of Orange

Page 317 of 614

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and Santa Ana; and

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WHEREAS, the reason for said proposed Reorganization as set forth in the resolution is as follows:

The City Councils of the cities of Orange and Santa Ana believe that multiple governmental agencies performing similar public works functions within the corporate boundaries of a city contribute to the complexity of local government and may hinder the ability of city residents to readily identify and contact the agency responsible for providing service. The City Councils further believe, as stated in their resolutions, that the residents of their respective cities would benefit from a full-service municipal concept and therefore have expressed their intention to become a full-service city and assume responsibility for providing the services currently provided by the Garden Grove Sanitary District; and

WHEREAS, it was determined the proposed detachment of territory from the Garden Grove Sanitary District was categorically exempt from the California Environmental Quality Act of 1970;

NOW, THEREFORE, BE IT RESOLVED that this mand does set the hear of 1:30 to clock A.M. on the lighted formary, 1985, a date not less than fifteen (15) days nor more than sixty (60) days after the date of this Resolution, in the Board Hearing Room of the Board of Supervisors of the County of Orange in the Hall of Administration, 10 Civic Center Plaza, Santa Ana, California, as the time, date and place for the proposed Reorganization designated as:

ORANGE COUNTY DISTRICT REORGANIZATION NO. 66
at which time, date and place this Board shall receive any oral or
written protests, objections, or evidence which shall be filed or
presented.

Page 318 of 614

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BE IT FURTHER RESOLVED that any interested person desiring to make written protest against said Reorganization shall do so by written communication filed with the Clerk of the Board not later than the hour set for hearing, and that a written protest by a landowner shall contain a description sufficient to identify the land owned by him, and a protest by a voter shall contain the residential address of such voter.

BE IT FURTHER RESOLVED that the Clerk is hereby ordered to publish a notice of said hearing once at least fifteen (15) days prior to January 16, 1985, the date set for hearing, in the Register, a newspaper of general circulation in the area.

BE IT FURTHER RESOLVED that the Clerk of this Board is hereby ordered to post a notice of said hearing on the official bulletin board adjacent to the Hearing Room of this Board, said posting to commence at least fifteen (15) days prior to the date set for hearing, and ton continue until said date.

BE IT FURTHER RESOLVED that the Clerk of this Board is hereby directed to give mailed notice of said hearing by mailing such notice to each affected county, city or district, the Garden Grove Sanitary District, and each person who has filed a request for special notice with the Clerk.

THOMAS F. RILEY, RALPH B. CLARK, ROGER R. STANTON. SUPERVISORS AYES: BRUCE NESTANDE and HARRIETT M. WIEDER NONE NOES: SUPERVISORS 3 NONE SUPERVISORS ABSENT: STATE OF CALIFORNIA 5 SS. COUNTY OF ORANGE 6 I, LINDA D. ROBERTS, Clerk of the Board of Supervisors of Orange 7 County, California, hereby certify that the above and foregoing Reso-8 lution was duly and regularly adopted by the said Board at a regular 9 meeting thereof held on the 18th day of December 10 and passed by a unanimous vote of said Board. 11 IN WITNESS WHEREOF, I have hereunto set my hand and seal this 12 , 19 ⁸⁴. 18th day of December 13 15 Clerk of the Board of Supervisors 16 of Orange County, California 17 18 19 20

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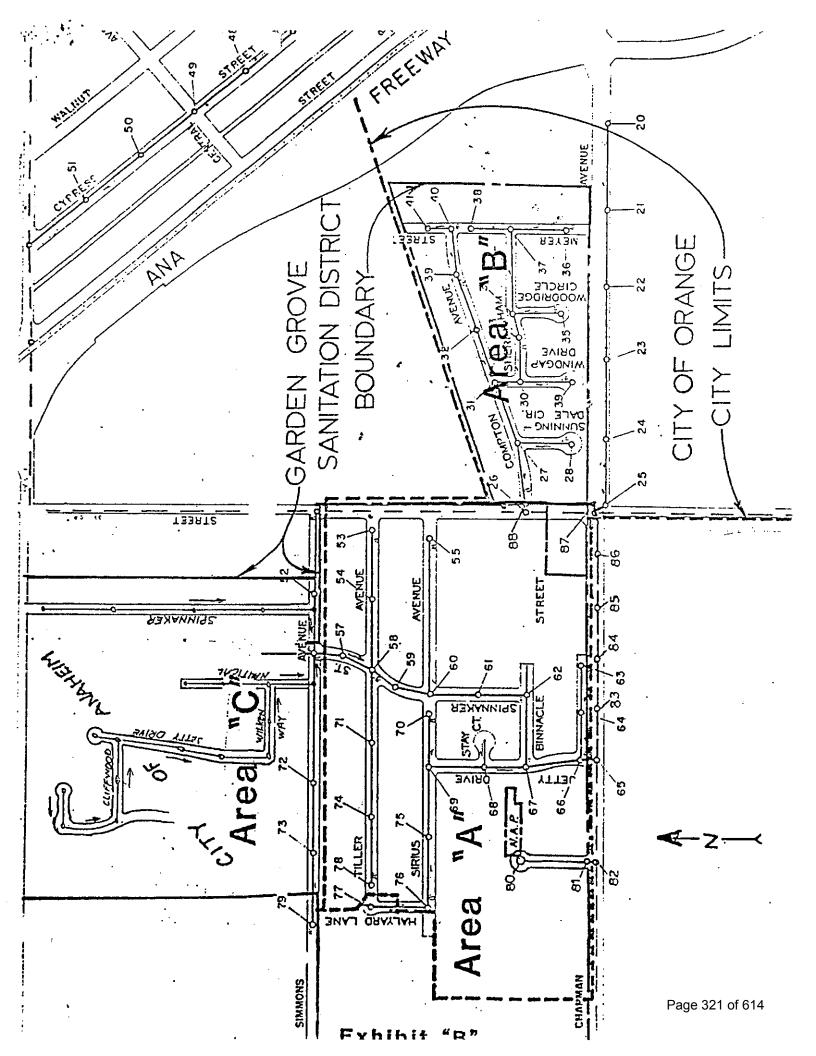
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A RESOLUTION OF THE BOARD OF DIRECTORS OF THE GARDEN GROVE SANITARY DISTRICT APPROVING AGREEMENT WITH THE CITY OF STANTON FOR JOINT USE OF SEWERAGE FACILITIES.

Upon motion duly made, seconded and carried by the roll call vote shown below, the Board of Directors of the Garden Grove Sanitary District does hereby resolve as follows:

WHEREAS, the Garden Grove Sanitary District, hereinafter referred to as District, and the City of Stanton, hereinafter referred to as City, desire to enter agreement for joint use of sewer lines and appurtenances; and

WHEREAS, Orange County District Reorganization No. 88 detached approximately 2,240 acres from the District; and

WHEREAS, said Reorganization provides for District to retain capacity rights in certain District sewerage facilities to be transferred to City which will be needed by District to transport wastewater from remaining areas of District to the Orange County Sanitation District facilities; and

WHEREAS, sewers transferred to City will remain connected to sewers retained by District, and City will need capacity rights in these sewers to transport wastewater from the detached areas within City to downstream portions of the same sewer transferred to City; and

WHEREAS, because capacity rights in certain sewerage facilities will be shared by District and City, it is in the best interests of District and City to enter into agreement to provide for the cost sharing of maintenance of sewers in which District and City will share capacity rights and to provide for funding of the construction of future sewers within City or District that may be necessary to provide sufficient capacity to transport the combined ultimate wastewater flows from portion of District and City to the Orange County Sanitation District facilities.

NOW, THEREFORE, BE IT RESOLVED BY THE BOARD OF DIRECTORS OF THE GARDEN GROVE SANITARY DISTRICT, COUNTY OF ORANGE, STATE OF CALIFORNIA:

- 1. That District Board does approve contract with the City of Stanton. Said contract is marked Exhibit "A" and is attached hereto and by this reference made a part hereof.
- 2. The President and Secretary of the Board of Directors of the District be authorized and directed to execute said contract.

VOTE POLLED:

BOARD MEMBERS: Barker, Culver, Main,

Singer, Zlaket

AYES Barker, Culver, Main, Singer

NOES None

ABSENT Zlaket

ADOPTED AND SIGNED this 16th day of January , 1994.

PRESIDENT - Robert H. Main

SECRETARY - Sheldon S. Singer

ATTEST:

I HEREBY CERTIFY that the above and foregoing Resolution was passed and adopted by the Sanitary Board of the Garden Grove Sanitary District of Orange County, California, on the 16th day of January , 1990.

Secretary of Garden Grove Sanitary District of Orange County, California

AGRÉEMENT

FOR

JOINT USE OF SEWERAGE FACILITIES

This agreement, made and entered into this	day of
, 19 , between the City of Stanton,	a municipal
corporation, hereinafter referred to as "CITY", and the Garde	n Grove Sanitary
District of Orange County, California, a sanitary district or	ganized under the
Sanitary District Act of 1923, hereinafter referred to as "DI	STRICT".

WITNESSETH

WHEREAS, Orange County District Reorganization No. 88 detached approximately 2,240 acres from the DISTRICT and the Stanton County Water District located within CITY; and

WHEREAS, Reorganization No. 88 will transfer to CITY the fixed assets of the detached portion of DISTRICT that are within CITY; and

WHEREAS, said Reorganization provides for DISTRICT to retain capacity rights in certain DISTRICT sewerage facilities to be transferred to CITY which will be needed by DISTRICT to transport wastewater from remaining areas of DISTRICT to the Orange County Sanitation District facilities; and

WHEREAS, sewers transferred to CITY will remain connected to sewers retained by DISTRICT, and CITY will need capacity rights in these sewers to transport wastewater from the detached area within CITY to downstream portions of the same sewer transferred to CITY: and

WHEREAS, certain shared sewers within CITY or DISTRICT will not have adequate capacity for the wastewater from the planned ultimate development of the areas within DISTRICT and CITY tributary to said certain facilities; and

WHEREAS, because capacity rights in certain sewerage facilities will be shared by DISTRICT and CITY, it is in the best interests of district and CITY to enter into an agreement to provide for the cost sharing of maintenance of sewers in which DISTRICT and City will share capacity rights and to provide for funding of the construction of future sewers within CITY or DISTRICT that may be necessary to provide sufficient capacity to transport the combined ultimate wastewater flows from portions of DISTRICT and CITY to the Orange County Sanitation District facilities; and

NOW, THEREFORE, in consideration of the findings herein provided, the parties agree:

1. Shared Sewers

(a) CITY hereby grants to DISTRICT and DISTRICT hereby grants to CITY capacity rights so long as capacity is available in the shared sewers. DISTRICT and CITY agree to use said shared sewers only to transport wastewater from those portions of DISTRICT or CITY within the tributary areas. The shared sewers, or portions thereof, shall be deemed to be at capacity when the measured peak flow has a depth equal to 67% of the sewer diameter.

When either party determines by field measurements that a portion of a shared sewer is flowing at capacity, as defined herein, they shall immediately notify the other party in writing, setting forth the limits, the measured flow, and the depth of the peak flow.

Upon determination and notification that a sewer is at capacity, both parties shall immediately cease issuance of any additional sewer connection permits to any tributary sewer. The cessation of issuance of sewer connection permits shall continue in force until additional sewer capacity has been constructed as provided for herein.

(b) CITY and DISTRICT agree to maintain their respective portions of the shared sewers in the same manner and at the same frequency as all other sewers maintained by CITY or DISTRICT.

(c) Replacement or repair of shared sewers

Both parties agree that the shared sewers have a finite life and eventually, due to damage or deterioration, all or portions of the shared sewers may need to be replaced. When either party determines that a portion of shared sewer within its jurisdiction is in need of major replacement, it shall immediately notify the other party in writing, setting forth a description and schedule of repair or replacement and the estimated cost thereof. Unless the work is required to abate a public health problem it shall be scheduled so that both parties can arrange for financing in the next following fiscal year. Work required to abate a public health problem shall be commenced immediately.

The cost of repair or replacement of each shared line shall be apportioned to each party in accordance with the ultimate build out as permitted under the General Plan for acreage within the shared tributary area using established flow coefficients as determined by the County Sanitation Districts of Orange County as shown on Exhibit "A" attached hereto. The total cost shall include engineering, administration and construction expenses. Prior to starting the repair or replacement work, the initiating party shall bill the other party for their apportioned share. The other party shall promptly deposit the billed amount. Upon completion of the work and payment of all costs, the initiating party shall submit a report setting forth all costs incurred together with either a bill, or a refund for the difference between the actual apportioned cost and the deposit.

Any repair or replacement costing less that \$5,000.00 may be done by force account. Repairs or replacements costing in excess of \$5,000.00

shall be subject to a public bidding process.

If, within 30 days after notification, the notified party disagrees with the necessity or estimated cost of apportionment of the cost of the repair or replacement, they shall so notify the other party in writing. If the parties are unable to agree upon the need or cost of the repair or replacement, the matter may be submitted to arbitration as set forth in Section 4.

2. Future Sewers

It is anticipated that, as the tributary area to the shared sewers continues to develop, there will not be adequate capacity, as defined in Section 1, in some of the shared sewers. Parallel sewers and relief connections to Orange County Sanitation District facilities will be required in the future to provide capacity for ultimate planned development.

On or before October 1st of each year, each party shall determine whether the shared sewers within their jurisdiction have sufficient capacity, as defined in Section 1, to provide service without limiting connections for the next calendar year. If it appears that adequate capacity will not be available, then the parties shall meet and determine within 60 days the size and estimated cost of a parallel relief sewer that, together with the existing sewer will provide adequate capacity for ultimate planned development within the tributary area. Each party shall provide the estimated ultimate flows for their portion of the tributary area using ultimate land use plans and established flow coefficients as determined by the County Sanitation Districts of Orange County formulas.

The cost of the new parallel sewer, including engineering, administration and construction shall be apportioned between the parties equal to the ratio that each party's estimated ultimate peak flows bears to the combined ultimate peak flow.

The construction of the new line shall be scheduled to start after the next July 1st in order to permit both parties to budget the required funds.

Prior to commencing construction, the party within whose jurisdiction the new sewer will be located shall bill the other party for their apportioned share of the total cost. The other party shall promptly deposit the billed amount. Upon completion of the work, and payment of all costs, the initiating party shall submit a report setting forth all costs incurred together with either a bill or a refund for the difference between the actual apportioned cost and the deposit.

If one of the parties does not finance their apportioned share of the new parallel sewer, or relief connection, or for any other reason declines to participate, then the remaining party at their option may proceed to construct and finance a parallel sewer with capacity only for the tributary area within their jurisdiction. If this option is exercised, then the party choosing not to participate shall immediately cease issuance of sewer connection permits as provided for in Section 1(a). Such cessation of connection permits shall remain in effect until the non-participating party constructs sewer facilities with capacity for added flows from their tributary area or diverts the added flow to non-shared sewers.

3. Arbitration

If the parties are unable to agree on the necessity, cost, or apportionment of repair or replacement of shared sewers, the matter may be submitted to arbitration before a 3-man arbitration board in the following manner:

Either party may, within 60 days after the date of the notification of the need for a repair or replacement, appoint one member of said arbitration board. The third member shall be appointed by the first two members. All members of said board shall be registered Civil Engineers in the State of California.

4. Notice

Any notice hereunder shall conclusively be deemed to have been given upon the date it is enclosed in a sealed envelope addressed to the party to whom intended at the following address:

if to the CITY:

City of Stanton

Attention	· ·
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if to the DISTRICT:

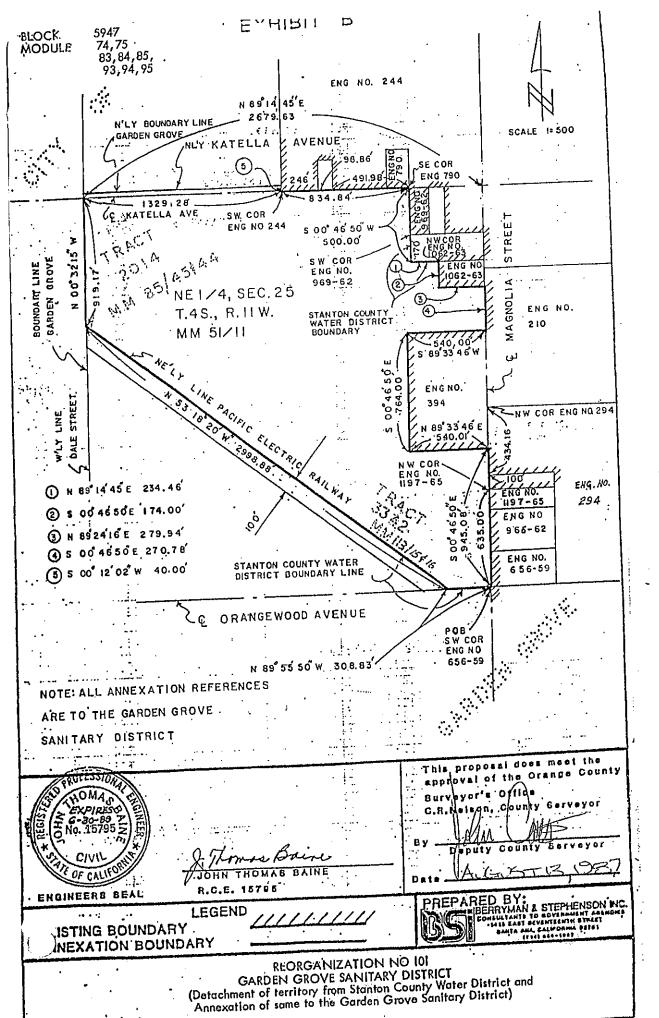
Garden Grove Sanitary District

Attention: President, Board of Directors

Termination

The term of this agreement shall commence upon approval and execution of this document by both parties, and shall continue for so long as is necessary to carry out the purposes of this agreement.

This agreement may be terminated or amended at any time by the consent of both parties.



Page 331 of 614



AGREEMENT

THE PARTIES MUTUALLY AGREE AS FOLLOWS:

1. <u>DURATION</u>: This Agreement shall be effective when executed by both parties, and the obligations of the parties hereunder shall commence upon the effective date of the reorganization, which is the date of recordation of the Certificate of Completion pursuant to Term 19 of the LAFCO Terms and Conditions. This Agreement shall continue as long as the parties continue to share sewer facilities or until superseded by mutual written agreement of the parties.

2. SHARED SANITARY SEWERS

a. <u>CAPACITY RIGHTS</u> GGSD nereby grants to MCSD, and MCSD grants to GGSD capacity rights so long as capacity is available in the shared sanitary sewers, the locations of which are shown in attached Exhibit A, and which are described in attached Exhibit B. MCSD and GGSD agree to use said shared sanitary sewers to transport wastewater only from those areas specified on Exhibit "A" as tributary to the designated facilities. The diversion, release, or transmission of wastewater from any other area into the shared sanitary sewer facilities by either party, without express written consent of the other party, shall be deemed to be a breach of this Agreement, and the party causing the unauthorized diversion, release, or transmission shall be subject to all remedies as provided in Section 8 hereof. The shared sanitary sewers or portions thereof shall be deemed to be at capacity for the purposes of this Agreement when the measured peak flow has a depth equal to 75% of the sanitary sewer diameter.

When either party determines by field measurements that a portion of the snared sanitary sewer is flowing at capacity, as defined herein, such party shall immediately notify the other party in writing, setting forth the capacity limits, the measured flow, and the depth of peak flow for the sanitary sewer in question.

b. MAINTENANCE GGSD and MCSD agree to maintain the portions of the shared sanitary sewers as shown on Exhibit A which lie in their jurisdiction in good condition and in at least the same manner and at the same frequency as all other comparable sanitary sewers maintained by GGSD and MCSD. Costs for routine maintenance shall be apportioned as set forth in Exhibit B. For purposes of this agreement, routine maintenance shall include anything that is within the normal scope of duties of the responsible party's employees or contractors. Any repair in excess of the normal scope of such duties shall be undertaken pursuant to paragraph 2.c.

c. REPLACEMENT OR REPAIR OF SHARED SANITARY SEWERS Both parties acknowledge and agree that the shared sanitary sewers have a finite life, and that eventually, due to damage or deterioration, all or portions of the shared sanitary sewers may need to be replaced. When either party determines that a portion of a shared sanitary sewer within its jurisdiction is in need of major repair or replacement, it shall immediately notify the other party in writing, setting forth a description and proposed schedule of repair or replacement, and the estimated cost thereof. Unless the work is required to abate a public heath hazard, it shall be scheduled so that both parities can arrange for financing. Work required to abate a public health hazard shall be commenced immediately. In the event that the non-initiating party disagrees with the necessity, projected cost, or cost apportionment of a repair or replacement, the parties agree to meet and confer to resolve the disagreement prior to scheduling construction.

The cost of repair or replacement of each shared line, and the cost of cleanup of any sewage spill on a shared line, shall be apportioned to each party as set forth in Exhibit B. The total cost shall include engineering, administration and construction expenses. Prior to starting the repair and replacement work, the initiating party shall bill the other party for such party's apportioned share. In the case of a normal repair or replacement, this pill shall be sent between sixty (60) and ninety (90) days prior to the scheduled commencement of the construction on the project. In the case of a repair to abate a public health hazard, the bill shall be sent after the repair is completed. The other party shall promptly deposit the billed amount with the initiating party. The initiating party must keep these funds in a segregated fund, and use them only for the project for which they were deposited. Upon completion of the work and payment of all costs, the initiating party shall submit a report setting forth all costs incurred together with either a bill, or a refund, for the difference between the actual apportioned cost and the deposit.

Any repair or replacement costing less that \$5,000 (five thousand dollars) may be done by force account. All other repairs or replacements shall be subject to a public bidding process.

If the party receiving notice of a necessary repair as provided in this section fails to deposit the specified amount with the party giving notice within sixty (60) days after the mailing of said notice, the party giving notice may proceed with the work and recover from the delinquent party that party's proportionate share of all necessary and appropriate costs as determined after completion of repairs, plus actual damages including interest at the rate available on funds deposited in the Local Agency Investment Fund of the State of California ("LAIF" rate") all reasonable attorneys' fees, court costs, and other reasonable costs incurred in collecting said amount from the delinquent party.

3. <u>FUTURE SANITARY SEWERS</u> It is anticipated that future development in the tributary area may lead to a situation in which there is not adequate capacity, as defined in Section 1, in the shared sanitary sewers.

On or before October 1 of each year, each party shall determine whether the shared sanitary sewers within its jurisdiction have sufficient capacity, as defined in Section 1, to provide service without limiting connections for the next calendar year. If it appears that adequate capacity will not be available then the parties shall meet and determine within 60 days the size and estimated cost of a parallel relief sanitary sewer that, together with the existing sanitary sewer, will provide adequate capacity for ultimate planned development within the tributary area. Each party shall provide the estimated flows for their portions of tributary area.

The cost of the new parallel sanitary sewer, including engineering, administration and construction shall be apportioned between the parties equal to the ratio that each party's estimated ultimate peak flows bear to the combined ultimate peak flow.

The construction of the new line shall be scheduled by the mutual agreement of the parties, taking into account budgetary considerations, but in no event shall it be undertaken sooner than the next July 1.

Prior to commencing construction, the party within whose jurisdiction the new sanitary sewer will be located shall bill the other party for its apportioned share of the total cost. The other party shall promptly deposit the billed amount with the initiating party. The initiating party must keep these funds in a segregated fund, and use them only for the project for which they were deposited. Upon completion of the work and the payment of all costs, the initiating party shall submit a report setting forth all costs incurred together with either a bill, or a refund, for the difference between the actual apportioned cost and the deposit.

If one of the parties does not fund its apportioned share of the new parallel sanitary sewer, or relief connection, or for any other reason declines to participate, then the remaining party may, at its option, proceed to construct and finance a parallel sanitary sewer with capacity only for the tributary area within its jurisdiction. If this option is exercised, then the party choosing not to participate shall immediately cease issuance of sanitary sewer connection permits as provided for in Section 1(a). Such cessation of connection permits shall remain in effect until the non-participating party constructs sanitary sewer facilities with capacity for added flows from its tributary area, or diverts the added flow to non-shared sanitary sewers.

4. BROOKHURST STREET LINE

- a. <u>Line Improvements.</u> Notwithstanding any other provision of this Agreement, GGSD shall, at its sole cost and expense, plan, design, and construct improvements to the existing ten-inch (10") sanitary sewer line in Brookhurst Street between Hazard Avenue and Bolsa Avenue, which are adequate to meet all foreseeable future needs of the area tributary to said sanitary sewer line shown on Exhibit "A". The timing of the improvements and the nature of the improvements shall be determined in GGSD's sole discretion, provided that the improvements shall be completed and in use no later than five (5) years from the effective date of reorganization as provided by Term No. 4 of the LAFCO Terms and Conditions. GGSD will deposit those reserve funds transferred from MCSD to GGSD, pursuant to Term No. 20 of the LAFCO Terms and Conditions, into an escrow account to be used to fund all or a portion of these improvements. Upon completion of the improvements, the improved facilities shall be owned and controlled by GGSD, subject to the shared capacity provided herein. The subject sanitary sewer line is shown on Exhibit "C" attached hereto.
- b. <u>Line Maintenance</u> Prior to completion of the improvements described in Section 4 a., GGSD shall bear all costs and expenses for maintenance and repair of, and for cleanup of sewage spills occurring on, the 10" sanitary sewer line in Brookhurst Street and related facilities. In addition, so long as GGSD is diverting wastewater from its Hazard Street sanitary sewer line into MCSD's facilities in Bowling Green Street and Fowler Circle, GGSD shall bear all maintenance and repair costs for, and the cost of cleanup of sewage spills occurring on, those sewer lines and related facilities. Upon completion of the improvements described in Section 4 a., GGSD shall discontinue all wastewater diversions into the Bowling Green/Fowler Circle facilities and disconnect its facilities therefrom.
- c. <u>Permits</u> MCSD agrees to cooperate with GGSD in securing any necessary permits, entitlements, or other authorizations that may be required by the City of Westminster for construction of the improvements provided for in this Section.

5. WESTMINSTER/NEWLAND AREA SHARED SANITARY SEWERS

a. <u>LINE CAPACITY</u> At such time as MCSD has measurements showing that the measured peak daily flow in the shared sanitary sewers serving the Westminster Avenue/Newland Street area has a depth equal to 75% of the sanitary sewer diameter, MCSD, subject to approval of GGSD with regards to consultant selection and project scope, shall undertake an engineering study to examine the causes and possible remedies for the capacity problems of these shared sanitary sewers. GGSD shall reimburse MCSD for a share of the cost

which is proportional to GGSD's actual contribution to the flow in the sanitary sewers studied. After completion of the study, the parties shall meet and confer to agree on an approach to be used to resolve the capacity problems prior to scheduling construction of the project.

- b. <u>FUNDING</u> GGSD and MCSD mutually agree to set aside funds in restricted accounts for their respective portions of any project agreed upon as a result of a study conducted pursuant to Section 5(a) within two years of the agreement between the parties on such a project.
- c. <u>CONSTRUCTION</u> The cost of repair or replacement of each shared line shall be apportioned on the basis of the flow attributable to the tributary sanitary sewers within the jurisdiction of each agency. The total cost shall include engineering, administration and construction expenses. Upon completion of the work and payment of all costs, the initiating party shall submit a report setting forth all costs incurred together with a bill for the actual apportioned cost.

GGSD shall reimburse MCSD for GGSD's share of all costs and expenses incurred in connection with the repair or replacement of the shared lines no later than thirty (30) days after receipt of the report and bill. If GGSD fails to reimburse MCSD within thirty (30) days, then MCSD shall be entitled to recover from GGSD, in addition to GGSD's share of costs, actual damages including interest at the LAIF rate, plus all attorneys' fees court costs, and other expenses incurred in collecting said amount.

- d. MAINTENANCE, REPLACEMENT AND REPAIR The shared sanitary sewers serving the Westminster/Newland area shall be subject to the maintenance, replacement and repair terms stated in Section 2 of this agreement.
- 6. KNOTT STREET/GARDEN GROVE BOULEVARD AREA MCSD and GGSD mutually agree that MCSD shall provide sanitary sewer services to those areas of GGSD lying North of Garden Grove Boulevard, South of State Highway 22, and West of Knott Street. GGSD agrees to pay to MCSD an amount equal to the tinen current MCSD annual sanitary sewer assessment for each parcel served under this section. The sanitary sewers in this area shall be subject to the same cost-sharing provisions regarding maintenance, repair and replacement as the shared sanitary sewers discussed in Section 2.
- 7. NOTICES Any notices hereunder shall conclusively be deemed to have been given upon the date it is enclosed in a sealed envelope addressed to the party to whom it is intended, and deposited in the United States Mail with adequate postage, delivered to the office of intended party, or sent through other commercially reasonable means, such as overnight delivery by a reputable

JOINT USE SEWERAGE FACILITIES AGMT 4-9-97

courier company.

The addresses of the respective parties for all notices shall be:

For GGSD:

City Engineer City of Garden Grove 11222 Acacia Parkway Garden Grove, CA 92840

For MCSD:

General Manager Midway City Sanitary District 14451 Cedarwood Avenue Westminster, CA 92683

- 8. <u>REMEDIES</u> In addition to any other remedies provided elsewhere in this Agreement and by law, the parties shall be entitled to specific performance. The parties acknowledge that monetary damages are not an adequate remedy in the event of a breach by either party to this Agreement with respect to the obligations to construct or repair facilities and to discontinue wastewater flows. The parties agree that said construction, repair or discontinuance obligations shall be specially enforceable by any court of competent jurisdiction.
- 9. <u>AMENDMENT</u>. This Agreement may be amended from time-to-time by the written agreement of both parties.
- 10. <u>LAFCO TERMS AND CONDITIONS</u>. This Agreement is intended to, and shall be construed to be consistent with and implement the Terms and Conditions imposed by LAFCO on Garden Grove Reorganization No. 141, a copy of which is attached hereto as Exhibit "E" and incorporated by reference. The terms of this Agreement shall be subject to the LAFCO Terms and Conditions as they exist on the date hereof and to any future amendments and modifications thereto. This agreement constitutes the entire agreement between the parties relative to joint use sanitary sewers and shall supersede all prior agreements.
- 11. <u>ATTORNEY'S FEES.</u> In the event that litigation becomes necessary for the resolution of any dispute ansing under the terms of this agreement, the prevailing party shall be entitled to its reasonable attorney's fees from the other party.

JOINT USE SEWERAGE FACILITIES AGMT 4-9-97

IN WITNESS THEREOF, the parties have executed this Agreement on the day and year first referenced herein.

GARDEN GROVE SANITARY DISTRICT

ATTEST:

MIXCHTANDS I SHULL E

Preside

APPROVED AS TO FORM:

Special Counsel\

MIDWAY CITY SANITARY DISTRICT

ATTEST:

Secretary

APPROVED AS TO FORM:

Special Counsel

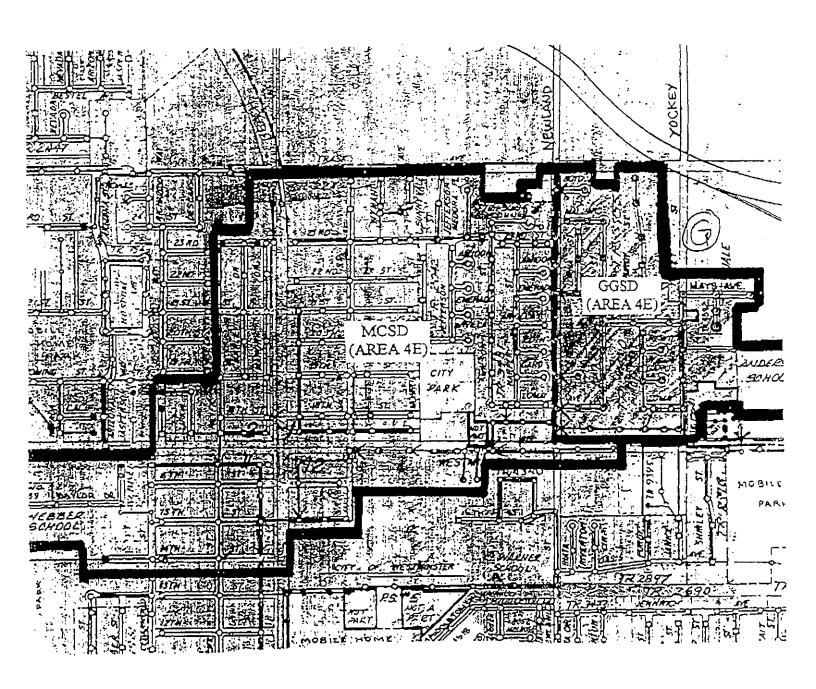
JOINT USE SEWERAGE FACILITIES AGMT 4-9-97

EXHIBIT A

TRIBUTARY AREAS INTO SHARED SANITARY SEWER FACILITIES

AREA 4E

PAGE 1 OF 3



A TIBIHKA

TRIBUTARY AREAS INTO SHARED SANITARY SEWER FACILITIES

AREA 4F

PAGE 2 OF 3

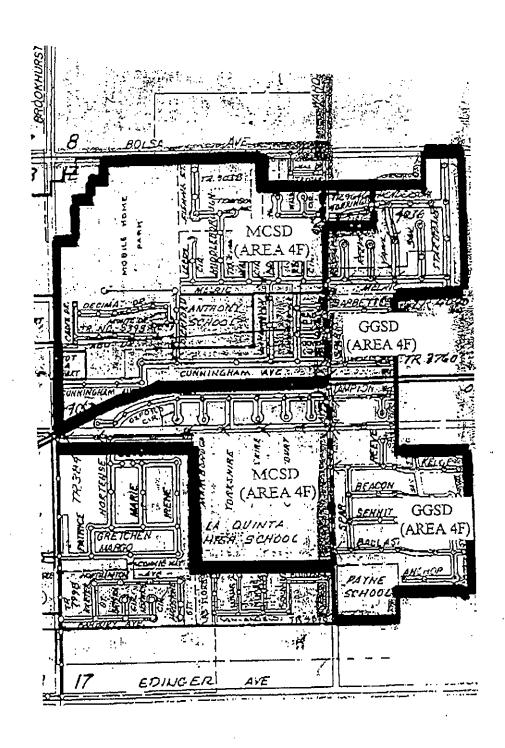
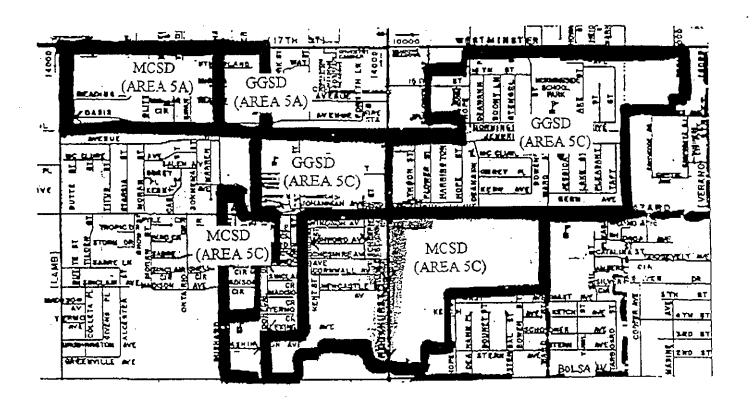


EXHIBIT A

TRIBUTARY AREAS INTO SHARED SANITARY SEWER FACILITIES

AREAS 5A AND 5C

PAGE 3 OF 3



LOCATION	MAINTENAI MCSD	ANCE SHARE GGSD LENGTH, FT		
1) SEWERLINE TO HOOVER TRUNK SEWER (SEE EXHIBIT	A, PARC	EL 4E)	
WESTMINSTER AV./ NEWLAND - BEACH BL. (JACKSON TO 15TH)	45%	5 5%	2,600	
15TH ST/ E/O BEACH- PACIFIC AND S/O PACIFIC	70	30	1,300	
14TH ST./ PACIFIC - HOOVER	80	20	2,000	
2) SEWERLINE TO BROOKHURST ST. TRUNK	SEWER (SEE	EX. A. P.	ARCEL 4F)	
YAWIJ HENDERSON - MELRIC	20%	80%	600	
MELRIC/ YAWL - WARD	15	85	650	
WARD/ MELRIC - DAVIT (CUNNINGHAM)	10	90	600	
WARD/ DAVIT - TAMPION (NOTTINGHAM)	80	20	500	
McFADDEN/ WARD - YORKSHIRE	60	40	800	
McFADDEN/ YORKSHIRE - BROOKHURST	75	25	1,800	
3) SEWERLINE TO BOLSA AV. TRUNK SEWER (SEE EX. A, PARCEL 5C)				
BROOKHURST/ NEWCASTLE - PREMIER	5%	95%	800	
BROOKHURST/ PREMIER - BOLSA	30	70	500	

EXHIBIT B - CONTINUED

LOCATION	MAINTENAN MCSD	IAINTENANCE SHARE ICSD GGSD LENGTH. FT		
4) SEWERLINE TO BOLSA AV. TRUNK SEWER	R (SEE EX. A, I	PARCEL S	<u>(C)</u>	
SHEFFIELD/ HAZARD - ASHFORD	20	80	400	
ASHFORD/ WAKEFIELD - SHEFFIELD	45	55	700	
WAKEFIELD/ ASHFORD - SABRE	80	20	400	
SABRE/ DONEGAL - WAKEFIELD	45	55	600	
DONEGAL/ SABRE - MADISON	60	40	500	
DONEGAL/ MADISON - LEXINGTON	45	55	500	
LEXINGTON (GGSD LIMITS)	50	50	600	
ALLEY/ 50. OF LEXINGTON - BOLSA TRUNK SEWER	60	40	600	
5) SEWERLINE TO MAGNOLIA ST. TRUNK SEWER (SEE EX. A, PARCEL 5A)				
BUSHARD/ N/O SUTHERLAND - OASIS	40%	60%	900	
OASIS / MAGNOLIA - BUSHARD	85	15	2,700	

EXHIBIT " C "

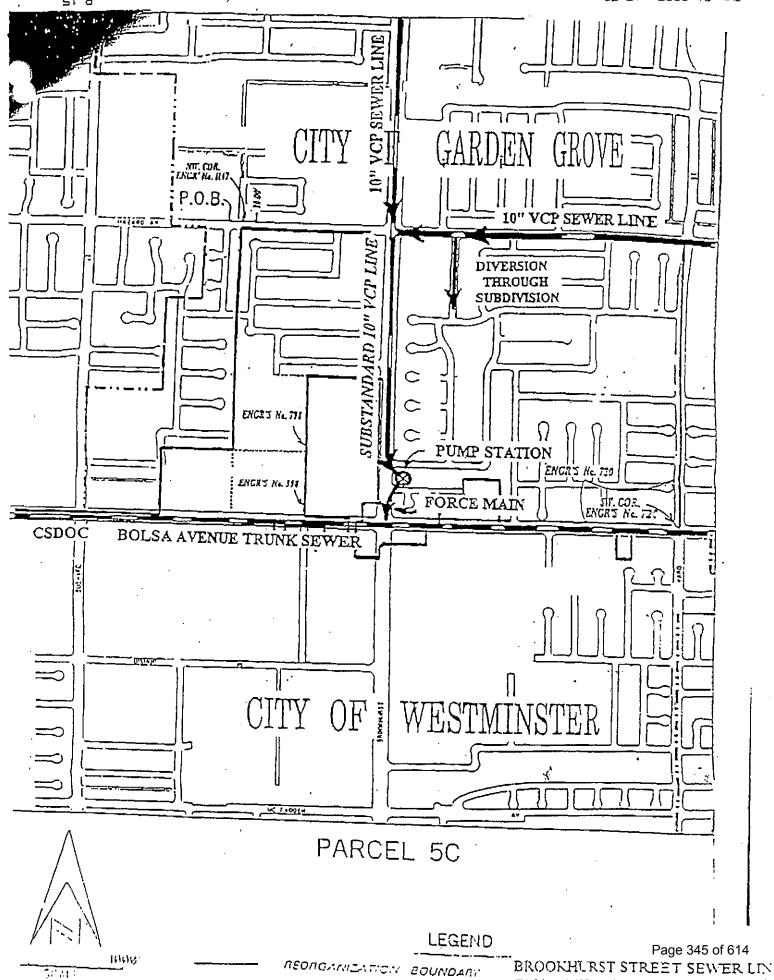


EXHIBIT D

RECOMMENDED TERMS AND CONDITIONS

- 1. The City Council of Garden Grove, acting as the future Board of Directors for the Garden Grove Subsidiary District, shall submit a plan to LAFCO for the establishment of a Sanitary District Advisory Commission. The five member commission shall advise the Board of Directors of the District concerning administrative, legal, operational, maintenance, and financial matters. The Board of Directors of the Garden Grove Sanitary District (GGSD), seated at the time the certificate of completion for this reorganization is issued, shall be offered the opportunity to become members of the new advisory commission. Their appointment shall run until their existing GGSD terms expire. The advisory commission shall include one resident of the unincorporated area and one member appointed by the Second District County Supervisor. In addition to these two appointments, one alternate for each position shall also be appointed [G.C. 56844(k)(v)].
- The GGSD, as a subsidiary district of the City of Garden Grove, shall samme a proportionate share of the bonded indebtedness associated with the acquisition of capital equipment of the Midway City Sanitary District (MCSD) which is to be rendered surplus to MCSD by this reorganization. The City of Garden Grove's newly created subsidiary district will take, in kind, the surplus equipment. The City of Garden Grove and Midway City Sanitary District shall file an agreement with LAFCO, which describes the disposition of the surplus equipment and certificate of participation funding. Notice that the agreement for equipment funding has been reviewed by the bond counsel shall be submitted to LAFCO by the City of Garden Grove, acting as successor agency [G.C., 56844(c)].
- 3. The GGSD, as a subsidiary district of the City of Garden Grove, shall accept all system facilities transferred from MCSD in an "as is" condition, without any payment or repair obligation from MCSD [G.C. 56844(h)].
- 4. The City Council of Garden Grove, acting as the future Board of Directors for the Garden Grove Subsidiary District, shall execute an agreement with the Midway City. Sanitary District, to upgrade the GGSD sewer line in Brookhunst Street between Hazard Avenue and the pump station to the trunk line in Bolsa Avenue, at their sole cost and discretion. The agreement shall provide that the upgrading be completed no later than 5 years from the effective date of this reorganization or as mutually agreed by the two parties. Any maintenance and repair incurred before replacement of these facilities shall be at the City of Garden Grove's Subsidiary District's expense. The upgraded facilities shall remain the property of the City of Garden Grove's Subsidiary District. Upon replacement of these facilities, operation and maintenance expenses will be shared per the agreement of the two districts [G.C.56844(h)].
- 5. The City Council of Garden Grove, acting as the future Board of Directors for the Garden Grove Subsidiary District, shall execute a main: mance, operation and capacity rights agreement with the Midway City Sanitary District for the use of the sewer lines serving

Terms & Conditions Garden Grove Reorganization No. 141 August 26, 1996

parcel 4E and for correction of capacity problems in those lines within 5 years or as mutually agreed upon by both agencies. Both agencies shall also include in the agreement a provision that the costs of construction shall be based upon the proportionate amount of sewage being generated by each respective agency. Garden Grove's Subsidiary District agrees to set axide funding each year in a restricted account for its share of the costs. If construction of a sanitary diversion line to the Orange County Sanitation District trunk line in Magnolia Street is less expensive than other alternative, then both parties may mutually agree to select this alternative at the time the decision is made to construct the rollef line [G.C. 56844(h)].

- 6. The GGSD, as a subsidiary district of the City of Garden Grove, shall assume all joint use flow agreements and maintenance agreements [G.C. 56844()(r)].
- 7. Agreement shall be reached between MCSD and the City Council of Garden Grove, acting as the future Board of Directors for the Garden Grove Subsidiary District, to continue sewer service to Parcels 4C and 4D within the City of Garden Grove [G.C. 56844(r)(v)].
- 8. The City Council of Garden Groye, acting as the future Board of Directors for the Garden Grove Subsidiary District, shall execute amendments of existing agreements with the respective contract solid waste franchisees serving the areas to be reorganized, and shall be completed to address those changes in service areas [G.C. 56844(r)(v)].
- 9. An agreement shall be reached between the City Council of Garden Grove, acting as the finure Board of Directors for the Garden Grove Subsidiary District, and the Midway City Sanitary District which provides that the City's subsidiary district shall be responsible for costs incurred by MCSD for public information efforts taken by MCSD to advise the affected residents of the changes in billing process, the cost of trash collection, and other service changes. Such costs shall not exceed \$5,000. As an alternative, Garden Grove may, in lieu of payment, provide notice in a form which is acceptable to MCSD [G.C. 56844(v)].
- 10. The City Council shall file a notice with LAFCO that the reorganization shall not adversely affect or impair the status of any employee of the District or City. As of the effective date of this reorganization, all employees of the Garden Grove Sanitary District shall become City employees. Current rates of pay, accrued vacation and sick leave, vacation and sick leave accrual rates, employee rights, seniority rights, insurance, retirement benefits, and all other benefits and programs now provided them shall continue at a level not less than that currently emjoyed [G.C.56844(1)].
- 11. All lands, buildings, real and personal property, and appurtonances held by the Midway City Sanitary District and within the City of Garden Grove served by the Midway City Sanitary District, as of the effective date of this reorganization, shall be transferred to the subsidiary district [G.C. 56844(h)].

P.07

Terms & Conditions Garden Grove Reorganization No. 141 August 26, 1996

- 12. All lands, buildings, real and personal property, and appurtenances held by the Garden Grove Sanitary District and within the City of Westminster served by the Garden Grove Sanitary District, as of the effective date of this reorganization, shall be transferred to the Midway City Sanitary District [G.C. 56844(h)].
- 13. The City Council of Garden Grove, acting as the future Board of Directors for the Garden Grove Subsidiary District, is sutherized but not required to continue to impose and collect all charges, fees, assessments and/or taxes previously authorized and imposed by the Midway City Sanitary District in the territory which is to be detached from Midway City Sanitary District annexed to the Garden Grove Subsidiary District. Nothing in this provision shall be deemed to limit the discretion of the Board of Directors of the Garden Grove Subsidiary District to establish and levy charges, fees, assessments and/or taxes as it determines to be necessary and appropriate [G.C. 56844(t)].
- 14. The Midway City Sanitary District is anthorized but not required to continue to impose and collect all charges, fees, assessments and/or taxes previously authorized and imposed by the Garden Grove Sanitary District in the territory which is to be detached from the Garden Grove Sanitary District and annexed to the Midway City Sanitary. Nothing in this provision shall be deemed to limit the discretion of the Board of Directors of the Midway City Sanitary District to establish and levy charges, fees, assessments and/or taxes as it determines to be necessary and appropriate [G.C. 56844(t)].
- 15. The City Council of Garden Grove, acting as the future Board of Directors for the Garden Grove Subsidiary District, and Midway City Sanitary District shall provide evidence to LAFCO that all sewer flow agreements affected by this reorganization have been modified to consider the reorganized boundaries, as appropriate [G.C. 56844(j)(x)].
- 16. The City of Gerden Grove shall assist the two surplus MCSD automated trash collection truck operators to obtain employment with the subsidiary district's private trash hauler [G.C. 56844(I)(v)].
- 17. Areas being annexed to the City of Garden Grove shall be subject to the City of Garden Grove's Paramedio Property Tax Override and shall become part of the Garden Grove Landscaping and Lighting Assessment District [G.C. 56844(t)].
- 18. The formation of Improvement District No. 1 within the Garden Grove Sanitary District is to include all territory annexing into Garden Grove Sanitary District and detaching from the Midway City Sanitary District. These areas are shown as Parcels 4 A-F on the map referenced in the LAFCO staff report. The Improvement District shall continue the existing rate structure from the Midway City Sanitary District [G.C.56844(e)].
- 19. The effective date of this reorganization shall be the date of recordation. In any case the effective date shall not be later than rine months after the date of the election, if required, in which a majority voted in favor of the reorganization [G.C. 56844(p) and 57202(2)].

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Terms & Conditions Gardon Grove Reorganization No. 141 August 26, 1996

- 20. A pro rata share of the reserve funds/cash balance contained in the Recycling Reserve, Contingency Reserve, Automated Equipment Fund and Capital Reserve Fund of the Midway City Sanitary District, reflecting a balance not less than that contained in those accounts on May 31, 1996 plus any additional funds collected in the transferred areas for these funds, shall be placed in an excrew account and used for repair/upgrading of the Newland and Brookhurst lines or held in reserve for debt service. The pro rata share shall be determined by multiplying the applicable fund balances by the ratio of net transferred be determined by multiplying the applicable fund balances by the ratio of set transferred is District. The ratio is approximately 17% and the amount to be transferred is approximately \$415,000. The final ratio and amount will be determined by LAFCO prior to the recordation date [G.C. 56884(I)].
- 21. The City Council of Garden Grove agrees to defend, indemnify and hold harmless LAFCO and/or its agents, officers or employees from any claim, action or proceeding against LAFCO and/or its agents, officers and employees to attack, set aside, void or annul the approval of LAFCO concerning the proposal or any action relating to or arising out of such approval when such action is brought within the applicable statute of limitations [G.C. 56884(o)].
- 22. The Local Agency Formation Commission shall retain jurisdiction prior to issuance of the cartificate of completion to hear and amend, if necessary, any term or condition that requires agreement between parties.

4

P. 27



AGREEMENT

FOR

JOINT USE OF SEWERAGE FACILITIES

	This agreement,	made and entered	into this	oth day	y of
August	, 19_8	35 , between the	City of Sant	a Ana, a mu	nicipal
corporation	, hereinafter re	eferred to as "CI"	TY", and the	Garden Grov	e Sanitary
District of	Orange County,	California, a sa	nitary distri	ct organize	d under the
Sanitary Di	strict Act of 19	23, hereinafter	referred to a	s "DISTRICT	II•

WITNESSETH

WHEREAS, Orange County District Reorganization No. 66 will detach approximately 1,000 acres from the DISTRICT, of which approximately 906 acres are located within CITY; and,

WHEREAS, Reorganization No. 66 will transfer to CITY the fixed assets of the detached portion of DISTRICT that are within CITY; and

WHEREAS, said Reorganization provides for DISTRICT to retain capacity rights in certain DISTRICT sewerage facilities to be transferred to CITY which will be needed by DISTRICT to transport wastewater from remaining areas of DISTRICT to the Orange County Sanitation District facilities; and,

WHEREAS, sewers transferred to CITY will remain connected to sewers retained by DISTRICT, and CITY will need capacity rights in these sewers to transport wastewater from the detached area within CITY to downstream portions of the same sewer transferred to CITY; and,

. WHEREAS, a report prepared by Boyle Engineering Corporation for the City of Santa Ana entitled "Addendum to the June 1979 Engineering Report Update on Sewerage Facilities" dated July 27, 1984 indicates that certain shared sewers

within CITY or DISTRICT will not have adequate capacity for the wastewater from the planned ultimate development of the areas within DISTRICT and CITY tributary to said certain facilities; and,

whereas, because capacity rights in certain sewerage facilities will be shared by DISTRICT and CITY, it is in the best interests of DISTRICT and CITY to enter into an agreement to provide for the cost sharing of maintenance of sewers in which DISTRICT and CITY will share capacity rights and to provide for funding of the construction of future sewers within CITY or DISTRICT that may be necessary to provide sufficient capacity to transport the combined ultimate wastewater flows from portions of DISTRICT and CITY to the Orange County Sanitation District facilities; and,

NOW, THEREFORE, in consideration of the payments herein provided and the several obligations hereof, the parties agree:

1. Shared Sewers

(a) CITY hereby grants to DISTRICT and DISTRICT hereby grants to CITY capacity rights so long as capacity is available in the shared sewers, the locations of which are shown on Exhibit A attached hereto and described in Exhibit B attached hereto. DISTRICT and CITY agree to use said shared sewers only to transport wastewater from those portions of DISTRICT or CITY within the tributary area as shown on said Exhibit A. The shared sewers, or portions thereof, shall be deemed to be at capacity when the measured peak flow has a depth equal to 75% of the sewer diameter.

When either party determines by field measurements that a portion of a shared sewer is flowing at capacity, as defined herein, they shall immediately notify the other party in writing, setting forth the limits, the measured flow, and the depth of the peak flow.

Upon determination and notification that a sewer is at capacity, both parties shall immediately cease issuance of any additional sewer connection permits to any tributary sewer. The cessation of issuance of sewer connection permits shall continue in force until additional sewer capacity has been constructed as provided for herein.

(b) CITY and DISTRICT agree to maintain their respective portions of the shared sewers as shown on Exhibit A in the same manner and at the same frequency as all other sewers maintained by CITY or DISTRICT.

(c) Replacement or Repair of Shared Sewers

Both parties agree that the shared sewers have a finite life and eventually, due to damage or deterioration, all or portions of the shared sewers may need to be replaced. When either party determines that a portion of a shared sewer within its jurisdiction is in need of major replacement, it shall immediately notify the other party in writing, setting forth a description and schedule of repair or replacement and the estimated cost thereof. Unless the work is required to abate a public health problem it shall be scheduled so that both parties can arrange for financing in the next following fiscal year. Work required to abate a public health problem shall be commenced immediately.

The cost of repair or replacement of each shared line shall be apportioned to each party as set forth in Exhibit B. The total cost shall include engineering, administration and construction expenses. Prior to starting the repair or replacement work, the initiating party shall bill the other party for their apportioned share. The other party shall promptly deposit the billed amount. Upon completion of the work and payment of all costs, the initiating party shall submit a report setting forth all costs incurred together with either a bill, or a refund for the difference between the actual apportioned cost and the deposit.

Any repair or replacement costing less than \$5,000.00 may be done by force account. Repairs or replacements costing in excess of \$5,000.00 shall be subject to a public bidding process.

If, within 30 days after notification, the notified party disagrees with the necessity or estimated cost or apportionment of the cost of the repair or replacement, they shall so notify the other party in writing. If the parties are unable to agree upon the need or cost of the repair or replacement, the matter may be submitted to arbitration as set forth in Section 4.

2. Future Sewers

It is anticipated that, as the tributary area to the shared sewers continues to develop, there will not be adequate capacity, as defined in Section 1, in some of the shared sewers. Exhibit C attached hereto shows the sizes and locations of parallel sewers and relief connections to Orange County Sanitation District facilities that are anticipated will be required in the future to provide capacity for ultimate planned development.

On or before October 1st of each year, each party shall determine whether the shared sewers within their jurisdication have sufficient capacity, as defined in Section 1, to provide service without limiting connections for the next calendar year. If it appears that adequate capacity will not be available, then the parties shall meet and determine within 60 days the size and estimated cost of a parallel relief sewer that, together with the existing sewer, will provide adequate capacity for ultimate planned development within the tributary area. Each party shall provide the estimated ultimate flows for their portion of the tributary area.

The cost of the new parallel sewer, including engineering, administration and construction shall be apportioned between the parties equal to

the ratio that each party's estimated ultimate peak flows bears to the combined ultimate peak flow.

The construction of the new line shall be scheduled to start after the next July 1st in order to permit both parties to budget the required funds.

Prior to commencing construction, the party within whose jurisdiction the new sewer will be located shall bill the other party for their apportioned share of the total cost. The other party shall promptly deposit the billed amount. Upon completion of the work, and payment of all costs, the initiating party shall submit a report setting forth all costs incurred together with either a bill or a refund for the difference between the actual apportioned cost and the deposit.

If one of the parties does not finance their apportioned share of the new parallel sewer, or relief connection, or for any other reason declines to participate, then the remaining party at their option may proceed to construct and finance a parallel sewer with capacity only for the tributary area within their jurisdiction. If this option is exercised, then the party choosing not to participate shall immediately cease issuance of sewer connection permits as provided for in Section 1(a). Such cessation of connection permits shall remain in effect until the non-participating party constructs sewer facilities with capacity for added flows from their tributary area or diverts the added flow to non-shared sewers.

3. Modifications

A pumping station in Fountain Valley now discharges sewage into the shared line in Edinger Avenue. In the event that the flow from this pumping station is discharged elsewhere, this agreement shall be modified as necessary to reflect the changed condition.

4. Arbitration

If the parties are unable to agree on the necessity, cost, or apportionment of repair or replacement of shared sewers, the matter may be submitted to arbitration before a 3-man arbitration board in the following manner:

Either party may, within 60 days after the date of the notification of the need for a repair or replacement, appoint one member of said arbitration board, giving notice thereof to the party making the first appointment to said board. The third member shall be appointed by the first two members. All members of said board shall be registered Civil Engineers in the State of California.

5. Notice

Any notice hereunder shall conclusively be deemed to have been given upon the date it is enclosed in a sealed envelope addressed to the party to whom intended at the following address:

If to the CITY:

City of Santa Ana

Attention:	Chief Engineer Utilities Agency
 Garden Grov	e Sanitary District

If to the DISTRICT:

Attention: President, Board of Directors

6. Termination

The term of this agreement shall commence upon approval and execution of this document by both parties, and shall continue for so long as is necessary to carry out the purposes of this agreement.

This agreement may be terminated or amended at any time by the consent of both parties.

Page 356 of 614

EXHIBIT B

	Sewer	Located . within	Apportionment of Repair of Replacement District	ר ִ
Shared Sewer Location	Diameter			
Marty - Lewis to Siemon	8 "	District	. 08	100%
Marty - Lewis west to City Boundary	8 "	District	44%	56%
Marty - City Boundary west to Laird	8 # '	City	44%	56%
Marty - Siemon to Lewis	8 <u>,</u>	District	0%	100%
Laird - Marty to Trask	10"	City	31%	. 69%
Trask - Laird to Fairview	10"	City	28%	72%
Cotter - Downie to Marty	8 m	City	67%	33%
Marty - Cotter to Fairview	8"	City	75%	.25%
Fairview - Marty to Trask	8 "	City	75%	25%
Westminster - Buena to Roxey	10"	District	8,0	100%
Westminster - Roxey to Clinton	12"	District	37%	63%
Westminster - Clinton to Harper	12"	City	48%	52 %
Westminster - Harper to Laurel	12 ^H .	City	42%	58%
Westminster - Laurel to Enterprise	12"	City	44%	56%
Westminster - Enterprise to Nautilus	12"	City	48%	52%
Westminster - Nautilus to east of Harbor	12"	City	51%	49%
Westminster - East of Harbor to Harbor	12"	City	54%	46%
Harbor - Westminster to Centur	y 15"	City	39%	61%
Harbor - Century to Washington	. 15"	City	36%	64%
Harbor - Washington to Hazard	15*	City	25%	75%

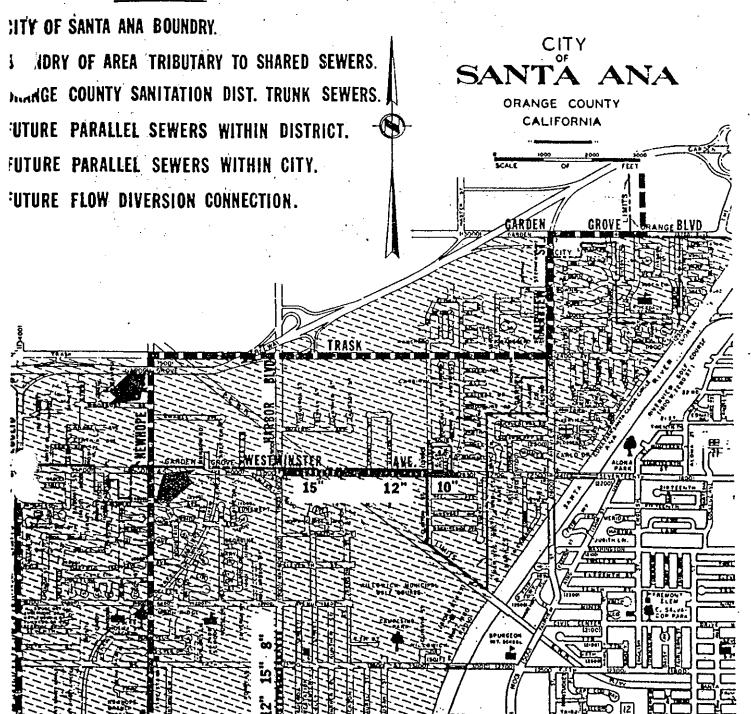
I	EXHIBIT B			4.5
	••		Apportionm	ent ⁽¹⁾
· · · · · · · · · · · · · · · · · · ·	Sewer Diameter	Located within	of Repair Replacemen District	OI
Shared Sewer Location		City	- 23%	77%
Harbor - Hazard to 5th	15"			78%
Harbor - 5th'to 1st	15."	City	22%	700
Harbor - Edinger to City Boundary	10"	District	. 0%	100%
Westminster - East of Newhope	10"	City	75%	25%
Westminster - East of Newhope to Newhope	10"	City	74%	26%
Westminster - Newhope west to City Boundary	10"	City	76%	24%
Westminster - City Boundary to Parsons	10"	District	78%	22%
Westminster - Parsons west to City Boundary	10" .	District	79%	21%
Westminster - City Boundary to Rosita	10"	City .	79%	21%
Westminster - Rosita to La Bonita	10"	City	79%	. 21%
Westminster - La Bonita ' to Anita	10"	City	808	. 20%
Westminster - Anita to Euclid	. 10"	City	92%	.88
Euclid - Westminster to Juare:	z 15"	City	91%	9%
Euclid - Juarez to Hazard	15*	City	. 83%	17%
Euclid - Hazard to 5th	15"	City	67%	33%
Euclid - 5th to 1st	15"	City	62%	38%
Edinger - Harbor to 2280 eas of Newhope	t 12"	District	35%	65%
Edinger - 2280' east to 1950' east of Newhope	12"	District	36%	648

EXHIBIT B

	* 1:	14:		ent''' or
Shared Sewer Location	Sewer Diameter	Located within	of Repair Replacemen District	
Edinger - 1950' east to 1620' east of Newhope	12"	District	37%	63%
Edinger - 1620' east of Newhope to City Boundary	12"	District	39%	61%
Edinger - City Boundary to Newhope	12"	City	39%	·61%
Edinger - Harmon to Euclid	12"	City	33%	67%

⁽¹⁾ Apportionment based on ultimate average flows per report prepared by Boyle Engineering Corporation for the City of Santa Ana entitled "Addendum to the June 1979 Engineering Report Update on Sewerage Facilities" dated July 27, 1984.

· LEGEND ·



AGREEMENT

FOR

JOINT USE OF SEWERAGE FACILITIES

Ţ	his agreeme	nt, made a	nd entered	into thi	.s <u>5th</u>	day	of	
August	,	19 <u>85</u> , ъ	etween the	City of	Santa Ana,	a muni	cipal	
corporation,	hereinafte	r referred	to as "CI	ΓΥ", and	the Garden	Grove	Sanita	гу
District of	Orange Coun	ty, Califo	rnia, a sam	nitary di	strict org	anized	under	the
Sanitary Dis	trict Act o	f 1923, he	reinafter :	referred	to as "DIS	TRICT".		

WITNESSETH

WHEREAS, Orange County District Reorganization No. 66 will detach approximately 1,000 acres from the DISTRICT, of which approximately 906 acres are located within CITY; and,

WHEREAS, Reorganization No. 66 will transfer to CITY the fixed assets of the detached portion of DISTRICT that are within CITY; and

WHEREAS, said Reorganization provides for DISTRICT to retain capacity rights in certain DISTRICT sewerage facilities to be transferred to CITY which will be needed by DISTRICT to transport wastewater from remaining areas of DISTRICT to the Orange County Sanitation District facilities; and,

WHEREAS, sewers transferred to CITY will remain connected to sewers retained by DISTRICT, and CITY will need capacity rights in these sewers to transport wastewater from the detached area within CITY to downstream portions of the same sewer transferred to CITY; and,

WHEREAS, a report prepared by Boyle Engineering Corporation for the City of Santa Ana entitled "Addendum to the June 1979 Engineering Report Update on Sewerage Facilities" dated July 27, 1984 indicates that certain shared sewers

Upon determination and notification that a sewer is at capacity, both parties shall immediately cease issuance of any additional sewer connection permits to any tributary sewer. The cessation of issuance of sewer connection permits shall continue in force until additional sewer capacity has been constructed as provided for herein.

(b) CITY and DISTRICT agree to maintain their respective portions of the shared sewers as shown on Exhibit A in the same manner and at the same frequency as all other sewers maintained by CITY or DISTRICT.

(c) Replacement or Repair of Shared Sewers

Both parties agree that the shared sewers have a finite life and eventually, due to damage or deterioration, all or portions of the shared sewers may need to be replaced. When either party determines that a portion of a shared sewer within its jurisdiction is in need of major replacement, it shall immediately notify the other party in writing, setting forth a description and schedule of repair or replacement and the estimated cost thereof. Unless the work is required to abate a public health problem it shall be scheduled so that both parties can arrange for financing in the next following fiscal year. Work required to abate a public health problem shall be commenced immediately.

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the ratio that each party's estimated ultimate peak flows bears to the combined ultimate peak flow.

The construction of the new line shall be scheduled to start after the next July 1st in order to permit both parties to budget the required funds.

Prior to commencing construction, the party within whose jurisdiction the new sewer will be located shall bill the other party for their apportioned share of the total cost. The other party shall promptly deposit the billed amount. Upon completion of the work, and payment of all costs, the initiating party shall submit a report setting forth all costs incurred together with either a bill or a refund for the difference between the actual apportioned cost and the deposit.

If one of the parties does not finance their apportioned share of the new parallel sewer, or relief connection, or for any other reason declines to participate, then the remaining party at their option may proceed to construct and finance a parallel sewer with capacity only for the tributary area within their jurisdiction. If this option is exercised, then the party choosing not to participate shall immediately cease issuance of sewer connection permits as provided for in Section 1(a). Such cessation of connection permits shall remain in effect until the non-participating party constructs sewer facilities with capacity for added flows from their tributary area or diverts the added flow to non-shared sewers.

3. Modifications

A pumping station in Fountain Valley now discharges sewage into the shared line in Edinger Avenue. In the event that the flow from this pumping station is discharged elsewhere, this agreement shall be modified as necessary to reflect the changed condition.

IN WITNESS WHEREOF, the parties hereto have caused this Agreement to be executed by their respective officers, duly authorized, the provisions of which Agreement are effective as of the date first above written.

	CITY OF SANTA ANA, A Municipal Corporation
ATTEST:	
By Janes J Juny	ByMayor
APPROVED AS TO FORM:	
By Attorney	
APPROVED AS TO CONTENT:	
By Jan Clerke	
City Manager	GARDEN GROVE SANITARY DISTRICT, a Sanitary District By Manitary District
	Chairman
ATTEST:	·
B. Secretary	
APPROVED AS TO FORM:	•. •
By Counsel Counsel	

· LEGEN(

EXHIBIT 'A'

--- CITY OF SANTA ANA BOUNDRY.

BOUNDRY OF AREA TRIBUTARY TO SHARED SEWERS.

ORANGE COUNTY SANITATION DIST. TRUNK SEWERS.

BOUNDRY OF AREA WITHIN CITY DETACHED FROM-GARDEN GROVE SANITARY DISTRICT.

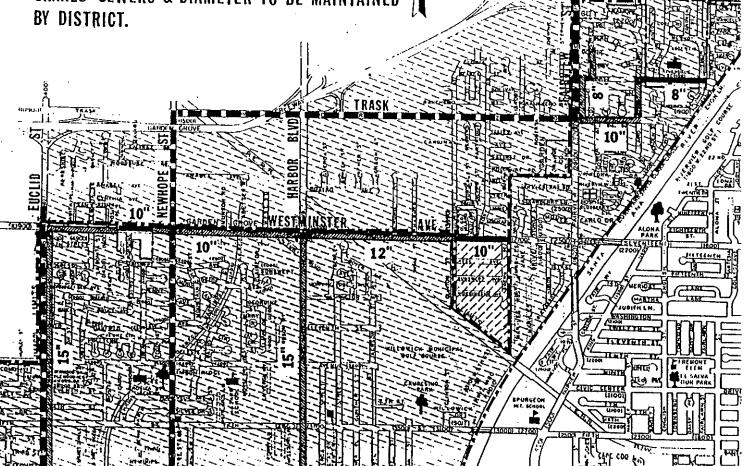
SHARED SEWERS & DIAMETER TO BE MAINTAINED BY CITY.

SHARED SEWERS & DIAMETER TO BE MAINTAINED



ORANGE COUNTY CALÍFORNIA

GARDEN



. 1	EXHIBIT B	•		•
	···		Apportionm of Repair	or
Shared Sewer Location	Sewer Diameter	Located within	Replacemen District	t Cost City
Marty - Lewis to Siemon	8*	District	0.8	100%
Marty - Lewis west to City Boundary	8*	District	44%	56%
Marty - City Boundary west to Laird	8"	City	44%	56%
Marty - Siemon to Lewis	8"	District	0%	100%
Laird - Marty to Trask	10"	City	31%	69%
Trask - Laird to Fairview	10*	. City	28%	72%
Cotter - Downie to Marty	8 ^m	City	67%	33%
Marty - Cotter to Fairview	8 т	City	75%	25%
fairview - Marty to Trask	8 **	City	· 75%	25%
Westminster - Buena to Roxey	10"	District	80	100%
Westminster - Roxey to Clinton	12"	District	37%	63%
Westminster - Clinton to Harper	12"	City	48%	52%
Westminster - Harper to Laurel	12"	City	42%	58%
Westminster - Laurel to Enterprise	12"	City	44%	56%
Westminster - Enterprise to Nautilus	12"	City	48%	52%
Westminster - Nautilus to east of Harbor	12"	City _	51%	49%
. Westminster - East of Harbor to Harbor	12"	City	54%	46%
Harbor - Westminster to Century	y 15*	City	39%	61%
Harbor - Century to Washington	15 " ·	City	36%	64%
Marbor - Washington to Hazard	15*	City	25%	75%

EXH	IB	ΙT	В
			_

		·	Apportionment of Repair of	nt ⁽¹⁾ r
Shared Sewer Location	Sewer Diameter	Located within	Replacement District	Cost City
Edinger - 1950' east to 1620' east of Newhope	. 12"	District	37%	63%
Edinger - 1620' east of Newhope to City Boundary	12"	District	39 %	. 61 <i>%</i>
Edinger - City Boundary to Newhope	12"	City	39%	61%
Edinger - Harmon to Euclid	12"	City	33%	67%

⁽¹⁾ Apportionment based on ultimate average flows per report prepared by Boyle Engineering Corporation for the City of Santa Ana entitled "Addendum to the June 1979 Engineering Report Update on Sewerage Facilities" dated July 27, 1984.

AGREEMENT

FOR

JOINT USE OF SEWERAGE FACILITIES

r	This agreem	ent, made	and ente	red into	this	5th	day	of	
August		19 <u>85</u> ,	between	the City	of Sar	ita Ana,	a muni	cipal	
corporation,	, hereinaft	er referr	ed to as	"CITY",	and the	Garden	Grove	Sanita	ıry
District of	Orange Cou	nty, Cali	fornia, a	sanitar	y distr	cict orga	nized	under	the
Sanitary Dis	strict Act	of 1923,	hereinaft	er refer	red to	as "DIST	RICT".		

WITNESSETH

WHEREAS, Orange County District Reorganization No. 66 will detach approximately 1,000 acres from the DISTRICT, of which approximately 906 acres are located within CITY; and,

WHEREAS, Reorganization No. 66 will transfer to CITY the fixed assets of the detached portion of DISTRICT that are within CITY; and

WHEREAS, said Reorganization provides for DISTRICT to retain capacity rights in certain DISTRICT sewerage facilities to be transferred to CITY which will be needed by DISTRICT to transport wastewater from remaining areas of DISTRICT to the Orange County Sanitation District facilities; and,

WHEREAS, sewers transferred to CITY will remain connected to sewers retained by DISTRICT, and CITY will need capacity rights in these sewers to transport wastewater from the detached area within CITY to downstream portions of the same sewer transferred to CITY; and,

WHEREAS, a report prepared by Boyle Engineering Corporation for the City of Santa Ana entitled "Addendum to the June 1979 Engineering Report Update on Sewerage Facilities" dated July 27, 1984 indicates that certain shared sewers

within CITY or DISTRICT will not have adequate capacity for the wastewater from the planned ultimate development of the areas within DISTRICT and CITY tributary to said certain facilities; and,

WHEREAS, because capacity rights in certain sewerage facilities will be shared by DISTRICT and CITY, it is in the best interests of DISTRICT and CITY to enter into an agreement to provide for the cost sharing of maintenance of sewers in which DISTRICT and CITY will share capacity rights and to provide for funding of the construction of future sewers within CITY or DISTRICT that may be necessary to provide sufficient capacity to transport the combined ultimate wastewater flows from portions of DISTRICT and CITY to the Orange County Sanitation District facilities; and,

NOW, THEREFORE, in consideration of the payments herein provided and the several obligations hereof, the parties agree:

1. Shared Sewers

(a) CITY hereby grants to DISTRICT and DISTRICT hereby grants to CITY capacity rights so long as capacity is available in the shared sewers, the locations of which are shown on Exhibit A attached hereto and described in Exhibit B attached hereto. DISTRICT and CITY agree to use said shared sewers only to transport wastewater from those portions of DISTRICT or CITY within the tributary area as shown on said Exhibit A. The shared sewers, or portions thereof, shall be deemed to be at capacity when the measured peak flow has a depth equal to 75% of the sewer diameter.

When either party determines by field measurements that a portion of a shared sewer is flowing at capacity, as defined herein, they shall immediately notify the other party in writing, setting forth the limits, the measured flow, and the depth of the peak flow.

Upon determination and notification that a sewer is at capacity, both parties shall immediately cease issuance of any additional sewer connection permits to any tributary sewer. The cessation of issuance of sewer connection permits shall continue in force until additional sewer capacity has been constructed as provided for herein.

(b) CITY and DISTRICT agree to maintain their respective portions of the shared sewers as shown on Exhibit A in the same manner and at the same frequency as all other sewers maintained by CITY or DISTRICT.

(c) Replacement or Repair of Shared Sewers

Both parties agree that the shared sewers have a finite life and eventually, due to damage or deterioration, all or portions of the shared sewers may need to be replaced. When either party determines that a portion of a shared sewer within its jurisdiction is in need of major replacement, it shall immediately notify the other party in writing, setting forth a description and schedule of repair or replacement and the estimated cost thereof. Unless the work is required to abate a public health problem it shall be scheduled so that both parties can arrange for financing in the next following fiscal year. Work required to abate a public health problem shall be commenced immediately.

The cost of repair or replacement of each shared line shall be apportioned to each party as set forth in Exhibit B. The total cost shall include engineering, administration and construction expenses. Prior to starting the repair or replacement work, the initiating party shall bill the other party for their apportioned share. The other party shall promptly deposit the billed amount. Upon completion of the work and payment of all costs, the initiating party shall submit a report setting forth all costs incurred together with either a bill, or a refund for the difference between the actual apportioned cost and the deposit.

Any repair or replacement costing less than \$5,000.00 may be done by force account. Repairs or replacements costing in excess of \$5,000.00 shall be subject to a public bidding process.

If, within 30 days after notification, the notified party disagrees with the necessity or estimated cost or apportionment of the cost of the repair or replacement, they shall so notify the other party in writing. If the parties are unable to agree upon the need or cost of the repair or replacement, the matter may be submitted to arbitration as set forth in Section 4.

2. Future Sewers

It is anticipated that, as the tributary area to the shared sewers continues to develop, there will not be adequate capacity, as defined in Section 1, in some of the shared sewers. Exhibit C attached hereto shows the sizes and locations of parallel sewers and relief connections to Orange County Sanitation District facilities that are anticipated will be required in the future to provide capacity for ultimate planned development.

On or before October 1st of each year, each party shall determine whether the shared sewers within their jurisdication have sufficient capacity, as defined in Section 1, to provide service without limiting connections for the next calendar year. If it appears that adequate capacity will not be available, then the parties shall meet and determine within 60 days the size and estimated cost of a parallel relief sewer that, together with the existing sewer, will provide adequate capacity for ultimate planned development within the tributary area. Each party shall provide the estimated ultimate flows for their portion of the tributary area.

The cost of the new parallel sewer, including engineering, administration and construction shall be apportioned between the parties equal to

the ratio that each party's estimated ultimate peak flows bears to the combined ultimate peak flow.

The construction of the new line shall be scheduled to start after the next July 1st in order to permit both parties to budget the required funds.

prior to commencing construction, the party within whose jurisdiction the new sewer will be located shall bill the other party for their apportioned share of the total cost. The other party shall promptly deposit the billed amount. Upon completion of the work, and payment of all costs, the initiating party shall submit a report setting forth all costs incurred together with either a bill or a refund for the difference between the actual apportioned cost and the deposit.

If one of the parties does not finance their apportioned share of the new parallel sewer, or relief connection, or for any other reason declines to participate, then the remaining party at their option may proceed to construct and finance a parallel sewer with capacity only for the tributary area within their jurisdiction. If this option is exercised, then the party choosing not to participate shall immediately cease issuance of sewer connection permits as provided for in Section 1(a). Such cessation of connection permits shall remain in effect until the non-participating party constructs sewer facilities with capacity for added flows from their tributary area or diverts the added flow to non-shared sewers.

3. Modifications

A pumping station in Fountain Valley now discharges sewage into the shared line in Edinger Avenue. In the event that the flow from this pumping station is discharged elsewhere, this agreement shall be modified as necessary to reflect the changed condition.

4. Arbitration

If the parties are unable to agree on the necessity, cost, or apportionment of repair or replacement of shared sewers, the matter may be submitted to arbitration before a 3-man arbitration board in the following manner:

Either party may, within 60 days after the date of the notification of the need for a repair or replacement, appoint one member of said arbitration board, giving notice thereof to the party making the first appointment to said board. The third member shall be appointed by the first two members. All members of said board shall be registered Civil Engineers in the State of California.

5. Notice

Any notice hereunder shall conclusively be deemed to have been given upon the date it is enclosed in a sealed envelope addressed to the party to whom intended at the following address:

If to the CITY:

City of Santa Ana

Chief Engineer
Utilities Agency

If to the DISTRICT:

Garden Grove Sanitary District

Attention: President, Board of Directors

6. Termination

The term of this agreement shall commence upon approval and execution of this document by both parties, and shall continue for so long as is necessary to carry out the purposes of this agreement.

This agreement may be terminated or amended at any time by the consent of both parties.

IN WITNESS WHEREOF, the parties hereto have caused this Agreement to be executed by their respective officers, duly authorized, the provisions of which Agreement are effective as of the date first above written.

	CITY OF SANTA ANA,
•	A Municipal Corporation
ATTEST:	Ву
By City Clerk	Mayor .
APPROVED AS TO FORM:	
By Attorney APPROVED AS TO CONTENT: By City Manager	GARDEN GROVE SANITARY DISTRICT, a Sanitary District By Add Manie Chairman
ATTEST:	·
B. Secretary	
APPROVED AS TO FORM:	
1 1 1	

EXHIBIT B

,	EVHIDIL D			•
	Sewer	Located .	Apportionm of Repair Replacemer District	or
Shared Sewer Location	Diameter	within_	DISTIFICE	CILY
Marty - Lewis to Siemon	8 ^H	District	0%	100%
Marty - Lewis west to City Boundary	8"	District	44%	56%
Marty - City Boundary west to Laird	8" '	City	44%	56%
Marty - Siemon to Lewis	8 ;	District	0.8	100%
Laird - Marty to Trask	10"	City	31%	. 69%
Trask - Laird to Fairview	10"	City	28%	72%
Cotter - Downie to Marty	8 "	City	67%	33%
Marty - Cotter to Fairview	8 n	City	75%	.25%
Fairview - Marty to Trask	8"	City	75%	25%
Westminster - Buena to Roxey	10"	District	0.8	100%
Westminster - Roxey to Clinton	12"	District	37%	63%
Westminster - Clinton to Harper	12"	City	48%	52%
Westminster - Harper to Laurel	12"	City	42%	58%
Westminster - Laurel to Enterprise	12"	City	44%	56%
Westminster - Enterprise to Nautilus	12"	City	48%	52%
Westminster - Nautilus to east of Harbor	12"	City	√ 51%	49%
Westminster - East of Harbor to Harbor	12"	City	5 4 %	46%
Harbor - Westminster to Centur	y 15"	City	398	61%
Harbor - Century to Washington	15"	City	36%	64%
Harbor - Washington to Hazard	15" .	City	25%	75%
•				•

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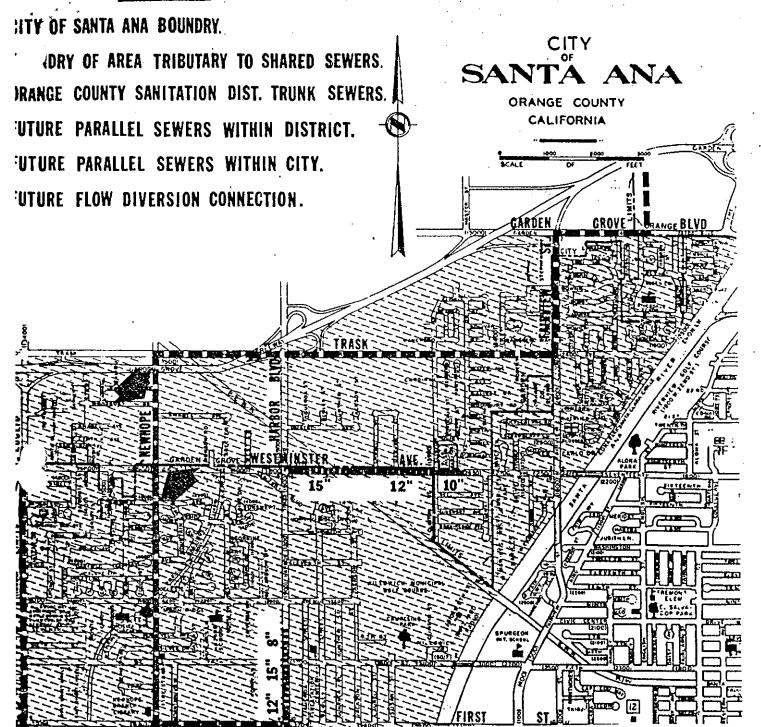
•	Sewer	Located	Apportionment of Repair on Replacement	Ç
Shared Sewer Location	Diameter	within	District	City
Harbor - Hazard to 5th	15 "	City	23%	77%
Harbor - 5th'to 1st	15"	City	22%	78%
Harbor - Edinger to City Boundary	10"	District	. 0%	100%
Westminster - East of Newhope	10"	City	75%	25%
Westminster - East of Newhope to Newhope	10"	City	7.4%	26%
Westminster - Newhope west to City Boundary	10"	City	76%	24%
Westminster - City Boundary to Parsons	10"	District	78%	22%
Westminster - Parsons west to City Boundary	10 " .	District	79%	21%
Westminster - City Boundary to Rosita	10"	City .	79%	21%
Westminster - Rosita to La Bonita	10"	City	79%	21%
Westminster - La Bonita to Anita	10"	City	80%	. 20%
Westminster - Anita to Euclid	10"	City	92%	.88
Euclid - Westminster to Juarez	15"	City	91%	9%
Euclid - Juarez to Hazard	15"	City	. 83%	17%
Euclid - Hazard to 5th	15"	City	678	33%
Euclid - 5th to 1st	15*	City	62%	38%
Edinger - Harbor to 2280' east of Newhope	12"	District	35%	65%
Edinger - 2280' east to 1950' east of Newhope	12"	District	36%	64%
		•		

EXHIBIT B

•	* 1;		Apportionm of Repair	ent ⁽¹⁾ or
Shared Sewer Location	Sewer <u>Diameter</u>	Located within	Replacemen District	
Edinger - 1950' east to 1620' east of Newhope	. 12"	District	. 37%	63%
Edinger - 1620' east of Newhope to City Boundary	12"	District	398	6j&
Edinger - City Boundary to Newhope	12"	City	39%	61%
Edinger - Harmon to Euclid	12"	City	33%	67%

⁽¹⁾ Apportionment based on ultimate average flows per report prepared by Boyle Engineering Corporation for the City of Santa Ana entitled "Addendum to the June 1979 Engineering Report Update on Sewerage Facilities" dated July 27, 1984.

· LEGEND ·



AGREEMENT

This Agreement is entered into this 12th day of January 1988, by and between the CITY OF STANTON, hereinafter referred to as "City", a municipal corporation and GARDEN GROVE SANITARY DISTRICT, hereinafter referred to as "GGSD", a special district of the State of California.

RECITALS

WHEREAS, the boundaries of the territory of the STANTON
COUNTY WATER DISTRICT ("SCWD") include territory in the City of
Stanton, the City of Garden Grove and a small portion of County
of Orange territory along Knott Avenue, hereinafter referred
to as the "KNOTT area"); and

WHEREAS, The City of Stanton is in the process of detaching all of the territory of the STANTON COUNTY WATER DISTRICT located within the boundaries of the CITY OF STANTON and all of the territory of the GGSD lying within the boundaries of the CITY OF STANTON; and

WHEREAS, said detachment will eliminate virtually all of the territory served by the SCWD except for an area of approximately 99 acres located in the CITY OF GARDEN GROVE lying south of Katella Avenue and east of Dale Avenue as shown on the Map attached hereto marked "Exhibit A" ("the 99 acres"); and

WHEREAS, it is not feasible for SCWD to remain in existence for the purpose of serving such a small area, and

WHEREAS, it is not feasible for the CITY OF STANTON to serve the 99 acre area, and

WHEREAS, GGSD has commenced proceedings to annex the 99 acres into its district boundaries on the basis that the CITY OF STANTON will compensate the GGSD as provided herein; and

WHEREAS, GGSD did commence said annexation in reliance upon said compensation agreement; and

WHEREAS, the reason for the CITY'S agreement to compensate GGSD is that there are no tax revenues flowing from the 99 acre area to support the services to be rendered and GGSD cannot afford to undertake the maintenance and service obligation without additional funds; and

WHEREAS, it would be unreasonable burden upon GGSD to undertake to service said territory without adequate revenues to pay for service.

NOW, THEREFORE, IT IS AGREED AS FOLLOWS:

- 1. The obligations and responsibilities of this agreement shall become effective only if the CITY OF STANTON's detachment proceeding is successfully concluded and only if the GARDEN GROVE SANITARY DISTRICT annexation of territory is also successfully concluded.
- 2. Upon successful completion thereof, the parties agree to proceed as follows:
- a. The CITY shall clean or arrange for the cleaning of all of the lines within the 99 ACRES within three months prior to the date of commencement of service by GGSD.
- b. The parties shall cooperate to complete the transfer of assets from SCWD to CITY and to GGSD in a manner such that GGSD shall receive four and two-thirds percent (4-2/3%) of the

total assets of the SCWD.

- c. At such time as the assets of SCWD are transferred to CITY and to GGSD, CITY shall also either transfer the sum of \$35,000.00 in cash to GGSD or commence payment of the sum of \$428.50 per month on the first day of each and every month for a term of 120 consecutive months.
- d. All manholes in the 99 Acre area shall be brought up to grade or payment of a sum sufficient to cause the same to be done shall be made by CITY to SCWD.
- 3. Immediately after execution of this agreement the parties shall complete discussions and negotiations and prepare an agreement with respect to sewer capacity rights in the lines currently under the jurisdiction of each party.

CITY OF STANTON

BY Murcha Weishaup &

GARDEN GROVE SANITARY DIST.

PRESIDENT

SECRETARY

ATTEST:

CITY CLERK

Block 5947 Mpdp/e 74,75 83,84,85, 93,94,95

EXHIBIT A

LEGAL DESCRIPTION REORGANIZATION 101 GARDEN GROVE SANITARY DISTRICT

(Detachment of territory from the Stanton County Water District and Annexation of same to the Garden Grove Sanitary District)

That portion of the Northeast Quarter of Section 25, Township 4 South, Range II West, as shown on a map recorded in Book 51, Page II of Miscelloneous Maps, Records of the County of Orange, State of California, in the City of Garden Grove, of said county, more particularily described as follows:

Beginning at a point in the existing boundary line of the Garden Grove Sanitary District as established by "Engineers No. 656-59", said point being the Southwest corner of said "Engineers No. 656-59", said point also being the intersection of the centerline of Orangewood Avenue with the centerline of Magnolia Street, as shown on a map of Tract No. 3342, recorded in Book 113, pages 15 and 16, of Miscellaneous Maps, in the office of the County Recorder of said County and State;

Thence leaving said existing boundary line, North 89°55'50" West along said centerline of Orangewood Avenue, also being the boundary line of the Stanton County Water district a distance of 308.83 feet to the Northeasterly line of the Pacific Electric Railway Right of Way (100.00 feet wide) as shown on said map of Tract No. 3342;

Thence North 53°18'20" West along said Northeasterly line and along said boundary line a distance of 2998.88 feet to the Westerly right-of way line of Dale Street, also being the boundary line of the City of Garden Grove, as established by Northwest Annexation No. 1 to the City of Garden Grove.

Thence North 00° 32'15" West along said boundary line of the City of Garden Grove a distance of 919.17 to the Northerly right-of-way line of Katella Avenue, also being the Northerly boundary line of the City of Garden Grove.

Thence North 89°14'45" East along said boundary line a distance of 1329.28 feet to a point in said existing boundary line of the Garden Grove Sanitary District, as established by "Engineers No. 244", said point being in the Westerly line of said "Engineers No. 244";

Thence South 00° 12'02" West along said existing boundary line a distance of 40.00 feet to the Southwest Corner of said Engineers No. 244

Thence North 89°14'45" East along said existing boundary line and said centerline of Katella Avenue a distance of 246.09 age 382 of 614 angle point in said existing boundary line;

EXHIBIT A

LEGAL DESCRIPTION
REORGANIZATION 101
GARDEN GROVE SANITARY DISTRICT
(Detachment of Territory from Stanton County Water District and Annexation of same to Garden Grove Sanitary District)

Thence leaving said existing boundary line North 89° 14'45" East along said centerline of Katella Avenue a distance of 98.86 feet to a point in said existing boundary line as established by said "Engineers No. 244", said point being distant North 89' 14' 45" East 344.86 feet from the Southwest corner of said "Engineers No. 244";

Thence continuing along said existing boundary line as established by said "Engineer's No. 244", "Engineers No. 790" and Engineers No. 969-62" the following courses:

North 89°14'45" East a distance of 491.98 feet to the Southeast corner of said "Engineers No. 790";

South 00°46'50" West a distance of 330.00 feet to the Southwest corner of said "Engineers No. 969-62";

Thence leaving said existing boundary line, continuing South 00 46'50" West along said Stanton County Water District boundary a distance of 170.00 feet;

Thence North 89°14'45" East along said boundary a distance of 234.46 feet to an angle point in said existing boundary line of the Garden Grove Sanitary District as established by "Engineers No. 1062-63", said point being the Northwest corner of said "Engineers No. 1062-63";

Thence along said existing boundary line as established by said "Engineers No. 1062-63", "Engineers No. 210", "Engineers No. 394" and "Engineers No. 294" the following courses:

South 00° 46'50" East a distance of 174.00 feet;

North 89° 24'16" East a distance of 279.94 feet;

South 00° 46'50" East a distance of 270.78 feet;

South 89° 33'46" West a distance of 540.00 feet;

South 00° 46'50" East a distance of 764.00 feet;

North 89° 33' 46" East a distance of 540.01 feet;

South 00'46'50" East a distance of 210.78 feet to an angle point in said existing boundary line, said point being distant South 00'46'50" East 434.16 feet from the Northwest corner of said "Engineers No. 294";

EXHIBIT A

LEGAL DESCRIPTION REORGANIZATION 101 GARDEN GROVE SANITARY DISTRICT

(Detachment of territory from the Stanton County Water District and Annexation of same to the Garden Grove Sanitary District)

Thence leaving said existing boundary line, continuing South 00°46'50" East along the centerline of Magnolia Street a distance of 100.00 feet to a point in said existing boundary line as established by "Engineers No. 1197-65", said point being the Northwest corner of said "Engineers No. 1197-65";

Thence continuing South 00°46'50" East along said existing boundary line as established by said "Engineers No. 1197-65", "Engineers No. 965-62" and "Engineers No. 656-59" a distance of 635.00 feet to the Point of Beginning.

The above described land contains 99.85 acres, more or less and is contiguous to the existing Garden Grove Sanitary District boundary.

All as more particularly shown on a map designated as "Exhibit B", attached hereto and by reference made a part hereof.

Prepared by:

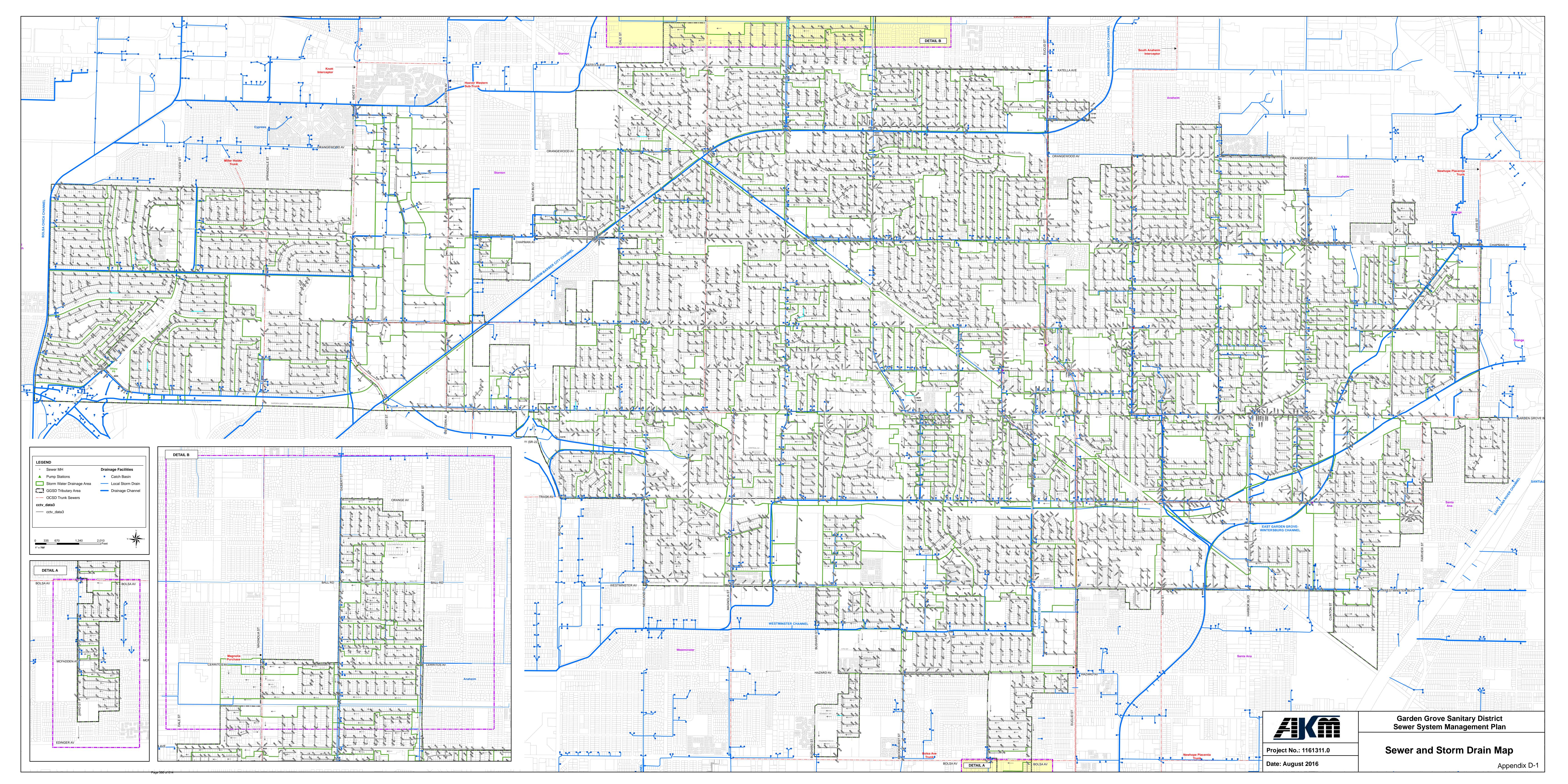
BSI CONSULTANTS, INC.

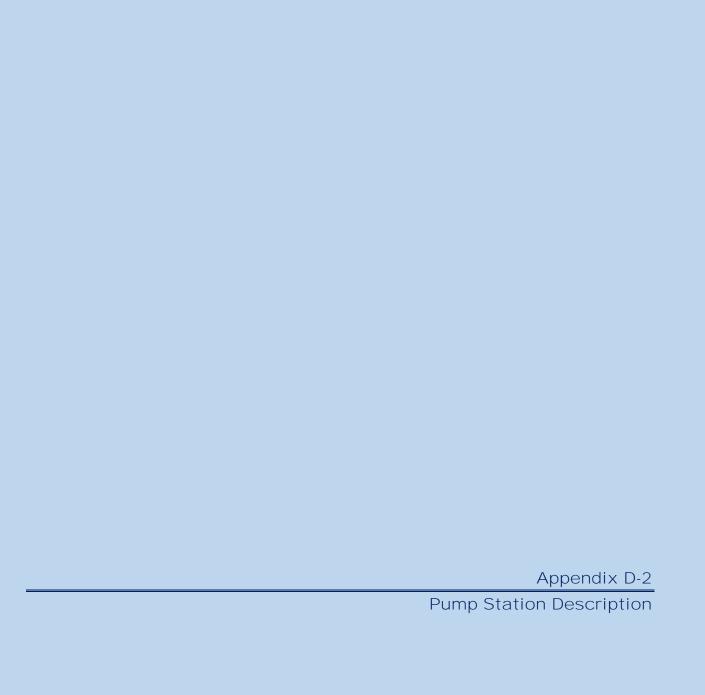
J. Thomas Baine J. Thomas Baine, RCE 15795

This proposal does meet the approval of the Orange County Surveyors Office C.R. Nelson, County Surveyor

By:







APPENDIX D-2

PUMP STATION DESCRIPTION

D2-1 Belgrave Pump Station

The Belgrave Sewage Pump Station is submersible pump station located adjacent to and behind 5856 Belgrave Avenue, Garden Grove, CA. The pump station is located within a Montessori school parking lot, just north of Belgrave Channel, an Orange County Flood Control District facility. The station was originally constructed in the early 1960's by the Midway City Sanitary District and upgraded/rebuilt in 2013 by the Garden Grove Sanitary District. The ground elevation at the pump station site is 29.0 ft amsl.

Belgrave Pump Station serves a 277.8 acre tributary area consisting of mostly low density residential, as well as some medium density, community residential, and light commercial areas.

Pumps

Belgrave Pump Station has two (2) WEMCO Hydrostal submersible pumps (Model F6K-M) with screw-centrifugal impellers. The pumps are driven by 60 HP motors. Per the certified pump testing curves, the pump deliver 1,400 gpm at a total dynamic head of 86 to 89 feet when operating at 1750 rpm. The Garden Grove Sanitary District has an identical spare pump, which can be installed at the facility if one pump has to be removed for service.

Wet Well

The wet well is a reinforced concrete, T-Lock lined rectangular structure with dimensions 7' by 11.17', and 19.83' high. The bottom of the structure is located at elevation 8.0 ft. amsl.

Forcemain

The wastewater tributary to the Belgrave Pump Station is pumped through approximately 3,700 ft of 12 inch diameter DR 14 PVC forcemain piping. The forcemain was constructed in 1999. It extends from the south side of the dry well, towards the Belgrave Channel, and east along the north side of the channel past Valley View, to the OCSD's Miller-Holder Trunk Sewer located in Springdale Street.

D2-2 Tiffany Pump Station

The Tiffany Sewage Pump Station is submersible pump station located at 12775 Valley View St. Garden Grove, CA. It has a ground surface elevation of 24.74 ft amsl. The station sits at the southwest corner of an office complex parking lot located on the south west corner of Valley View St and Tiffany Ave. The station was originally constructed in the early 1960's by the Midway City Sanitary District and transferred to the Garden Grove Sanitary District in 1997. The Garden Grove Sanitary District constructed the new Tiffany Pump Station in 2010.

Tiffany Pump Station serves a 222.2 acre tributary area consisting of mostly low density residential with some light commercial areas.

Pumps

Tiffany Pump Station has two (2) WEMCO Hydrostal submersible pumps (Model F6K-H) with screw-centrifugal impellers. The pumps are driven by 75 HP motors. Per the certified pump curves, the pumps deliver 1,560 gpm at a total dynamic head of 104 feet when operating at 1785 rpm.

Wet Well

The wet well is a reinforced concrete, T-Lock lined rectangular structure with overall inside dimensions of 19.67' wide, 29' long, and 29' high at the operational wet well. The bottom elevation is -5.26 ft. amsl. The wet well is divided onto an operational storage section which is 12' long, and an emergency storage section which is 16' long. The emergency storage is separated from the pump operational storage by a 1' thick and 7' high weir structure (top elevation of 8.21 feet amsl).

Forcemain

The wastewater tributary to the Tiffany Pump Station is pumped through approximately 5,370 ft of 12 inch diameter PVC pipe. The forcemain extends from the north-east side of the dry well. It then extends south-east on the north side of the Garden Grove Freeway off ramp at Valley View Street, and east on the north side of the Garden Grove Freeway to the OCSD's Miller-Holder Trunk Sewer located in Springdale Street.

D2-3 Partridge Pump Station

The Partridge Sewage Pump Station is submersible facility located to the east of Partridge Street cul-de-sac north of the Thunderbird Mobile home Park, south of Garden Grove Boulevard. The station was completed in 2010.

Tiffany Pump Station serves a 14.0 acre tributary area consisting of mostly low medium density residential, office professional, and open space.

Pumps

Partridge Pump Station has two submersible pumps with 120 gpm capacity at 17' total dynamic head.

Wet Well

The wet will is an 8-foot diameter precast concrete structure that is 19.75' tall. The bottom elevation is 88 feet amsl.

Forcemain

The wastewater tributary to the Partridge Pump Station is pumped through approximately 410 ft of 4 inch diameter PVC forcemain. The forcemain extends north from the pump station along Partridge Street to the gravity sewer at Partridge and Garden Grove Boulevard.

Appendix D-3
CCTV Database

			i o Ž	۶			General		era O	Θ	Pipe	•						Structura	I Defect Co	oding	bed Sed Pipe	e &	Failure	uct Rating	Defect Scor				Operati	tional and Mai	ntenance				int Rating	3 Score		Construction	on Features		aneons	in Features rey Aband.	andoned
Phase Priority Ranking	Contractor Tape No.	DVD No. Inspection No.	Reversal DVD NA	Location Location		Existing MH II	D Previous	s MH ID	Direction of Cam Existing Sewer II	Previous Sewer	Size (in) Material	Joint Length (ft)	GIS Comment Length (ft)	CCTV Length (ft)	Crack C	Frac F	ture Bi	oken Hole B H	0	Joint J S L S M L	X Collaps	Surfac Damaç	LLining Regs Regs	PACP Quick Str.	Total Structural E		Deposits D AE L % Z	Other		Roots (R) Medium (M)	Ball (B)	 ~	eacles Vermin	PACP Quick Mai	Total O&M Defec	Tap (Lateral	I) Line	LD RD SRH	Material IS	M SA CU M	ন Total Constructio	147 198
2 1_Severe 1		R030 12		Y 8TH ST	9/21/2005	11416 1141	5 MHP110031	MHP110030	J/S 5269	SPP110017	6 VCP		120	18.7	1		1							2	. 6						1				1	4					1		18.7 BROKEN PIPE (SV). 18.7 MSA = BROKEN PIPE. SOIL & ROOTS IN BROKEN PIPE, POSSIBLY ABANDONED
3 1_Severe 1	РРТ	53 22		Y LEWIS			7 MHU130017						271	272			1							1	5 5.00										0	0 0.00							Repeat inspection, DVD 19 - Spot repair at 120.40 ft BSV, 162.0 ft JOM 46.4' MSA (JOM). 46.4' BVV &
5 1_Severe 1	PPT	MAP 3-B3-3 30		Y TAFT STREET	8/21/2012	12282 1179	MHO140001	MHP140029	U/S 4333	SPO140030	6 VCP		350	46.4	1 1			1	1		1			5232 5	i 17 3.40		1	11							2A00 11	22 2.00					1 2	2 10	after BVV Possible Collapsed Pipe(Pipe plugged with broken pipe materials), Severe Defect: No Reversal Video Collapsed Pipe Aft to end of the Collapsed Pipe
1 1_Severe 2 2 1_Severe 2		12 G003 3 28 33		x Grove Blvd. Y WASCO DR			4 MHK060005		J/S 1887	SPK060027			63 160 325	63 174.8						1					5 5.00	2	15	9 5.00						2	23			1			1 1	L	Replace pipe 152.5' JOL (D/SH) JOL
3 1_Severe 2	PPT	28 33 MAP		Y EASY	7/27/2007	9801 1066	89 MHO080039	MHO090018	D/S 5209	SP0080043	8 VCP		325	314	1	1	1		1					4	12 3.00										0	0 0.00							Replace from 260 ft to 314 ft 336.4' & 506' BSV, 508.1 BVV, 510.9' JOL (D/SL), 160' to 166' Deformed Pipe Horizontal. Too many Cracks & Fractures (7 to 234' 160' to 166' & 506' to 510.9', Patch
5 1_Severe 2 1 1_Severe 3	PPT 45	3-3 3		Y EUCLID STREI 10242 Garden x Grove Blvd.	FT 7/27/2012 4/30/2004	11787 1176	MHO100002 MHN130006	MHO110001 MHN130007			8 VCP	3	535 381	537.9 1 381 1	26 48	6 3	2 2 2	1 5	2 .	1	2		39	544E 12	5 5.00	3	10	06	48			1		8	412U 180	362 2.01 8 0.62	1	5 8 6	1 2		6	2	& 340' to 420' DSZ. Severe Defect Repair @ 336.4 . Reline Pipe Replace pipe 3' & 26.5' MSA =DAGS, HEAVY
2 1_Severe 3		G058 7	G058 8	Y VOLKWOOD S			MHS100007	MHS110009	D/S	SPS110006	8 VCP		92	91.5		1			++					1	2	17	1 35.00		5		1				24	44					2		GREASE AT 26.5, NO INSPECTION 3 TO 26.5' 173.4' MSA (DAE). End of the Sewer Line. 157.2' DH. Severe Replace Pipe 155' to 161' and
5 1_Severe 3	PPT	1-2 7		Y STREET	7/19/2012	8331 8332	2 MHG100010	MHG110005	D/S 1126	SPG100014	8 Tile		177	173.4			1	1			1			5241 3	14 4.67	15 10									2D00 25	50 2.00					1		Defect Clean Deposits 103.2' BVV & 106.8' BSV & Deformed Horizontal Pipe
5 1_Severe 4 1 1_Severe 5	PPT 45	MAP 2 July- 4 5	MAP 2 July- 4 4	LAMPSON Y AVENUE Garden Grove x BI./Rosewood E		8687 8688	8 MHK110039 MHN130007	MHK110040 MHN130008			8 VCP	3	240	201.7	2		1 1	1 2			1			5341 4	19 4.75	16		9	1					1	2911 10	19 1.90 28 1.62					2		103.8 to 106.8" MSA (BVV). Sewere Defect Inspection Completed Replace Pipe 103.2" to 109.8" Replace Pipe
5 1_Severe 5	PPT	MAP 2-1-3 5		Y FLETCHER DR	7/12/2012	10692 1132	25 MHN110029	MHN120021	D/S 2627	SPN110036	8 VCP		330	355.5 1	1		4 1	1			1			5344 g	34 3.78		3	30	3 1		1			1	2E14 36	67 1.86							346.4' & 350.6 BVV, 346.6' BSV, 347' Deformed Horizontal Pipe. Severe Defect Replace Pipe 185' to 188'(FM) & 338' to 354'
5 1_Severe 6	PPT	MAP 4-B1-2 4		Y NOTTINGHAM	AVE 9/10/2012	7315 7316	6 MHO220027	MHO220028	D/S 158	SPO220027	8 VCP		269	349			2	2	1	1	1		24	5342 3	1 76 2.45			0							0000 0	0 0.00							313' & 315.7' BVV, 313.9' Deformed Pipe. Severe Defect. Inspection Report shows 16.9' JOL. It was JOM & we changed it. Replace Pipe 311' to 317'
5 1_Severe 7 2 1_Severe 8	PPT	Map 2 B1 7 S006 5		Y D ESTE DR		9349 9348	8 MHM020014 MHS110013	MHM020041 MHS120024		SPM020034 SPS110011			147 291		1		1		3	1	1	1	1 2		18 2.57	9	26	6 5.00						1	0000	127							148' Deformed Vertical Pipe. Severe Defect. U/S MH is CO. Replace Pipe 148' to 152' 3.3' JOL (D/SL)
5 1_Severe 8	PPT	Map 1 May 2		BELGRAVE Y AVENUE		7348 7349	9 MHG090043						284		4	23 4 1	7 23 1	1						524G		54		5.50							2100	127	1						140.3' BVV & 269.8' BSV. Continuous Fractures & Cracks. Severe Defect Replace Or Reline Pipe
5 1_Severe 9 5 1_Severe 10	PPT PPT	MAP 1 14 MAP 3-B5 10		CHAPMAN Y AVENUE HAVENWOOD Y DRIVE			8 MHG090016 11 MHP140012						325 295	326 292 1	4	2 9	0 1 2	1	1						7 387 3.99 3 49 3.77		4	18	5	1	2			6	3221 14 2H19 57	19 1.36 108 1.89		1					24.4 HVV, 127 & 213' BVV. Continuous FM. Severe Defect 130' , 210' to 216' & Reline all pipe. 33.1' & 93.5' BSV, 244.2' BVV. Severe Defect 246' 246'
5 1_Severe 11	PPT	June Map 2 B1 15		Y HEDLUND DR	6/7/2012	8345 8343	3 MHM030023	MHM030008	D/S 3610	SPM030026	8 VCP		330	332.3 14	8 6	1	1	1 1	1					5243										1	1100								303.3' HSV & 306.4' BVV . Severe Defect 7.7.2' BSV & 358' JOL (D/SL) at Material Change Point. Severe Replace Pipe 300' to 309' 7.7.2' BSV & 358' JOL (D/SL) at Material Change Point. Severe Replace Pipe 27' to 30'to BSV. Fix
5 1_Severe 12	PPT	3-B3-1 20		Y AVENUE		11764 1176	MHP110014	MHP110015	D/S 4408	SPP110039	8 Tile		230	413.8 3	5 1		2 1		1	1				5242 13	3 32 2.46	115		0							2W00 115	230 2.00					2	2	Defect or Replace JOL @ 358'
5 1_Severe 13	PPT	MAP 4-B2-3 9 MAP		Y BOULEVARD	9/28/2012		03 MHP170003				Clay				4 16	1 1	4	1	1 1	1				5244 38	8 108 2.84	2			1						2311 4	8 2.00	1						188.6',192.9' and 235.5 plugged with over 50% Deposits. 253' JOL (D/SL) at Material Change
5 1_Severe 14 5 1_Severe 15	PPT	3-5 15 MAP 3-6 1		Y GARY STREET Y 9TH STREET			MHO080035 MHP110026				Clav		277 312		5	1 1	1 1	1		1					4 42 3.00	35 12	1	14	2					7	2F11 36 2619 35	74 2.06 61 1.74		1			2	2	Point. 267.3' BVV . Severe Defect Replace Pipe 253 to 271 46.7' BVV, 216.6' BSV. Severe Replace Pipe 42' to 47' & 215.9' to Defect. @ 107.7' Unmapped MH 221"
5 1_Severe 16	PPT	MAP 3-B3-3 22		NUTWOOD Y STREET	8/22/2012	11241 1114	3 MHN110035	MHN110036	D/S 2378	SPN110002	8 VCP		55	94.9 1		1	1	1		1				5241 5	18 3.60	25									2D00 25	50 2.00					1 1	1	94.9 MSA (HIGH WATER LEVEL.POSSIBLE OFFSET),76.1 Pipe ID is not correct. Ask City, JOL (D/SL) 72.4 Small BVV. Severe Defect. No Reversal Video @76.1 at Material Changing Point
5 1_Severe 17	PPT	MAP 3-B3-3 22		NUTWOOD Y STREET	8/22/2012	11241 1114	I3 MHN110036	MHN110037	D/S 2379	SPN110003	8 VCP		100	949 4										5241	18 3.60	25									2D00 25	50 200							Multiple reaches were evaluated with one inspection. 94.9 MSA (HIGH WATER LEVEL. POSSIBLE OFFSET), 76.1 JOL (D/SL) 72.4 Small BVV. Severe Defect. No Reversal Vive. Severe Defect. No 26.76 L1 Waterial Changing Point 97.6 L1 Waterial Changing Point
3 1_36466 17		3-63-3 22		TOTREET	8/22/2012	11241	S WI INT 10030	WII II V 1 10037	2318	311110003	o ver		100	34.3		1	1	1		1				3241 5	18 3.60	25									2500 25	50 2.00					1 1	1	Multiple reaches were evaluated with one inspection. 9.7' JOL
5 1_Severe 18	PPT	MAP 3-6 14		WESTLAKE Y STREET	7/27/2012	12328 1232	7 MHO110024	MHO110023	J/S 4932	SPO110014	Clay 8 Tile		360	243.4 1			1	1		1			1 55	5242 60	0 128 2.13				4						1400 4	4 1.00					1 2	2	(D/SH) at Material Change Point & 241.7 BVV. 3 Times SAG. Severe Defect. No Reversal Video 242'
5 1_Severe 19	PPT	MAP 3-B3-2 7		Y TAFT STREET	8/20/2012	12277 1227	9 MHO130010	MHO130012	D/S 3836	SPO130010	8 VCP		140	134.8 3	2 19	1	1	2	\square					5241 28	8 82 2.93			3							5123 4	12 3.00	1						21.7' & 112' Small BVV. Severe Replace Pipe19' to 24' & Patch Repair @ 112'
5 1_Severe 20	PPT	MAP 3-3 4		Y EUCLID STRE	T 7/27/2012	11787 1178	MHO100002	MHO100001	U/S 5118	SPO100001	8 VCP		535	539	4 6		7		2	1			38	5147 58	8 137 2.36		2	24	1 26		1	3			4331 85	210 2.47		8 11 9	1 1				173.3' JOL (D/SH). Alignments & Sags. Severe Defect. After 462', Looks Like Abandoned pipe Should Replace All Pipe
5 1_Severe 21	PPT	MAP 4-B1-3 12		Y BALLAST AVE	9/11/2012	7319 7320	0 MHO230008	MHO230009	D/S 161	SPO230020	8 VCP		170	169.1						1			1	5121 2	7 3.50										2100 1	2 2.00		1					167.4' JOL (D/SH). Severe Defect Replace Pipe 163' to 168' 2' JOL (D/SL) at Material Changing
5 1_Severe 22	PPT	MAP 3-5 9		STANFORD Y AVENUE	7/26/2012	11832 1183	MHO120004	MHO120007	D/S 5395	SPO120003	Clay 8 Tile		460	473.5 1	5 41	1 3 3	11		1 1	1 1		24		514E 10	9 321 2.94	150									2Z00 ₁₅₀	300 2.00					2	2	Point. Too Many Cracks & Fractures also Deposits. Severe Defect Replace Pipe 2' to 15.4', Reline Pipe and Clean Deposits
5 1_Severe 23	PPT	2 July- 4 13 June		Y COVEY	6/26/2012	9623 1026	MHM080037	MHM090014	D/S 5042	SPM080033	8 Tile		312	310.7 16	2 20	2 2 3	3			1				514E 76	6 249 3.28			5						1	2512 6	13 2.17		1					243.4 JOL (D/SL). Too many Fractures & Cracks. Severe Defect Reline Pipe
5 1_Severe 24	PPT	Map 2 B1 64		Y HOMEWAY DR	IVE 6/13/2012	10836 1084	MHL060030	MHL060036	D/S 5230	SPL060035	8 VCP		330	323.4 5	8 15	2	1 1	\square	1	1	+ + +		+	5144 34	4 93 2.74	4								8	2418 12	16 1.33	+						317' JOL (D/SL). Severe Defect Replace Pipe 317' to 321.5'
5 1_Severe 25	PPT	MAP 3-B3-3 29		Y TAFT STREET	8/21/2012	12295 1229	MHO140020	MHO140019	J/S 3941	SPO140006	8 VCP		145	217.9 5	9 35	2				1				5149 6	1 171 2.80			36							2F00 36	72 2 00						2	60.7' JOL (D/SL). Severe Defect. Unmarked MH @139.2'. Inspection Report Camera Direction was U/S, but it was D/S & we changed it. Replace Pipe 60.7' to 68.3'
		MAP 3-B5 15	1 1	NUTWOOD Y STREET			MHN110039								1 4		2			1					28 3.11	109		0							2000 109						2	2	90.8' JOL (D/SL) @ Material Changing Point . Severe Defect Replace Pipe 90.8' to 112'
5 1_Severe 27 5 1_Severe 28	PPT PPT	MAP 3-5 6 MAP 2-1-1 4		Y ACACIA AVEN BROOKHURST Y STREET			MHO120023 3 MHM090003								4 43 4 38	1 1	1 2			1					3 195 3.10 3 152 2.87	62								2	2K12 64 2500 6	126 1.97 12 2.00		1			2	2	73.1 JOL (D/SL) at Material change point. Too Much Fractures & Cracks 4 Lateral (73.02.6), 199.1 & 232.21 have 55 % Grease, Replace Pipe 73.1 to 78.6°. Reline Severe Defect 263.3 JOL (D/SL) & Cracks. Replace Pipe 263.3 to 265.6° & Reline all Line

				General							Struct	ural Defect Codin	na	1 - 1	181		Operational	and Maintenance				ı	Construction Features	s	1 %	2 T ti T	
	9			Concre	g	Pi	ре				- Cudos	did Bolok Godin	pa dd Po	apair t Rating	afects afect So	ndex	Оролинония	ara marionario			t Rating		OUTGITUDIOT F CALAIC	<u> </u>	neous Feature	y Aband	
	No. Tape No. OVD No. Spec. P. Trocat	ion	Existi	ting MH ID Previous MH ID	f Camer	ewer ID	th (ft)	gth (ft)	Crack	Fracture	Broken Ho	nle .lo	Deforme Collapse Surface Damage	Sags Sags	tural De	To Deposits		Roots (R)		Infiltration Obstacles	CK Main I Defects	Tan (Lateral)	Line	Intruding Seal Material	Miscella	or Surve	
ase ority nking	D No. D No. versal Ir	on .	Exion	ang milita	ection o	e (in)	nt Lengl	ogth (ft)	C	F	B I	0	D X	WL &	al Struc	AE AE Other		ap (T) Medium (M) Ball (B	Inhitration Obstacles I OB Other	M Pe % % %	Tap (Lateral)	L	IS	al Cons	asons fo	
Co Ra Pri	MAP	lame CCTV	Date Start	t End Start End	EX Dir	Pre Siz	918	CO Fe	L C M S	H L C M S	H SV VV SV	VV S M L S	SMLAVHP S LI	RP S ₫	<u> </u>	AGS B % L % Z % E	3 L J C B	L J C B L J	CBLJ	C G D R W C Z %	C R 4 10 10 80	FD FL BI BD	D L U R LD RD S	SRH SRB SRL Z SA	A CU MC P	- 8 S	Comments Recommendations 313.9' MSA (JOL). 311.4' JOL.
5 1_Severe 29 PPT	3-B2-4 15 Y FREDRICK			5 12539 MHP090017 MHP090001				330 313.9	2			2 1		5134	5 17 3	3.40 80					2 2012 82 162 1.98			1	1		Same Inspection Map 3-B3-3 # 18. Use this one & delete other. Replace Pipe @ 311.4 to next joint
5 1_Severe 30 PPT	2-1-4 13 Y SEACRES	DRIVE 7/17/2	2012 9866	6 9867 MHN080024 MHN080025	D/S 5880	SPN080024 8 VCP		245 247.8	3 4			2 1		5136	10 26 2	2.60 13					2A00 13 26 2.00						5' JOL (D/SL). Severe Defect Replace Pipe 5' to 7'
5 1_Severe 31 PPT		E 10/3/2	2012 7434	4 7435 MHR140019 MHR140020	D/S 421	SPR140021 10 VCP		46 70.5	2			1 1		5133	4 14 3	3.50 18				0	2B00 18 36 2.00						18.4' JOL (D/SL). Severe Defect Replace Pipe 16.2' to 18.4' 294.1' BSV. Cracks & too many
5 1_Severe 32 PPT	MAP CHAPMAN			3 8279 MHG090017 MHG090018 1 8279 MHG090018 MHG090046				350 348 350 348.1	18 2 10	22 1 40	1			514G	94 301 3	3.20	11 1		3		3 331B 18 23 1.28						Fractures . Severe Defect Replace Pipe or Reline 98.7' BVV. Cracks & too many
5 1_Severe 33 PPT 5 1_Severe 34 PPT	MAP CHAPMAN	5/11/2		1 7352 MHG090046 MHG090046				350 348.1 303 300.6	21 6 9	22 1 26	1			514D	77 236 3	2.93	6 1		4		3 311A 10 12 1.20 7 3422 18 32 1.78	2			2		Fractures . Severe Defect Replace Pipe or Reline 43.3' BVV. Cracks & too many Fractures . Severe Defect Replace Pipe or Reline
	Map 1 VANGUAR)																									83.1' BSV. Continuous Fractures & Cracks. Severe Defect. Pipe ID
5 1_Severe 35 PPT	Map 1 VANGUAR	0		4 7335 MHF090001 MHG090024				213 211.2	8 2 1	17 9	15 1			514E	53 173 3	3.26	2 1				5 0000	1					wasn"t exist Reline Pipe 169.1' BVV. Continuous Fractures
5 1_Severe 36 PPT	May 6 Y AVENUE		2012 7335	5 7336 MHG090024 MHG090025	D/S 1476	SPG090037 8 VCP		213 213.3	5	13 2 16	12 1			514D	49 170 3	3.47	3	1	1		1 4131 7 13 1.86						& Cracks. Severe Defect Reline Pipe
5 1_Severe 37 PPT	May 3 Y AVENUE WAKEFIEL	5/15/2		9 7350 MHG090044 MHG090045		Clav		300 279.5	6 9 4	8 9	7 1			514B		69					412K						25.4' BVV. Severe Defect Replace Pipe 23' to 29' 273.3' BSV, Fractures & Cracks. Replace Pipe 273.3' to 276' &
5 1_Severe 38 PPT	3-5 14 Y AVENUE	7/23/2	2012 13155	5 12797 MHP060005 MHO060001	D/S 6604	SPP060007 8 Tile		300 293.7	20 17	1 22	1			514C	61 187 3	3.07					0000 0 0 0.00						Severe Defect Reline Pipe 174.2' Small BVV, Fractures.
5 1_Severe 39 PPT	3-B3-4 31 Y STUART D	RIVE 8/28/2	2012 10903	3 11442 MHQ130023 MHQ130024	D/S 3709	SPQ130002 8 VCP		305 298.2	6 1 2	1 42 6	7 1			514A	66 209 3	3.17 17 5					1 2C11 23 49 2.13	2					Severe Defect Patch Repair BVV & Reline Pipe
5 1_Severe 40 PPT	MAP 3-B2-5 8 FALLINGLE Y STREET	AF 8/28/2	2012 12735	5 12736 MHS090024 MHS090025	D/S 6547	SPS090011 8 VCP		388 392.3	28 10 26	2 4 2 13	1 1			514A	87 235 2	2.70 0	7	1	2		2 4231 12 20 1.67						387.6' BVV, Close to Ending MH. Severe Defect Reline Pipe 50.2' Small BVV. Cracks &
5 1_Severe 41 PPT	MAP 3-B3-3 28 Y TAFT STRE		2012 12295	5 12296 MHO140020 MHO140021	D/S 3942	SP0140007 8 VCP		340 252.6	6 8 47	6	1	2	1	1 5146	72 199 2	2.76					2 312E 35 72 2.06	1					fractures. Severe Defect. @ 181' Unmarked MH Patch Repair 50.2' & Reline Pipe
5 1_Severe 42 PPT	MAP 3-6 11 STANFORI Y AVENUE	7/27/2	2012 11749	9 11748 MHO120001 MHP120036	U/S 4403	SPP120037 8 Clay Tile		407 406	2 1 5	2 2	1	4		3 5145	20 57 2	2.85 59	29				1 312J 90 154 1.71	1					221.4' BVV (Missing Pipe) Severe Defect Replace Pipe221.4' to 224' 2.8' BVV. Severe Defect. Ending
5 1_Severe 43 PPT	MAP 2-2-2 9 Y GARDEN G	ROVE 7/20/2	2012 8368	8367 COK130002 COK130003	U/S 3375	SPK130004 8 Tile		50 149.6	3 1	3	1	2		5143	10 30 3	3.00					1 1100 1 1 1.00						MH was 8386. We checked GIS & Changed it. Replace Pipe 0' to6'
5 1_Severe 44 PPT	June MAGNOLIA MAGNOLIA	6/15/2	2012 10787	7 10788 MHL050044 MHL060045	D/S 4240	SPL050054 8 VCP		247 258.3	8 3 7	7	2	1		5142		62					1 2K00 63 125 1.98						257.5' HVV. Severe Defect Replace Pipe 254.5' to 257.5'
5 1 Severe 45 PPT	June Map 2 B1 8 Y CHANTICL	EER RD (4/2)	042 9346	6 9339 MHM020010 MHL020002	D/S 3487	SPL020006 8 VCP		290 287.3	4 2 7					5141	16 47 2	204 52	2				8 0000 62 114 1 84						234.5' HSV. Severe Defect Replace Pipe 234.5' to 237.5'
	MAP ALLEY E/O	F MAIN	UN MARK	Œ		Clay			4 2 7	1				0.41	16 47 2	2.94 52	2				0 02 114 1.04						82.8' MSA (DAZ). 14.8' BVV.
5 1_Severe 46 PPT	3-B3-1 14 Y STREET May May Folder Folder	8/3/2	012 D M.H	H. 11735 MHP120023 MHP130010	D/S 6763	SPP120027 6 Tile		663 82.8	1	1	1		2	5141	5 15 3	3.00 1 19					1 2C11 21 53 2.52		1 3 2	1			Severe Defect No Reversal Video) 22.8' BVV. Severe Defect. Lateral 8 81.5 plugged 50 % .Inspection Replace Pipe 14' to 17' Replace Pipe 19' to 24' & Clean
5 1_Severe 48 PPT	2 7 2 8 Y OWEN STR	REET 5/29/2	2012 8817	7 8818 MHF120004 MHF120005	D/S 1622	SPF120031 8 VCP		258 261.3		1	1			5141	2 9 4	4.50					5100 1 5 5.00	1		2			Completed lateral @ 81.5'
5 1_Severe 49 PPT	3-B3-5 11 Y BONSER A	VE 8/31/2	2012 9456	9455 MHM100001 MHN100038	U/S 3191	SPN100045 8 VCP		170 183	2		1			5132	3 11 3	3.67 45					2H00 45 90 2.00						19.5' BSV . Severe Defect Replace Pipe 19.5' to 22.5' 19' BSV , Missing Pipe. There is an
5 1_Severe 50 PPT		TREET 8/6/2	012 12510	0 12516 MHQ110024 MHQ110031	D/S 4129	SPQ110005 8 VCP		340 346.5	1		1			5111	2 6 3	3.00 57		1			312J 58 117 2.02						another utility pipe inside the broken part. Severe Defect Replace Pipe 17' to 20'
5 1_Severe 52 PPT	June BROOKHU BROOKHU STREET	RST 6/13/2	2012 10350	0 9942 MHM050042 MHM050043	D/S 5014	SPM050017 10 VCP		282 237.4	6 5 16	3 2	1	2		513C	35 101 2	2.89	1				11 0000 12 12 4.00						55.4' BVV & JOM 55.4' & 58.5. Severe Defect Replace pipe 55.4' to 58.5'
5 1 Severe 53 PPT	MAP 4-B1-5 1 Y HARBOR B	LVD 9/26/5	2012 7549	9 7551 MHR160022 MHR160023	D/S 573	SPR160024 8 VCP		252 288.8	1		1			5123	5 12 2	2.40	13 1				3 413B 43 68 1.58						235.7' BVV. Severe Defect Replace Pipe 235.7' to 241'
5 1_Severe 54 PPT	MAP 4-B2-1 29 Y RANCHER	OWY 9/4/2			20	6 VCP		277 277 1																			274.5' BVV. Severe Defect. End of the Sever Lane Replace Pipe 270' to 277'
5 I_Severe 54 FFI	4-02-1 29 1 NANCHEN	5 W 1 9/4/2	012 14123	3 14121	DIS	6 VCF		211 211.1		1				5141	2 9 4	4.50					2 2412 6 10 1.67		4				2.12' BVV. Severe Defect. Laterals
5 1_Severe 55 PPT	MAP 4-B2-1 18 Y BARNETT	WY 9/7/2	012 11923	3 11922 MHP150011 MHP150010	U/S 4825	SPP150009 8 VCP		380 382	3 1 13	8	2 1			514A	28 91 3	3.25 50	2				10 2l1A 62 112 1.81						at 186.7', 228.04', 288.10', 352.5', Replace Pipe 0 to 3' laterals should 373.3' over 50 % deposits. Replace Pipe 0 to 3' laterals should be cleaned by Home owners Too Many Fractures & Cracks.
5 1_Severe 56 PPT	MAP 3-B2-1 9 Y 9th STREE	_	40000	0 12238 MHP080030 MHP080031	D/D 0000	SPP080005 8 VCP		380 378 7						4105							2010						Severe Defect. Laterals at 199.6', 272' & 340.8' have over 50% Reline Pipe & Clean Grease by
5 I_Severe So FFT	3-B2-1 9 1 9111 3 TREE	8/7/2	012 13000	0 12235 NITPUGUUSU NITPUGUUST	D/3 6323	3FF0000005 6 VCF		360 376.7	2 1 22	1 9 //	5			HINGE	117 433 3	3.70 96 0					3 2515 99 195 1.97						Grease. Home Owner Too Many Fractures & Cracks. Severe Defect. Laterals at 115.9',
5 1_Severe 57 PPT	MAP 3-B2-1 10 Y 9th STREE LAURELTO		012 12999	9 13000 MHP080029 MHP080030	D/S 6322	SPP080004 8 VCP		395 395.6	5 3 23	6 4 2 75	4			4N3D	122 456 3	3.74 131 0					9 0000 140 271 1.94						184.5' , 244.7', 313.2' & 385.3' Reline Pipe & Clean Grease by have over 50% Grease. Home Owner
5 1_Severe 58 PPT	1 5 Y AVENUE	5/11/2		2 8273 MHG090009 MHG090010				371 369.8	-	25 3 62					97 342 3						1 2G00 44 87 1.98						Continuous Cracks & Fractures. Severe Defect Replace Pipe or Reline Cracks & too many Fractures .
5 1_Severe 59 PPT	1 10 Y AVENUE	5/11/2	2012 7352	2 7353 MHG090047 MHG090048	D/S 1174	SPG090054 8 VCP		350 346.3	27 4 12	1 10 42				4G3A	96 285 2	2.97	1		2		2 3213 5 8 1.60						Severe Defect Replace Pipe or Reline Cracks & too many Fractures .
5 1_Severe 60 PPT	MAP	AVE 6/19/2	2012 10318	8 10325 MHK090003 MHK090004	D/S 5936	SPK090023 8 VCP		275 279.8	3 1 7	7 7 50	7			4J3A	82 291 3	3.55 90					2R00 90 180 2.00						Severe Defect Replace Pipe or Reline
5 1_Severe 61 PPT	2 July- 1 1 Y CHAPMAN	AVE 6/19/2	2012 10317	7 10318 MHK090002 MHK090003	D/S 5929	SPK090003 8 VCP		275 274.5	8 5 27	2 2 33	5			4F3D	82 272 3	3.32 91					2R00 91 182 2.00				+ + +		Cracks & too many Fractures . Severe Defect Replace Pipe or Reline
5 1_Severe 62 PPT	2 July- 1 5 Y MACNAB S	TREET 6/19/2	2012 10315	5 10317 MHK080020 MHK090002	D/S 5927	SPK080024 8 VCP		295 291.5	11 7 21	2 5 4 28	2			4E3D	80 249 3	3.11					0000 0 0 0.00				\coprod		Cracks & too many Fractures . Severe Defect Replace Pipe or Reline
5 1_Severe 63 PPT	Map 1 LAURELTO Y AVENUE	N 5/16/2	7342	2 7343 MHF090003 MHG090030	D/S 1483	SPG090044 8 VCP		307 304.5	21 2 11	3 10 18	12			4E3C		30					2F00						Continuous Fractures & Cracks. Severe Defect Reline Pipe
5 1_Severe 64 PPT	MAP 3-B3-4 33 Y ALLEY			2 10901 MHQ130022 MHQ130021				395 389.5		56 15	10			4031	84 275 3	3.27					3 2B13 19 35 1.84						Continuous Fractures & Cracks. Severe Defect Reline Pipe
5 1_Severe 65 PPT	MAP			.7 12649 MHT100028 MHT100029				250 243.3													4 2A14 15 26 1.73						Continuous Fractures & Cracks. Severe Defect Should Reline
	Map 1 LAURELTO	N							0 4 10	3 2 1 27 5					61 210 3	3.44 11 0											Continuous Fractures & Cracks. All
5 1_Severe 66 PPT 5 1_Severe 67 PPT	MAP			0 7331 MHG090013 MHG090014 1 11215 MHN100046 MHN100001				350 348 272 272.8	3 1 2		5			4D3C 4D3B	74 248 3	112				1	1 1100 1 1 1 100						Joints have DAE. Severe Defect Clean Deposits & Reline Pipe Cracks & Fractures. Severe Defect. Reline Pipe
5 1_Severe 68 PPT	MAP			6 13155 MHP060004 MHP060005				327 328.5		2 2 24					88 254 2				ШП		1 2611 7 13 1.86						Cracks & Fractures. Severe Defect. Reline Pipe Cracks & Fractures. Severe Defect Reline Pipe
5 1_Severe 69 PPT	Map 1 May 4 BELGRAVE Y AVENUE	5/15/2	2012 7350	0 7357 MHG090045 MHF090011	D/S 1172	SPG090052 8 VCP		368 369	20 9 12	8 2 3 10	6			4C3C		60 98					2200						Continuous Fractures & Cracks. Severe Defect Reline Pipe
	MAP																										Cracks & Fractures. Severe Defect. Also 152' Tap Break Defective, Reline Pipe. TBD should be fixed
5 1_Severe 70 PPT	3-2 7 Y EUCLID ST	REET 7/24/2	2012 13154	4 12797 MHO050001 MHO060001	D/S 6602	SPO060001 8 VCP		350 352.9	16 15 40	1 1 6 21	1			4C3B	101 277 2	2.74	1			+ + + + + + +	2 2A13 14 29 2.07	1	++++	+++	+++	+	Broken Pipe piece in the Lateral by Home owner
5 1_Severe 72 PPT	MAP WESTIAK	AVE 9/13/2		2 10533 MHN170039 MHN170040						8 5 4 16	3			4B3F	70 242 3	3.46					2A00 14 28 2.00				+ + +		Too Many Crack & Fracture. Severe Defect Reline Pipe
5 1_Severe 73 3K	3-6 16 Y STREET	7/26/2	2012 11835	5 11838 MHO120008 MHO120011	D/S 5398	SPO120007 8 Clay Tile		314 324.4	15 57	1 12		5	+++++	1 12 4A3J	103 277 2	2.69 78 15	+++		+++		42 322R 138 244 1.77	2	1		+++		Cracks & Fractures. Severe Defect Should Reline
5 1_Severe 75 PPT	MAP LAMPLIGH	TED		4 10564 MHN170041 MHM170015				176 176.9			1				46 171 3						0000 0 0 0.00		++++		+ + +		Too Many Crack & Fracture. Severe Defect Reline Pipe Cracks & Fractures . Severer
5 1_Severe 76 PPT	1 9 Y STREET	5/11/2	2012 8279	9 8765 MHG090018 MHG090021	D/S 2434	SPG090019 8 VCP		273 271.9	23 8 18	6 2 14				4A3C	71 186 2	2.62 59					1 2J11 60 119 1.98						Defect Reline Pipe

	General Pipe	Structural Defect Coding	D	and Maintenance	suc particular succession of the succession of t
SV Q O Set Et A C V C C Set Et A C V C C Set Et A C V C C C C C C C C C C C C C C C C C	D Previous MH ID 15 (4)		Sustrates Paral Paran Paral Paran Paral Paran Paral Pa	2	U
1 1 1 1 1 1 1 1 1 1	Existing S Size (in) Direction Material Community (ii) Community (iii) Communi	C F B H J D X O S L C M S H L C M S H SV VV SV VV S M L S M L A V H P	WL	Roots (R)	IS
MAP	0 MHN090023 MHN090024 D/S 2881 SPN090021 8 VCP 330 330.8 11 MHN090024 MHN100046 D/S 2882 SPN090022 8 VCP 330 332.4	4 17 18 1 6 13 1 9 20 18 3 4 6 7 3	4A3C 80 200 2.50 7 3 4A3C 83 203 2.45 6	3 2713 10 17 1.70 6 2616 12 18 1.50	Cracks & Fractures. Severe Defect Reline Pipe Cracks & Fractures. Severe Defect Reline Pipe
Man 1 VANGUARD	D MHF090002 MHG090028 D/S 1480 SPG090041 8 VCP 152 148.4		3 4A3B 36 114 3.17	4 1400 4 4 1.00	Continuous Fractures & Cracks. Severe Defect Reline Pipe
5 1_Severe 81 PPT 3-1 1 Y ALLEN DR 7/19/2012 11277 11281	11 MHN100045 MHN100046 D/S 2879 SPN100031 8 VCP 280 242.7	1 9 13 1 1 6 8 7 7	4A3B 63 169 2.68	1 1100 1 1 1.00	Cracks & Fractures. Severe Defect Reline Pipe Spot repair at 14.30 ft FM and
1 2_Major 6 17 3 x 10930 Grove St. 3/5/2004	3 MHH190001 MHH90002 D/S 316 SPN190001 10 VCP 382 259 MH0120013 MH0120014 DS SPD120012 8 VCP 3 500 500 8 MH1100025 MH1140005 DS 772 SPJ130024 10 VCP 4 191 658	1 9 1 3 1	2 8 4.00 146 304 3.13 15 162 57 107 3.57 25 6	1 5 6 4 4.00 1 1 1 4 8 8 1.76 1 3 0.05	245.60 ft FM. Clean pipe. Replace pipe Replace pipe
9820 Garden Grove	11 MHM130038 COM130002 DS 2342 SPM130024 6 VCP 3 299 299	1 2 1	45 95 2.44	0 000 1	Replace pipe
					DS Z
1 2_Major 9 45 23 45 33 X Grove Blvd. 5/4/2004 2 2_Major 9 M011 6 Y ROBERT LN 8/25/2005 13144 13117	MHP130002 MHP130001 US SPP130002-B 10 VCP 3 332 332 7 MHC080046 MHC080047 D/S 5856 SPC080056 8 VCP 157 152.4	1 8 4	29 73 2.03 30 20.00 2 6 47 33 5.00	4 0 0.00	2 1 1 1 1 1 1 1 1 1
1 2_Major 10 45 18 9916 Garden Grove 1 4/30/2004	MHM130002 MHM130003 DS SPM130001 10 VCP 331 331	1 1	2 6 47 33 5.00 18 40 3.64	2 0.16	Replace pipe
					Ce me
2 2_Major 11 G046 10 Y VOLKWOOD ST 10/10/2005	1 MHN140028 MHN140028 DS 2907 SPN140015 6 VCP 2 365 367 MHS100042 MHS100007 D/S SPS100024 8 VCP 321 320.8	1 1 14 6	39 2.79 25 93 93 186 106 2 18	2 5 25 0.16 3 1 126 232	2 nt Replace pipe 2 SAGS, HIGH FLOW
1 2_Major 12 43 11 x Bhxd_Motel 4/22/2004 0 7110 2 2_Major 12 G046 9 Y VOLKWOOD ST 10/10/2005	D MHJ130027 MHJ130027 MHJ130028 DS 6835 SP130027 8 VCP 3 315 313 MHS100041 MHS100042 DIS SPS10023 8 VCP 342 341.8	1 1	12 38 2.00 111 11 90 92 185 1 100 5.00 2 5.00 1 1	3 1 0 0.000	19 Replace pipe 3 SAGS, 6' (D'SL) JOM, HIGH FLOW
					LL. Indi
					leg Dro Dro poe
1 2_Major 13 11 27 12 1 x 13115 Pleasant St. 2/26/2004 11092 11094 1 2_Major 14 32 10 x Grove Blvd. 4/1/2004	4 MH0130021 MH0130023 DS 2351 SPO130019 6 VCP 3 360 371 MHM130001 MHM130002 DS SPM130029 10 VCP 4 314 314	3 1 1 1 1 2	13 260 21	1 0 0.00 1 1	2 M81 Replace pipe 1 JO Replace pipe 1 M Replace pipe
- 2	10 00 0		0 000 00	100	LL 45d
	MHO140010-AMHO140012-A DS SPO140048 8 VCP 5 5	1	3 3.00	0 0.00 1	eg. JO M Replace pipe
2 2_Major 20 G030 5 CHAPMAN AV 8/29/2005 13117 13118	2 MHO110004 MHO110005 DS 4791 SPO110004 8 VCP 307 195 8 MHQ090047 MHQ090048 DVS 6274 SPQ090059 12 VCP 285 258.5	37	32 1.00 1 1 1 33 36 74 1 1 1 5.00	1 20 3 9	OBZ= OBS, BUILT INTO STRUCTURE POSITION.
2 2_Major 23 R052 1 Y CHAPMAN AV 11/3/2005 12984 12985	3 MHS130004 MHS130005 D/S 558 SPS130014 8 VCP 382 383.0 5 MHQ090059 MHQ090060 D/S 6279 SPQ090008 18 VCP 400 405.1	2 4 2 1	24 33 66 23 6 80.00 2 7 3 32 34 64 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8	38 67	CONTINUOUS FRACTURE
2 2_Major 24 G027 8 Y TIMMY LN 8/23/2005 13078 13079 2 2_Major 27 G048 6 VOLKWOOD ST 10/17/2005	9 MHR080006 MHR080007 D/S 5643 SPR08018 8 VCP 241 242.1 MHS110011 MHS110012 D/S SPS110009 8 VCP 335 334.7	3 3 3 2 10	21 62 16 5.00 1 9 1 22 22 44 3 9 1 9 1	26 43 13 16	MULTIPLE SAG
5 2_Major 82 PPT MAP 3-83-2 13 Y CENTRAL AVENUE 8/10/2012 11176 11193 ACACIA	3 MHO140002 MHO140005 D/S 2492 SPO140033 6 VCP 320 328.4	7 2 5 16 9 2 1	514A 42 128 3.05 77 0 7	2N17 84 161 1.92	56.4' Small BVV. Major Defect Patch Repair 198.1' BVV. Major Defect. Also
5 2_Major 83 PPT 3-5 19 Y PARKWAY/ALLEY 7/27/2012 11843 11842	2 MHO120017 MHO120016 U/S 6826 SPO120014 8 Tile 310 306	2 1 18 4 1	5144 26 80 3.08 6 15 2	322C 25 54 2.16 1 1	Laterals (9 61.7 & 139.4°75% full of Grease 60.3 BVV. 128.4° MSA (RBJ). No Patch Repair 184.3°, Cut & Clean
MAP	9 MHS130024 MHS130023 U/S 524 SPS130009 8 VCP 128 128.4 Clay		5143 11 33 3.00 11 1	1 1 1 4222 16 27 1.69 2	1 Reversal Video. Major Defect. RBJ 80.7 BVV. Major Defect. Ending MH was 11420. We checked GIS &
5 2_Major 86 PPT 2-2-2 3 Y MOEN STREET 7/2/2012 8569 8570	0 MHP110035 MHP120004 D/S 5273 SPP110021 6 Tile 325 325.2 0 MHJ070007 MHJ070008 D/S 2068 SPJ070008 8 Tile 1111 108.7	2 8 18 1 2 1 1 1 1 1 1 1 1	13 5142 46 111 2.41 33 3 3 5141 3 11 3.67 32 1 1 1	412E 37 75 2.03 1 1 1 312E 35 68 1.94	changed it. Patch Repair 0' Small BVV. Major Defect Patch Repair
5 2_Major 87 PPT 3-83-1 11 STANFORD 8/3/2012 11025 11026	6 MHP120025 MHP120026 D/S 5140 SPP120018 8 VCP 334 329.5	4 3 25 1 1 1 1 2	3 5141 40 110 2.75 30	14 ZB1A 44 77 1.75 1	316 Small BVV. Major Defect Patch Repair
5 2_Major 88 PPT Map 1 5 Y KNOTT STREET 6/7/2012 8163 8164	4 MHG090050 MHG100011 D/S 1682 SPG090002 10 VCP 408 412.8	1 1 2	2 5141 2	2200 2 4 2.00	327.6' BVV. Major Defect Patch Repair
5 2_Major 89 PPT Map 1 22 Y KNOTT STREET 6/27/2012 8141 8142	2 MHH120008 MHG120029 D/S 918 SPH120008 8 Tile 427 424.8	1 1	5141 2 9 4.50	12 0000 13 13 1.00	336.9 BSV. Major Defect Patch Repair 176.7 Small BVV. Major Defect.
5 2_Major 90 PPT 4-B1-5 17 Y 11th STREET 9/19/2012 6907 6925	5 MHM180005 MHN180005 D/S 527 SPM180005 8 VCP 283 282.6	1 5 3 1 1	5134 11 24 2.18	2 1 3211 3 7 2.33	176.7 Small beV. Mayor Detect. Inspection Report shows JOL @ 176.7. It was JOM & we changed it Patch Repair
	4 MHT090029 MHU090001 U/S 6027 SPT090020 10 VCP 320 296.8	1 1	5131 2 8 4.00 97	9 281A 106 205 1.93 1	286.1' Small BSV. Major Defect Patch Repair
5 2_Major 93 PPT May 16 Y STREET 5/17/2012 7836 7840	0 MHE080024 MHE080027 D/S 986 SPE080004 8 VCP 260 257.1	1 1 1	5131 2 8 4.00	0000 0 0 0.00	254.3 BVV. End of the Sewer Lane. Major Defect Patch Repair
line	9 MHR160020 MHR160021 D/S 571 SPR160022 8 VCP 71 228	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	5111 2 6 3.00 10 17	1 1 1 4131 29 44 1.52	7: Small BVV. Moderate Defect Patch Repair
Map 1 VANGUARD	8 MHE090020 MHE090015 D/S 1409 SPE090035 8 VCP 350 353.3	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	5100 1 5 5.00 5	2500 5 10 2.00	253.7 BSV. Major Defect Patch Repair Continuous Fractures & Cracks.
MAP	1 MHG090028 MHG090029 D/S 1481 SPG090042 8 VCP 227 225.7 5 MHR080008 MHR080009 D/S 6562 SPR080005 8 VCP 345 353.8	1 38	4F31 39 155 3.97 44	2100 44 88 2.00	Major Defect Reline Pipe
MAP		4 4 9 1 1 13 23 2	4D3C 76 225 2.96 4 0 1 5 4C3E 79 231 2.92 14	4 2414 14 18 1.29 2A00 14 28 2.00	Cracks & Fractures. Major Defect Reline Pipe Cracks & Fractures. Major Defect Reline Pipe
MAP WESTI AKE	Clay				Inspection Report shows 11' BVV. This is RPP (Patch Repair). Too Many Fractures & Cracks. Major
5 2_Major 101 PPT 3-6 17 Y STREET 7/26/2012 11834 11835	5 MHO120007 MHO120008 D/S 5397 SPO120006 8 Tile 336 336.1 1 MHG090019 MHG090020 D/S 1067 SPG990020 8 VCP 246 245	4 4 46 1 1 1 17 5 2 10 1 14 3 18 1	1 483H 74 225 3.04 56 1 32 483D 54 172 3.19 17 1 1	9 2P19 98 187 1.91 3 4 332B 27 53 1.96 1	Defect Should Reline Cracks & Fractures . Major Defect Reline Pipe
5 2_Major 103 PPT 3-83-4 32 Y LEMONWOOD 8/28/2012 10902 10903	3 MHQ130022 MHQ130023 D/S 4461 SPQ130026 8 VCP 205 201.1		483C 43 144 3.35 2	0000 2 2 1.00	Inspection Report shows 77.3" & 115.6" BVV. Those are 7M and we changed them. Cracks & Fractures, Major Delect Reline Pipe
5 2_Major 104 PPT 3-5 13 Y LAW DRIVE 7/24/2012 11270 11229	9 MHN100042 MHN100009 D/S 2922 SPN100033 8 Clay Tile 280 271.6	0 2 7 2 7 1 13	4850- 43 144 3.35 4838 42 132 3.14 10	2 2A12 12 22 1.83	Najor Reline Pipe
5 2_Major 105 PPT 3-B3-1 24 LAMPSON AVENUE 8/2/2012 12585 12586	6 MHP110020 MHP110021 D/S 5087 SPP110012 6 Tile 130 124.6	3 18	4B33 21 81 3.86	3100 1 3 3.00 1	Major Reline Pipe

				Consert						T		Oles on t	ral Defect Coding		1	1 1 =	T T		Onomi	ional and Maintena	nce					Construction F	atures	1 00	l d l		
		o c		General		2	0	Pipe				Sidetal	al Delect Couling	ed Pipe	epair	efects	ndex		Ореганс	onal and Maintena	1106			rt Rating		Construction Fea	itules	meous Feature	sy Aband andoned		
	Tape No.	Location Location	E	xisting MH ID Pr	evious MH ID	of Came Sewer ID	Sewer II	gth (ft)	gth (ft)	Crack	Fracture			Deforming F	Point R. Sags	ick Stru ctural D	Defect	Deposits		Roots (R)		Infiltration		ick Mair M Defect	Tap (Lateral)	Line	Intruding Seal Material	Miscella	for Survi		
hase riority anking ontracto	vD No.	eversal				irection xisting S	revious : ize (in)	oint Leng	ength (ff	C	F	ВН	0 VV S M L S	D X	WL	ACP Qu otal Stru	tructural	AE		Tap (T) Med	dium (M) Ball	I (B) I	OB V Other	ACP Quotal O&P		L	IS	otal Con	easons IS Ident		
<u>α</u> <u>α</u> <u>α</u> <u>σ</u>	MAP & &	Street Name FIREBRAND	CCTV Date S	start End Start	t End	0 11	Δ	-3 0	3 0	LCMS	H L C M S	S H SV VV SV	VV 3 M L 3	M L A V H P S LF	RP S	<u> </u>		70 L 70 Z 70 E	B L J C	BLJCB	LJCBL	JCGDRV	W C Z 76 C	R & F F O	FD FL BI BL	DID L DIRILDIR	RD SRH SRB SRL Z SA	CU MC =	× 0	Comments	Recommendations
5 2_Major 106 PPT	3-B2-5 11			2729 12730 MHS090					269 273.5	15 3 24	4 1 1 13				4	4A3D 61 190	3.11		5		2 1 1			4133 9 18 2.00						Cracks & Fractures. Major Defect	Reline Pipe
5 2_Major 107 PPT	3-B2-2 2	Y HOLYOAK LANE FIREBRAND	8/16/2012 13	3035 13036 MHR080	0009 MHR080010	D/S 6563	SPR080006 8 VCP		265 256.5	4 8 19	1 4 9	1			4	4A3C 46 132	2.87	32	6		1 1		2	4131 42 79 1.88						Cracks & Fractures. Major Defect	Should Reline
5 2_Major 108 PPT	3-B2-5 10 MAP	Y STREET	8/27/2012 12	2730 12731 MHS090	0019 MHS090020	D/S 6509	SPS090005 8 VCP		270 271.3	14 4 21	5 1 10				4	4A3D 55 173	3.15		1 1		2		5	3217 9 13 1.44						Cracks & Fractures. Major Defect	Reline Pipe
5 2_Major 111 PPT	2 July- 1 14	Y DALE STREET	6/21/2012 8	047 8513 MHK070	0049 MHK070043	3 D/S 1901	SPK070030 8 VCP		358 367	9 28 15	1 8 9				4	493B 70 146	2.09	72			1			412M 73 148 2.03						Cracks & Fractures. Major Defect	Reline Pipe
5 2_Major 112 PPT	3-1 5 June	Y HACKAMORE RD	7/20/2012 11	1278 11279 MHN090	0022 MHN090023	3 D/S 2880	SPN090020 8 VCP		350 355.4	15 15 34	4 3 3 8				4	483F 82 222	2 2.71 13	6					4	2B14 23 42 1.83						Cracks & Fractures. Major Defect	Reline Pipe
5 2_Major 113 PPT	Map 2 B1 68	Y KATELLA AVE	6/14/2012 7	983 7984 MHK050	0046 MHJ050001	1 D/S 1839	SPK050026 8 VCP		225 228.4	17 11 11	8				4	483A		1						2100 1 2 2.00						Too many Cracks . Major Defect	Should Reline
5 2_Major 114 PPT	MAP 4-B2-2 22	Y ALLEY	9/12/2012 7	004 6993 MHK160	0016 MHK160038	B D/S 334	SPK160028 8 VCP		264 262.5	20 3 9	1 11 5				4	453C 49 130	2.65		7		1			4117 8 11 1.38						Fractures & Cracks. Major Defects	s. Should Reline
5 2_Major 115 PPT	MAP	Y NELSON STREET		2263 12264 MHO120					150 200	7 61	4		2		7 4	443K 81 226	2.79	25	4		1 1		2	4231 35 73 2.09	1	1					Reline Pipe
5 2_Major 116 PPT 5 2_Major 117 PPT	MAP	Y LANAKILA LN Y FAYE AVE		0752 10753 MHM110 1274 11275 MHN090					240 241.6 270 272.3	8 12 16	1 2 3 3					433B 45 107 423D 64 176	2.38	5	4		1		1	3125 10 17 1.70						Cracks & Fractures. Major Defect Cracks & Fractures. Major Defect	
	MAP						Clay				3 1 2													2001 0 10 1.07							
5 2_Major 118 PPT 5 2_Major 119 PPT	3-B3-1 26 MAP 3-B5 29	Y 8TH STREET Y GARDEN GROVE		1413 10874 MHP120			SPP120007 8 Tile SPP130031 10 VCP	+ +	331 328 50 330.1	4 6 60 6 15 49	1		+++	+++++		413K 71 198 413H 71 178	3 2.79	31	+				,	312E 33 74 2.24	2					Cracks & Fractures. Major Defect Too Many Crack. Major Defect	Should Reline Reline Pipe
	June Map 2																													300.7' Small BVV, end of the	·
5 2_Major 120 PPT	B1 2	Y PARADE STREET	6/4/2012 9	295 9296 MHM990	JU26 MHM990027	/ D/S 3447	SPM990025 8 VCP		300 303.2	10 4 2	3	1				4133 20 56	2.80 10	0					10	2M00 20 30 1.50						Sewer Lane. Major Defect	Patch Repair Very small trib. Area. 7 JOM, downstream being higher. Not a
4 3_Moderate 1	P COUN TY 1	Y MARKEV	10/8/2007	643 9644 MHL040	1021 MHI 040034	4 U/S 5523	SPL040024 8 VCP		333 342.8							0 20	2 75						1 10 5	6 9 150						69.8', 96.8', 197.9', 253.8', 308.2', 314' & 329' JOM (D/SH)	high priority. No immediate action but shold be replaced when necessary.
- O_modelate		, maddle v	10/0/2007 9	NII ILUAU	12040024	. 0,0 3023	S. EUROUER 8 VCP		555 542.0							8 22	2.75						1 10 5	0 9 1.50	-			4		303.7', 330.4', 426.3', 431.7',	Very small trib. Area. 6 JOM, downstream being higher. Not a
4 3_Moderate 2	P COUN TY 3	Y MARKEV	10/8/2007 9	642 9641 MHL040	020 MHL040019	9 U/S 5518	SPL040019 8 VCP		254 249.7	1			6			7 19	2.71		1 2		1		3	7 10 1.43				0		438.2', 453.3' JOS (D/SH)	high priority. No immediate action but shold be replaced when necessary.
																														14.7',17.8',66',72' & 75' JOM	5 medium joint offsets. Very small trib. Area (3 laterals). No
4 3_Moderate 3	3 2204	Y COLCHESTER	6/19/2006 9	312 9311 MHM000	0011 MHM000010	0 U/S 3461	SPM000004 8 VCF	,	83 79.6				5			5 15	3.00 25						12	37 62 1.68	1			2		(D/SH)	immediate action. Replace with other improvements in the area Very small trib. Area. 4 JOM,
	P																													10.6', 137.5', 246', 248.6', JOS (D/SH)	downstream being higher. Not a high priority. No immediate action but shold be replaced when
4 3_Moderate 4 3 3_Moderate 5 PPT	TY 3 33 32	Y MARKEV ORANGEWOOD		643 9642 MHL040 656 9919 CON060			SPL040020 8 VCP SPN060033 8 VCP		243 256.6 140 139	2 1	1 1		4			6 16 3 6	2.67				1			1 3 3.00 0 0 0.00				0			necessary.
4 3_Moderate 5	P COUN TY 11	BROOKHURST Y ALLEY	10/9/2007 9	274 9273 MHM030	0031 MHM030030	0 U/S 4371	SPM030006 8 VCP		230 227.8				3			2 0	3.00		6		1		7	14 16 1 14						79.3', 128.8' & 138.4' JOM (D/SH)	Spot repair JOM, root treat. Very small trib. area.
3 3_Moderate 6 GGSE 4 3_Moderate 6			1/31/2005 7	845 7846 MHD080	0017 MHD080021	1 U/S 987	SPD080001 8 VCP SPM020025 8 VCP		258 255 300 296.2	44 4 3					12	12 24 45 92		14						14 42 3.00 118 236 2.00				0			Spot repair 229-243, reline
3 3_Moderate 7 GGSE	32 1062	Y MANLEY	2/9/2005 8	632 8633 MHD090	0010 MHD090011	1 D/S 1924	SPD090009 8 VCP		259 260						20	20 40							1	1 1 1.00			3				Spot repair several locations, reline.
4 3_Moderate 7 3 3_Moderate 8 GGSE	7 2267 32 1074	Y HARRIET LN Y BELGRAVE		223 9222 MHM020 644 8645 MHD090					300 298.0 169 166	25 2 7	3 1					37 82 1 2		:	1				1	139 277 1.99 32 64 2.00				0			Very small trib. area.
																														21 Cracks.	Capacity deficiency Project 62. Mostly Anaheim flows. Clean, flow
4 3_Moderate 8 3 3_Moderate 9 GGSE	11 2345 36 1169	Y PACIFIC Y RICHMOND	5/12/2005 7		0001 MHE100003	3 U/S 1420	SPE100039 8 VCP		290 307.4 382 381	17 4 10	2				11	33 74 11 22	2.24 116 2.00 74	14	1					131 275 2.10 74 148 2.00				0			monitor, then replace if necessary.
4 3_Moderate 9 3 3_Moderate 10 GGSE	7 2267 36 1169						SPM020023 8 VCP SPD100024 8 VCP		240 239.5 381 378						70	32 68 70 140								85 170 2.00 74 148 2.00				0			Spot repair 4 locations, reline
	MIXE D P																														Spot repair JOM at 273.6; reline. Most fractures called out are
4 3_Moderate 10	COUN TY 1 12	Y LULLABY LN					SPM020028 8 VCF		300 296.6	15 2	8 1		1			27 61	2.26 12		8				3	23 35 1.52	1			2		273.6' JOM (D/SL)	cracks.
3 3_Moderate 11 GGSE	36 1170 MIXE	Y RICHMOND	5/12/2005 7	962 7961 MHD100	0003 MHD100002	2 U/S 1538	SPD100001 8 VCP		381 379						14	14 28	2.00 75		1 1					77 152 1.97							Capacity deficiency Project 62.
4 3_Moderate 11	D P COUN TY 1 3	Y PACIFIC		070 0007 14414000		5 B/0 0500	SPM030012 8 VCF																							GIS Length is 415'.	Mostly Anaheim flows. Clean, flow monitor, then replace if necessary.
3 3_Moderate 12 GGSE							SPD100002 8 VCP		415 214.6 381 377	12 2	8 5				21	27 60 21 42	2.22		1					71 141 1.99				0		GIS Length is 415.	
	MIXE D P																														Spot repair 61.5, 124.4, 143.1, 212.1 to 222 (DS MH)
4 3_Moderate 12 3 3_Moderate 13 GGSI	COUN TY 2 1	Y POONA ALLEY Y RICHMOND					SPM020005 8 VCF SPD100016 8 VCP		228 222.0 254 252	14 3	4 1 1		1			23 49	2.13 18 5 3.00 48 31		3				2	28 51 1.82 79 158 2.00				0			ZIZI (SS WII)
- 5_mounts 15 303L	MIXE	. INSTINUTE	3/12/2005			1302	3. 2.33010 8 VCF		207 202							1 3	40 31							7.5 130 2.00							
4 3_Moderate 13	D P COUN TY 1 13	Y LULLABY LN	11/4/2007 9	225 9226 MHM020	0035 MHM020036	6 D/S 3594	SPM020027 8 VCP		300 298.5	17 1	4 1					23 49	2.13							28 51 2.31							Reline. Very small trib. area.
3 3_Moderate 14 PPT							SPE080012 8 VCP		350 343								200													MSA = DAE (20%). Pipe SPE0800012 corrected to SPE080012	
3 3_Moderate 14 PP1	50 18	VALLEY VIEW ST	12/20/2007 8	811 8813 MHEU8U	0005 MHE080006	b D/S 1615	SPE080012 8 VCP		350 343				1			1 3	3.00 3							3 6 2.00	2		1				Capacity deficiency Project 62.
4 3_Moderate 14	11 2333						SPM030013 8 VCF		297 291.5							28 56	2.00 92 8		1 2					103 203 1.97				0		30 cracks at joints	Mostly Anaheim flows. Clean, flow monitor, then replace if necessary.
3 3_Moderate 15 GGSE	P6 2	CHAPMAN	12/1/2007 8	896 8895 MHE080	0020 MHE080019	9 U/S 1/35	SPE080021 8 VCP		365 349		1		1			2 /	3.50 13 3							16 32 2.00	1						Capacity deficiency Project 62.
4 3_Moderate 15	11 2349	Y PACIFIC	10/4/2006 8	947 8944 MHM030	0011 MHL030039	9 D/S 3659	SPL030005 8 VCF SPE080017 8 VCP		299 281.0	13 5 9						27 58	2.15 90 21		2				2	115 226 1.97				0		10 cracks	Mostly Anaheim flows. Clean, flow monitor, then replace if necessary.
3 3_Moderate 16 GGSE	34 1123	Y BAILEY	4/12/2005 8	907 8889 MHE080	0023 MHE080013	3 U/S 1549	SPE080017 8 VCP		316 298	1					20	21 41	1.95 88						3	91 179 1.97							Calculated hydraulic deficiency.
	P																														Flow monitor to assess if would have enough capacity with lining. Otherwise, replace with larger pipe.
4 3_Moderate 16 3 3_Moderate 17 GGSD	COUN TY 3B 8	Y GILBERT Y BLACKMER	10/16/2007 8: 1/24/2005 7:	955 8956 MHL040 839 7838 MHE080	001 MHL040002	2 D/S 3667 5 U/S 1449	SPL040002 10 VCP SPE080034 8 VCP		273 269.8 358 355	8 10 9		++++			22	27 53 22 44	1.96 53 7 2.00 117	7	+		+++		+++	60 120 2.00 117 234 2.00	3	++++		9			Significant Anaheim flows
4 3_Moderate 17	1 1682	Y STONYBROOK		163 9138 MHM990						20 2 2																					Spot repair 264-267; 401.6-422.8; reline. Very small trib area.
3 3_Moderate 18 GGSE		Y SANTA BARBARA		839 7840 MHE080					262 255.0 289 244	20 3 2					32	25 49 34 68		4	4			1		137 266 1.94 5 16 3.20				0			
4 3_Moderate 18	1 1722	Y COLONY		164 9168 MHM990			SPM990012 8 VCP		323 319.9	21 3			1			25 54	2.16 64 50		18				1	133 247 1.86				0			Root treat; spot repair 47.9, 111.9- 114.8; reline
3 3_Moderate 19 GGSE	35 1138	BELGRAVE ALLEY	4/21/2005 8	905 8904 MHE090	0011 MHE090010	0 U/S 1396	SPE090033 8 VCP		362 359				1			1 3	3.00							0 0 0.00							

			General	Pij	ne e			Structural Defe	ct Coding	2 _	ating 48	×	Operation	onal and Maintenance			ating	Construction Featu	ires g	atures band.	pau
ý vý l	9 S			ID ID		÷.			pe d F	age g Failu Repai	Defec	at Inde					aint Re act So		lane	ion Fe	kband
n No.	Location Location	Exis	sting MH ID Previous MH ID	of Car	gth (ft)	E Crack	Fracture		Joint Q S	Surfa Dama Point Sags	uctural	Deposits		Roots (R)		n Obstacles Vermin	M Def M Def M	Lateral) Line	Intruding Seal Material	struct for Su	/ Pititied /
onity onity on the last on the last on the last on the last one la	wersal			ection isting a svious	S Com		F	ВН	0 S X	WL	CP Q	AE AE Other		Tap (T) Medium (M)	Ball (B)	Other	CP Q Stall O& Stall O		IS M	as ons	ue p
4 3_Moderate 19 3 2192	∑ ∑ Street Name Y STONYBROOK	6/7/2006 916	t End Start End 5 9164 MHM990006 MHM99000	15 U/S 4380 SPM990008 8 VCP	300 2	6.5 22 1 1	S H L C M S	H SV VV SV VV S	M L S M L A V H P	S LF RP S	24 48	5 AGS B % L % Z % 2.00 95 66	B L J C	BLJCBLJC	BLJCGDR	W C Z % C R	163 324 1.99	BI BD D L U R LD RD	SRH SRB SRL Z SA CL	NC 5 %	Comments Recommendations Reline. Small trib. area.
1 3_Moderate 20 27 8	x 9561 Stanford Ave.			11 DS 3111 SPM120033 8 VCP		61 1	2	2	2	5	10	3.33 22 5.00		2			0 0.00				Replace pipe
3 3_Moderate 20 GGSD P1 2	ADAMS	8/22/2007 893	5 7749 MHE110048 MHE12000	05 D/S 1361 SPE110019 8 VCP	200	33			1		1 3	3.00 4					4 8 2.00		1		MSA = DAE
																					Mostly cracks. This is also a capacity deficiency, majority of the flows from Anaheim. Clean pipe.
4 3_Moderate 20 11 2345	Y PACIFIC	10/3/2006 894	5 8946 MHM030009 MHM03001	10 D/S 3657 SPM030034 8 VCP	290 2	2.9 14 2 8					24 54	2.25 76 8					84 176 2.10			0	flow monitor, then replace when needed.
																	33 33 33			MM C-	1
1 3_Moderate 21 29 3 29	4 13100 Gilbert St.	3/25/2004 1205	53 12086 MHM130041 MHL13001-	4 DS 2714 SPL130020 8 VCP	340	36	1				35	2.19					3 0.06			offs et	s Replace pipe
3 3_Moderate 21 GGSD 49 1583	CHAPMAN	11/4/2005 735	4 7353 MHF090004 MHG09004	18 U/S 1175 SPF090002 8 VCP							14 32		6				6 6 1.00				
4 3_Moderate 21 4 2221	Y VANCOUVER 9651 Garden Grove			12 D/S 3456 SPL000006 8 VCP			1 2				23 53	2.30 41 18					59 136 2.31 1			2	Reline. Small trib. area.
1 3_Moderate 22 27 3	x Blvd. BELGRAVE		36 12039 MHM130008 MHM13000		3 365	60 1 1	1 3 1	2	1	6	32	2.29					50 1.11	1			Replace pipe
3 3_Moderate 22 PPT 50 34 MIXE	EASEMENT		7 8858 MHF090041 MHF090043		21	59	1				1 4	4.00					0 0 0.00		1		MSA =Siphon Spot repair 313, 551.6, 600-609;
4 3_Moderate 22 D 2 2451 1 3_Moderate 23 1 18	Y HARCOURT x 12201 Faye Ave.		3 9014 MHL040010 MHL05005 76 11277 MNW23019 MNW23021	1 D/S 4923 SPL040010 8 VCP 0 DS 2878 SPN090019 8 VCP	306 3		3		1		23 40	1.74 8 11 3.71	5 1	1 8 1		1	25 44 1.76 28 0.19			0	reline Replace pipe
3 3_Moderate 23 GGSD P4 A- 1 3	TOPAZ	11/11/2007 865	6 8657 MHF120011 MHF12001:	2 D/S 1227 SPF120005 8 VCP	258	54	1				1 2	2.00 2					2 4 2.00				
																					Capacity deficiency Project 62.
4 3_Moderate 23 11 2333	Y PACIFIC		8 9229 MHM030006 MHM03000			16.7 13 5 4					22 43	1.95 106 12	1				119 237 1.99 1			2	Mostly Anaheim flows. Clean, flow monitor, then replace if necessary.
1 3_Moderate 24 23 2 3 3 3_Moderate 24 GGSD 44 1521	x Alley/G.G. Blvd. WEAVER			36 DS 2678 SPM130021 8 VCP 24 D/S 1096 SPG080021 8 VCP		75 1	5		1		24	2.67 14 3.00					134 2.35 0 0 0.00				Replace pipe
3 3_Moderate 24 GGSD 44 1521 4 3_Moderate 24 10 2323	Y HARLE			21 D/S 3607 SPM030023 8 VCP		87 i0.4 14 3 4					1 3	2.05 58 12 11				1	82 174 2.12			0	Mostly small cracks. Reline
1 3_Moderate 25 11 24	x 11000 Acacia Pkwy.	2/25/2004	MHP120038 MHO12001	16 DS SPO120002 8 VCP	3 169	69 1 1 6	$\bot \downarrow \downarrow \downarrow \downarrow \downarrow$		1		20	2.00 37		20			0 0.00				Replace pipe
3 3_Moderate 25 GGSD D 1 1569	Y VANGUARD	10/31/2005 733	6 7337 MHG090025 MHG09002	26 D/S 1477 SPG090038 8 VCP	186	3 1	3 2				9 24	2.67 45	4			15	64 109 1.70 1				
4 3_Moderate 25 MIXE D 2 2451	Y HARCOURT		2 9013 MHL040009 MHL040010			2.0 15 5 1	$\bot \downarrow \downarrow \downarrow \downarrow \downarrow$				21 38	1.81 15 10	1 2			13	41 67 1.63 1			2	Spot repair at 152.1, 188.8, 291.7- 295.3; reline.
1 3_Moderate 26 18 18 18 3 3_Moderate 26 GGSD 48 1575	x 13251 Deanann AMY			18 DS 2898 SPN140006 8 VCP 34 D/S 1322 SPG090059 8 VCP				2	1		9 21	2.10					0 0.00				Replace pipe
4 3_Moderate 26 10 2323	Y HARLE		6 9237 MHM030019 MHM03002			11.5 15 2 3					20 41		1				71 148 2.08			0	Spott repair at 376.2, 401.6-411.2, 657.7, reline
	Nelson St/ Lampson																			low late	3
1 3_Moderate 27 7 7 3 3_Moderate 27 PPT 47 24	Ave. BELGRAVE	2/13/2004 10/12/2007 828	MHO110006-A MHO11000 4 8290 MHG090039 MHG09003	06 DS SPO110006-A 8 VCP 88 U/S 1089 SPG090031 8 VCP	63 278	17 ₃	1		1	6	4 9	2.00					14 2.00		1	ral	Replace pipe
4 3_Moderate 27 9 2321	Y CHANTICLEER Gilbert St./Stone	9/21/2006 920	4 9205 MHM020004 MHM02000	05 D/S 4509 SPM020011 8 VCP	300 2	15.4 14 2	1 2				19 45	2.37 97 19 21					137 295 2.15 1			2	Reline
1 3_Moderate 28 49 17 2 3_Moderate 28 G022 9	x Haven Cir.		2 9519 MHL110062 MHL11005	9 DS 3225 SPL110002 8 VCP		31 1 1 6.5 3 22	2		1	2	11 29 81	2.75 3 7 5.00 37 5.00	7				0 0.00 48 132				Replace pipe
3 3_Moderate 28 GGSD 39 1409	Y WEAVER			14 U/S 1472 SPG090033 8 VCP			2 2		1		3 9						54 108 2.00				Some parts Heavy DAE
																					Mostly cracks. This is also a capacity deficiency, majority of the
																					289' JOM (D/SL) flows from Anaheim. Clean pipe, flow monitor, then replace when
4 3_Moderate 28 11 2335	Y PACIFIC 12601 Kengsington	9/28/2006 922	9 8343 MHM030007 MHM03000	08 D/S 3599 SPM030015 8 VCP	294 2	3.6 14 2 2			1	54	73 147	2.01 96 12	1 2				111 231 2.08			0	needed. If not replaced, spot repair joint offset.
1 3_Moderate 29 5 19 2 3_Moderate 29 R044 8	Ln. Y LAMPSON AV		59 11143 MHN110007 MHN11003	37 DS 2920 SPN110021 8 VCP 10 D/S 5365 SPT100025 8 VCP	150 405 4	64			1	4	10	2.00 4					3 0.43		1		Replace pipe
3 3_Moderate 29 PPT 47 9	DANVERS	10/9/2007 823	2 8230 MHG110032 MHG11003	80 U/S 1968 SPG110006 8 VCP	310	58			2		28 76 2 6	3.00 53 5.00				1	66 184 0 0 0.00				
4 3_Moderate 29 10 2326 1 3_Moderate 30 46 26	Y HEDLUND 12451 Pleasant Pl.		4 8345 MHM030022 MHM03002 0 9485 MHM100019 MHM11000	23 D/S 3609 SPM030025 8 VCP 09 DS 3426 SPM100022 8 VCP		16.2 11 3 3			1	15	32 64 9	2.00 40	0	1		1	41 81 1.98			0	Minor cracks, reline Replace pipe
2 3_Moderate 30 G024 10	DANIEL AV		37 12995 MHQ070025 MHP07002				3 5				25 75	4 1 5.00				1 10	6 15				CONTINUOUS CRACK MULTIPLE, OBSTACLE= OBJ
3 3_Moderate 30 PPT 53 25	KNOTT		3 8292 MHG110047 MHG11004		140	48			2	2	4 10	2.50					0 0 0.00				Repeat inspection, DVD 47 - Section 16
																					Capacity deficiency Project 62. Mostly cracks Mostly Anaheim flows. Clean, flow
4 3_Moderate 30 11 2335	Y PACIFIC		3 8945 MHM030008 MHM03000		296 3	7.3 9 2 5			1	18	35 74	2.11 99 15	8				122 251 2.06			0	mostly cracks widely Arlanein nows. Clean, now monitor, then replace if necessary.
1 3_Moderate 31 23 12 2 3_Moderate 31 G020 9	12801 Lucille Ave. MAC MURRAY ST	3/16/2004 849 8/8/2005 1034	0 8491 MHL120025 MHL120020 11 10283 MHK050017 MHK050011	8 D/S 3150 SPL120024 8 VCP 8 D/S 5951 SPK050045 8 VCP	303 : 195 2		1 1		1		7 27 71	2.33					16 2.00 2 4				Replace pipe CONTINUOUS CRACK MULTIPLE
3 3_Moderate 31 PPT 45 9	Y ACACIA			13 U/S 1467 SPG120023 8 VCP	354						0 0	0.00 2					2 4 2.00	1			DAE 10% of the cross sectional area
		10 112001																			Calculated hydraulic deficiency.
													$ \ \ \ \ $								Flow monitor to assess if would have enough capacity with lining. Otherwise, replace with larger pipe.
4 3_Moderate 31 COUN TY 3B 9	Y GILBERT	10/16/2007 895	6 8957 MHL040002 MHL040003	3 D/S 3668 SPL040003 10 VCP	289 2	8.3 8 8					16 24	1.50 60 16					76 152 2.00	3		9	Significant Anaheim flows
1 3_Moderate 32 5 12	10361 Lampson x Ave.	2/9/2004 1125	53 11254 MHN110001 MHN11000	DS 2540 SPN110008 8 VCP	3 320	13 1		1	1		7	2.33	8				0 0.00				Replace pipe
2 3_Moderate 32 G008 7				16 D/S 2001 SPK080050 8 VCP			14 4			3	29 71	5 1 5.00	4				.0				SMALL SAG DAE 10% of the cross sectional
3 3_Moderate 32 PPT 45 8	Y ACACIA	10/1/2007 732	4 7325 MHG120014 MHG12001	5 D/S 1690 SPG120024 10 VCP	268	76	++++		++++++++		0 0	0.00 3	++++		++++++	+++++	3 6 2.00	1	++++		area
4 3_Moderate 32 13 2370	Y KATELLA		4 0000 1444 0	66 U/S 4073 SPL050031 12 VCP		11.8 8 4 3	++++						$ \ \ \ \ $								162' JOM (D/SH); Atlas indicates 15-inch pipe. Spot replace if d/D exceeds 0.62 with lining. Partial Anaheim flow
1 3_Moderate 33 12 2	10631 McKeen St.	2/26/2004 1109	94 11095 MHO130023 MHO13002	24 DS 2353 SPO130021 6 VCP	290				1		16 32	2.00 85 49	1			1 20 22	157 343 2.18 3 0.35	1		3	Replace pipe
2 3_Moderate 33 G019 10	KATELLA AV	8/5/2005 797	9 7980 MHK050042 MHK05004	3 D/S 1835 SPK050022 8 VCP	213 2		5 4				25 71	1	28				29 30				CONTINUOUS CRACK MULTIPLE DAE 15% of the cross sectional
3 3_Moderate 33 PPT 47 1	Y ACACIA	10/9/2007 1203	35 12036 MHG120015 MHG12001	16 D/S 2743 SPM120025 10 VCP	350	68					0 0	0.00 7					7 14 2.00				area
4 3_Moderate 33 1 1 1682	Y STONYBROOK	3/15/2006 916	4 9163 MHM990005 MHM99000	04 U/S 4379 SPM990007 8 VCP	252 2	3.9 11 3 1					15 28	1.87 55 61	1			1 1	118 234 1.98 5 2.50		<u> </u>	0	Spot repair 155.1 and 242.5 to 248.5; reline. Very small trib area.
1 3_Moderate 34 10 2 2 3_Moderate 34 G046 2	11222 Acacia St. Y FALLINGLEAF ST			15 US 5136 SPP120014 6 VCP 13 D/S 6503 SPS100021 8 VCP					1	- 14	5		2 42					1			Replace pipe SAG
2 3_Moderate 34 G046 2 3 3_Moderate 34 PPT 40 23	Y MONARCH		5 8096 MHH110003 MHH11000		376		2 3	 	 	14	29 70	46 32 5.00	2 12		+++++	+++++	92 170		 		MSA = TBI. Inspection stopped just short of D/S MH.
3 3_Moderate 34 PP1 40 23 Mixed 4 3_Moderate 34 3 2476	Y MONARCH Y ORANGE		6 9277 MHM990014 MHM99001		376		++++		 		45 00	172 5 20			+++++	+++++	37 53 400	-	1		Spot repair 260. Very small
1 3_Moderate 35 23 1	9832 G.Grove Blvd./ Alley		77 10762 MHM130039 MHM13002		200	01					15 26	200	2		 	+++++	£1 02 1.93	 	 		19 crauces at juritis tributary area Replace pipe
2 3_Moderate 35 M002 13	POLLARD DR	8/5/2005 1016	35 10166 MHL060010 MHL06001	1 D/S 3727 SPL060014 8 VCP	390 3	0.8 2 5 19					26 66		32				33 34				CONTINUOUS CRACK MULTIPLE
3 3_Moderate 35 PPT 44 11 P	LAMPSON	9/26/2007 815	3 8152 MHH110007 MHH11000	06 U/S 1681 SPH110011 10 VCP	350	53	1				1 4	4.00	+++		+++++	++++	0 0 0.00	2	+ + + + + + + + + + + + + + + + + + + +		
4 3_Moderate 35 COUN TY 2		10/11/2007 916	6 9159 MHM990007 MHM99002	21 D/S 4382 SPM990010 8 VCP	130 2	8.8 13 2					15 28	1.87 5	1			6	12 17 1.42			0	Spot repair JOM at 137, reline.
1 3_Moderate 36 7A 9	11531 Blackthorn St.		79 10678 MHN110016 MHN11001			19			1		3	3.00	5				6 0.62				Replace pipe
2 3_Moderate 36 R048 2 3 3_Moderate 36 PPT 44 10	STUART DR Y LAMPSON			23 D/S 4365 SPQ130023 8 VCP 07 U/S 1680 SPH110010 10 VCP		12.9 6 1 13 54		$+++\mp$		2	23 64 2 4		7		++++=	+++-	7 7 0 0 0.00	++++++++++++++++++++++++++++++++++++	$+++\Pi$	$+ + \top$	+
4 3_Moderate 36 8 2309	Y RHIEMS			24 D/S 4516 SPM020018 8 VCP		19.9 4 6 4			 		14 26	1.86 14 5					19 43 2 26	 	 	0	Spot repair at 5.8, 53.1-59.4, 105.8- 138
		J. 15/2000 52 1				- 1 - 0 4					19 20	17					.0 40 2.20		+ + + + + + + + + + + + + + + + + + + +	1 1	100

	General			Structural Defect Coding		Operational and Maintenance	Const	viruction Features
0 2 5		Pipe G		ed Pipe ed Pipe e eniure	ct Rating effects effect So effect So Index		t Score	Feature oy Aban andoned
ON C	Existing MH ID Previous MH ID	of Came Sewer II	(#) 45 Crack Fracture	Buokeu Hole Point Collapse Surface Souring F Sags	ick Stru ictural Deposits			Intruding Seal Siturction Waterial W W Waterial W W W W W W W W W W W W W W W W W W W
riority ontractc ontractc VD No. VD No. VD Wat		irection xisting \$ ize (in) ize (in) int Len	CC Le	B H J D X	D	Other	Other O O O O O O O O O O O O O O O O O O O	L IS M O O B O O O O O O O O O O O O O O O O
	Date Start End Start End 004 11521 11520 MHL140018 MHL140017 005 10338 10341 MHK050014 MHK050017		100 109 167 138.8 19 3	H SV VV SV VV S W L S W L A V H P S LF RP S	3 3.00	2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2	3 0.88 S	U R LD RD SRH SRB SRL Z SA CU MC P 2 0 Comments Recommendations Replace pipe CONTINUOUS CRACK MULTIPLE
KNOTT	1007 8141 8139 MHH120008 MHH120006		167 138.8 19 3 380 203 1		1 4 4.00		1 2 0 0 0.00	1 CONTINUOUS CRACK MULTIFLE Repeat inspection, DVD 45 - section 22
10101 Lampson	9304 9283 MHM000002 MHL000001		308 304.4 5 3 6		14 31 2.21 99 22		9 130 251 1.93	0 Reline. Small trib. area.
GARDEN GROVE	2004 10683 10682 MHN110020 CON110019 2005 12456 12457 MHS120046 MHS120047		55 55 320 318.7 4 2 17	1	3 3.00	1	0 0.00	Replace pipe CONTINUOUS CRACK MULTIPLE
4 3_Moderate 38 8 2298 Y D'ESTE 9/5/20	006 9349 9345 MHM020014 MHM020009 1004 11185 11118 MHO150015 MHO150014	D/S 3489 SPM020035 8 VCP	373 375.0 7 3 4 350 351		14 29 2.07 120 10		130 260 2.00	0 Reline. Small trib area. Relose pipe
2 3_Moderate 39 M012 4 Y CHAPMAN AV 8/25/21	1005 12248 12249 MHT090032 MHT090033		170 172.3 19 1		20 61 25 5.00		5 30 55	CONTINUOUS CRACK MULTIPLE
3 3_Moderate 39 PPT 48 41 BLVD 10/31/2	2007 8090 8091 MHH130003 MHH130004	D/S 1672 SPH130004 10 VCP	200 211	1	1 3 3.00		0 0 0.00	
MIXE D P COUN								Reline. Very small trib. area.
	9224 9225 MHM020034 MHM020035 004 11187 11188 MHO150001 MHO150002		210 207.1 9 2 2 350 348	1	13 28 2.15 3 3.00		0 0 0.00	0 Replace pipe
2 3_Moderate 40 G023 5 MARGIE LN 8/17/2	1005 12231 12232 MHQ070019 MHQ070020	D/S 6444 SPQ070014 8 VCP	285 288.3 2 4 19 2		27 60 2		2 4	CONTINUOUS FRACTURE CIRCUMFERENTIAL
3 3_Moderate 40 PPT 49 6 WESTERN 11/2/2/	8081 8079 MHI080006 MHI080004	U/S 875 SPI080009 8 VCP	235 246	1	1 3 3.00		0 0 0.00	Palina
4 3_Moderate 40 TY 4 Y STONYBROOK 10/11/2	2007 9165 9166 MHM990006 MHM990007 2004 12026 10759 MHM130023 MHM130024		300 298.9 12 1 139 136		13 25 1.92 30 3 3.00		5 35 65 1.86	0 Replace pipe
2 3_Moderate 41 M005 10 Y VONS DR 8/10/2	0005 10838 10839 MHL060033 MHL060034		245 247.6 4 5 9 2 4		24 60 8 5 5.00		13 26	
3 3_Moderate 41 PPT 48 36 WESTERN EASEMENT 10/31/2	2007 7203 7202 MHI090006 MHI090005	U/S 1074 SPI090011 8 Iron	100 106	2	2 6 3.00		0 0 0.00	Pipe SPH000011 corrected to SPI000011 24 J 0M (D/SH), @ 509.9' there is
4 3_Moderate 41 3 2145 3 2193 Y HILLVIEW 5/4/20	9293 9302 MHM990024 MHM990033	U/S 3454 SPM990032 8 VCP	330 327.4 12		13 27 2.08 98 11	4	113 222 1.96	24 JOM (DISH). © 509.9' there is CO. GIS map shows this is Spot receir JOM at 24. Reline MHM990032
1 3_Moderate 42 41 17 8565 Edgebrook Dr. 4/21/2			231 232	1	3 3.00		0 0.00	Reptace pipe
	12242 12243 MHQ070012 MHQ070013 1006 9219 9218 MHM020029 MHM020028		285 286.7 2 5 7 1 7 3 80 90.3 7 2 1 1	1	25 59 2 30 5.00		32 64	2 71.4' JOM (D/SH) Spot repair JOM at 71, reline for cracks
1 3_Moderate 43 45 10 10242 Garden Grove Blvd. 4/30/21	11235 11321 MHN130006 MHN130005		260 288	1	3 3.00		0 0.00	Replace pipe
	1005 11442 11446 MHQ130024 MHQ130002 1007 7177 7196 MHI120019 MHI110002		300 302.5 6 10 390 398	2 2	24 58 2 6 3.00		0 0 0 0.00	275.6' NEW MANHOLE FOUND
P								Reline
	2007 8943 8942 MHL030037 MHL030038		330 298.2 3 7 1		11 15 1.36 20 30		51 101 151 1.50 3	
	004 9507 9521 MHM110013 MHL110061 005 9759 9760 MHK050003 MHK050004		288 287 300 300.8 2 18	1	20 56 1	12 4	11 0.25 17 26	Replace pipe CONTINUOUS CRACK MULTIPLE
3 3_Moderate 44 PPT 41 27 BLVD 9/18/2			39 39 1		1 4 4.00		0 0 0.00	
1 3_Moderate 45 27 1 x 12841 Village Rd. 3/19/2	2006 8341 8333 MHL040018 MHL050053 2004 12034 12035 MHM120024 MHM120025	DS 2742 SPM120024 8 VCP 3	306 321.4 6 4 1 350 349 1 7 3	2	11 19 1.73 40 25 36 2.12 1	50.00 1 2	69 134 1.94 1 38 1.44	2 Reline Replace pipe
	005 8505 8506 MHK070041 MHK070042 007 8695 8696 MHJ110014 MHJ110015		342 344.3 18 1 250 418 1 2 1		19 56 4 11 2.75	1 1 1	1 3 4 0 0 0 0.00	
MIXE 4 3_Moderate 45 D2 2447 Y BERRY 12/18/2	2006 8340 8341 MHL040017 MHL040018	D/S 5023 SPL040017 8 VCP	306 308.8 5 5 1		11 18 164 40 24		64 128 2 00	205.40' There is lateral @ 9 o'clock. This lateral does not exist on Reline. Small trib. area. database.
1 3_Moderate 46 11 26 x Alley 2/25/21	0004 11843 11844 MHO120017 MHO130001 005 12578 12539 MHQ090042 MHP090001	DS 5405 SPO120015 8 VCP 3	305 309 1 7 5 2 2 330 337.7 1 5 2 3	12	35 2.92 2 23 56 5 1	13 3 5.00 3 2 2	9 0.32 1	Replace pipe OBZ= OBJ. SAG
3 3_Moderate 46 PPT 21 2 LAMPSON 6/28/28	007 8698 8701 MHJ110017 MHJ110018	D/S 1823 SPJ110020 8 VCP	338 343 2 1		3 8 2.67		0 0 0.00 1	
1 3_Moderate 47 8 21 x 12671 Main St. 2/18/20	9277 9278 MHM990015 MHM990001 1004 11772 11749 MHO110005 MHO110005-A	DS 4792 SPO110005 8 VCP 3	337 324.2 6 5 3 4 230 233 3 4 4	5	11 17 1.55 3 10 35 2.33	3 3	16 30 1.88 1 1 23 1.19 1 1	3 Reline Replace pipe
2 3_Moderate 47 G007 9 DALE ST 7/20/20	005 8046 8047 MHK060015 MHK070049	D/S 1900 SPK070029 8 VCP	284 287.8 6 10 1 2 3		22 55		1 3 1	
3 3_Moderate 47 GGSD TY 3C 8 ANNAPOLIS AVE 10/13/2	2007 10368 10369 MHK030005 MHK030004	U/S 4673 SPK030004 8 VCP	389 388 3 4		7 10 1.43		0 0 0.00	
12900 Casa Linda	2007 10368 10369 MHK030005 MHK030004 2006 9158 9157 MHM990020 MHM990019		336 335.6 3 8		11 14 1.27 52 10	2 1	65 129 1.98 3	6 Root treat, reline, small trib area
1 3_Moderate 48 19 19 x Ln. 3/9/20 2 3_Moderate 48 G011 2 SHELLEY DR 7/26/21	004 8472 8474 MHL120016 MHL130003 0005 10819 10821 MHL070012 MHL070014	DS 3132 SPL120017 8 VCP 3 D/S 4834 SPL070029 8 VCP	375 384 1 5 6 1 2 190 194.9 3 11 1 2 3		34 3.09 1 20 55 1	5.00 4 1	9 4 0.40	Replace pipe
P COUN								
3 3_Moderate 48 GGSD TY 3C 7 MAC 10/13/2	2007 10368 10367 MHK030005 MHK040008		310 308 8 8 8 1 1 336 334.1 1 5 3 1	+++++++++++++++++++++++++++++++++++++++	16 24 1.50		0 0 0.00	Spot repair 132.7, 190.2, and 262-
1 3_Moderate 49 34 6 x 12802 Lorna St. 4/2/20	0006 9210 9776 MHM020023 MHM020022 004 8412 8414 MHK120021 MHK120023 0005 10814 10795 MHL070007 MHL080023	DS 3390 SPK120023 8 VCP 3	332 332 10 1		10 20 2.00 105 32 2.29	2	105 210 2.00 8 0.09	0 284, or reline Replace pipe
2 3_Moderate 49 R002 8 CLOVER LN 7/26/28	UUD 10014 10795 MHLU70007 MHL080023	U/S 4/33 SFLUGUU36 8 VCP	338 336.4 4 1 15	+++++++++++++++++++++++++++++++++++++++	20 54	4	6 11	
3 3_Moderate 49 GGSD TY 3C 6 MAC 10/13/2	2007 10358 10356 MHK040001 MHK050047	D/S 4778 SPK040011 8 VCP	307 294 2 2		4 6 1.50		0 0 0.00	
	9292 9291 MHM990023 MHM990022 1004 11567 11568 MHL130039 MHL130040		280 287.5 10 342 340 1 3 1 1		10 20 2.00 65 60		125 250 2.00 1 1 3 82 1.35	Three cracks, minor joint offsets. No immediate action. Replace pipe
2 3_Moderate 50 G028 6 CHAPMAN AV 8/25/2/			260 264.8 2 1 18 3		24 53 1	5.00	1 3	CONTINUOUS FRACTURE CIRCUMFERENTIAL
P COUN TV3								
3 3_Moderate 50 GGSD A 3 REGAL 10/14/2 4 3_Moderate 50 6 2252 Y ANTIGUA 8/2/20	2007 10360 10358 MHK040002 MHK040001 206 9185 9184 MHM010024 MHM010022	D/S 4774 SPK040010 8 VCP U/S 4396 SPM010007 8 VCP	385 380 4 1 310 589.8 1 2	1	6 11 1.83 3 4 1.33 185 20 4	2 19 2 1	1 1 1.00 1 2 234 456 1.95	
1 3_Moderate 51 27 11 x 12755 Gilbert St. 3/22/2	2004 8455 8456 MHL120002 MHL120003 2005 12116 12117 MHS090001 MHS100011	DS 3114 SPL120003 8 VCP 3	333 330 1 5 1 3		31 1.15 1 18 53 16	24 2 1 2 2 3 1	21 2.63 1 16 32	Replace pipe
P								
	2007 10361 10360 MHK040004 MHK040002		267 268 4 7 1	+++++++++++++++++++++++++++++++++++++++	12 18 1.50	2	2 2 1.00	Multiple reaches were evaluated
	006 9186 9185 MHM010024 MHM010022 004 10717 11317 MHN140034 MHN140035		284 589.8 1 2 355 195 1	05	3 4 1.33 185 20 4	2 19 2 1	1 2 234 456 1.95	0 with one inspection. 1 TBI Replace pipe
	004 10717 11317 MHN140034 MHN140035 005 10310 10315 MHK080015 MHK080020	D/S 5891 SPK080019 8 VCP	345 341.5 8 1 5 2 1 3	20 1 1 1	20 52 98 5.00	20.00	0 0.00 5 1	1 Ion Trebuce hite
COUN TY3								
3 3_Moderate 52 GGSD A 4 MAC MURRAY 10/14/2	2007 10361 10362 MHK040004 MHK040005	U/S 4771 SPK040006 8 VCP	280 278 1 3 4	+++++++++++++++++++++++++++++++++++++++	8 17 2.13		0 0 0.00	Multiple reaches were evaluated Pipe is in good condition. Very
4 3_Moderate 52 4 2213 Y CLEARBROOK 6/27/28	0006 9315 8986 MHM000014 MHM000024	U/S 4525 SPM000016 8 VCP	266 263.8		2 6 3.00 48 25		32 106 205 1.93	with one inspection. Several small small trib area. No immediate to medium joint offsets

				General		Pipe				Structural	Defect Coding	Pipe nu	'n	Rating cts	×		Operation	nal and Maintenar	nce			tating		Construction Features	sno	eatures Aband.	pauo	
	No.	P (Y)			amera or ID er ID.	₽	t (#)					omed apsed face nage	nt Repa	Struct F al Defe al Defe	ect Ind							Maint R sfects		Inte	ruding Seal	ction Fe	Aband	
	o. John No al Tapi	E Location	Exit	sting MH ID Previous MH ID	J Sewe	angth ((ff)	Crack C	Fracture F	Broken Hole B H	Join J	N C D Et	NR Sag	Quick tructur	ral Def	Deposits D	Fine (F)	Roots (R) Tap (T) Medi	lium (M) Ball (B		Obstacles Vermin	SM De SM De Tal	ap (Lateral) T	Line L	Material ∑ IS M	onstru is for §	putitied	
Phase Priority Sankin Contrad	DVD N nspect	Street Name	CCTV Date Sta	art End Start End	Direction	Materia Materia Joint Le	SIS Co	I C M S	H I C M S	H SV VV SV VV	SMLS	S MLAVHP S IF	RP S	PACP oral S	Structu	AE AE Other	3 1 .1 6	BILLICBI	I J C B I J	CGDRV	Other	PACP Total O	EL BL BD	D I URIDED SEH	SRB SRL Z SA CU M	Total C Reason	S Comments	Recommendations
1 3_Moderate 53 18	20	x 13342 Deanann	3/9/2004 113	01 11302 MHN140019 MHN14002	0 DS 2900 SPN140008	8 VCP 3	301 294	4 3	1 1 2					30	0 2.14							8 0.13					314.2' (D/SL) JOM, LINE=	Reline
2 3_Moderate 53	G022 6	WAVERLY DR	8/16/2005 129	53 12920 MHP080026 MHP090020	0 D/S 6235 SPP080020	8 VCP	332 316.3	1 4 12	3		1			21 51	1 2	1 5.00						4 9		1			DOWN AND RIGHT	
	P																											
	TY 3C 6	Y CANTON		64 10358 MHK040006 MHK040001 74 8973 MHM040008 MHM040011		8 VCP	256 253 285 589.9	1 3						4 5	1.25							180 356 1.98					Multiple reaches were evaluated	
	13 2383 G035 6	Y REXFORD RD		40 12810 MHQ100018 MHQ100019		8 VCP	285 589.9	3 4	7 5					19 49	2.00 176	4 24 500 4 500	1 3					180 356 1.98				0	with one inspection. CONTINUOUS FRACTURE CIRCUMFERENTIAL	
2 0_110001000 04	P	T REAL OND RD	9/6/2005	12010 111114100010 11114100011	5 5/5 0402 5/ 4/100044	o VCF	040 041.1	3 4	7 5					19 49	9 24	4 24 5.00 1 5.00						51 100					OINCOM EXERTINE	
3 3_Moderate 54 GGSD	COUN TY 3B 1	KATELLA	10/24/2007 103	56 10355 MHK050047 MHK050044	B D/S 4780 SPK050049	8 VCP	380 373	1 1 1						3 6	2.00 52	2						52 104 2.00						
4 3_Moderate 54	13 2383	Y CANTON	10/26/2006 896	65 8974 MHM040008 MHM040019	5 U/S 4414 SPM040040	8 VCP	285 589.9	3						3 6	2.00 176	76	1 3					180 356 1.98				0	Multiple reaches were evaluated with one inspection.	
1 3_Moderate 55 20 2 3_Moderate 55	1 R049 5	x 12571 Leroy Ave. Y BANNER DR		78 8479 MHL110036 MHL11003 80 11985 MHR140027 MHR140029			370 372 280 280.9	9 4 3	1				16	29 23 49		2 5.00	9 1	1 1 3	3		1	45 2.07 1 3 7						Replace pipe
	P		11/2/2000		2,0	0 101	200 2000						10	20 40		1 0.00												
3 3_Moderate 55 GGSD	COUN TY 3B 1	KATELLA		55 10370 MHK050048 MHK050048		8 VCP	370 370	11 4 1						16 29	9 1.81 73	3						73 146 2.00						
4 3_Moderate 55 1 3_Moderate 56 8	10 2327	Y HARLE x 12551 Fletcher Dr.		52 8951 MHM030028 MHM03002 90 10691 MHN110027 MHN11002			375 375.4 330 327	1 3	3		6			1 2	2.00 57	7 28 4	1 10	1 2 3	1 1			101 222 2.20				0		Replace pipe
	G038 5	DORADA AV		13 11720 MHQ110004 MHQ11001		8 VCP	255 264.9	1 2 3	1 12 2					21 48	в 0.00	0 0.00						0 0					CONTINUOUS FRACTURE CIRCUMFERENTIAL	Nagara Papa
3 3_Moderate 56 PPT	21 5 MIXE		6/28/2007 852	26 8527 MHK090020 MHK09002	1 D/S 2015 SPK090031	8 VCP	300 285		1					1 4	4.00							0 0 0.00	2					
4 3_Moderate 56 1 3_Moderate 57 34	D 3 2470	Y RUSTIC x 12845 Adelle St.		36 9639 MHL040022 MHL040026 25 8426 MHK120027 MHK120021		8 VCP 3.5	256 256.7 343 336	1 4	4	+++	+++		$\sqcup \sqcup$	1 1	1.00 13 8 2.55	3 6 1 10.00	+ + +	++++	++++		1	20 39 1.95	+ + +			0		Reline, Clear deposit
2 3_Moderate 57	G006 11	MACNAB ST	7/19/2005 799	92 7993 MHK070016 MHK070013 92 8030 MHK090026 MHK090028	7 D/S 1848 SPK070015	8 VCP	310 316.8	3 14						17 48	5 2.00	1 10.00						1 2						
	20 42 MIXE D 3 2468	AMY Y REGAL		92 8030 MHK090026 MHK090028 36 9643 MHL040022 MHL040021		8 VCP 8 VCP	160 157 318 316.2	4 2	++++	+++	1			1 3	3.00	 	+ + +	++++	++++		1 42	0 0 0.00						
1 3_Moderate 58 38	5	x 13332 Wilson St.	4/12/2004 768	38 7689 MHK140038 MHK14003	9 DS 719 SPK140035	8 VCP 3	370 372	1 3 5	2					6 10	0 1.6/ 9 B 2.15	,		1			1 10	10 22 2.20 37 0.99				U		Reline, Cut roots
	20 39 12 2358	AMY Y CRESTWOOD	6/26/2007 853 10/10/2006 896	32 8533 MHK090029 MHK090030 51 8960 MHM040006 MHM04000	0 D/S 1802 SPK090037 4 U/S 3671 SPM040028	8 VCP	265 252 285 572.6	4	2				$\vdash \vdash \vdash$	3 11 4 8	1 3.67	8 8	+H	++++	++++			0 0 0.00 86 180 2.09	1			3		
1 3_Moderate 59 19	8	x 9721 Stanford Ave.	3/8/2004 115	50 12030 MHM120018 MHM12002	0 DS 2736 SPM120018	8 VCP 3	346 341	5 5	2 1					28	8 2.15	17	7 1					17 1.54 1						Replace pipe
	M005 13 23 25	VONS DR LAMPSON		37 10840 MHL060032 MHL060038 97 9098 MHK110034 MHK110038		8 VCP	332 331.8 120 304	6 5 10	1 1					21 47	7 1		7					8 9	1					
4 3_Moderate 59	7 2280	Y PERDIDO		33 9182 MHM020005 MHM01002		8 VCP	380 620.2	2 1						3 5	1.67 175	75 81	1				15	272 528 1.94				0	Multiple reaches were evaluated with one inspection.	
1 3_Moderate 60 12 2 3 Moderate 60	11 R029 4	x 13311 Adland St. Y 9TH ST	2/27/2004 112	03 11204 MHQ140014 MHQ14001: 78 12479 MHQ120003 MHQ120004	5 DS 2528 SPO140052	8 VCP 3		4 4 4	1					28	8 2.33	1 5.00 1	1 1	1	1 1	1		5 0.03					HIGH FLOW	Reline, Clear D&R
	23 27	LAMPSON		99 9105 MHK110036 MHK110037			120 172	2	1					17 47 3 8	_	4 15 5.00 1 40.00	1					0 0 0.00	2		1			
	7 2280	Y PERDIDO		05 9183 MHM020005 MHM01002		8 VCP	240 620.2	2 1						3 5	1.67 175	75 81	1				15	272 528 1.94				0	Multiple reaches were evaluated with one inspection.	
1 3_Moderate 61 26 4 3_Moderate 61	6 2264	x 9352 Imperial Y GUINIDA		70 12071 MHM140008 MHL140016 00 9139 MHM010032 MHM01003		8 VCP 3	245 248 249 494.6	5 2 4	1				47	27	7 1.42	1	1		1		4 5	166 1.19					Multiple reaches were evaluated	Reline, Cut roots
4 3_Woderate 61	6 2204	1 GUINIDA	8/11/2006 920	9139	7 U/S 3636 SFW010023	8 VCP	249 494.6						1/	17 34	4 2.00 124	24 10	3 3				1 5	141 288 2.04 1				Ca	with one inspection.	
																										mer a roll		
																										ove r,		
1 3_Moderate 62 14	20 14	21 x 10232 Dakota	3/2/2004 113	12 11314 MHN140029 MHN14003	1 DS 2910 SPN140018	6 VCP 2	365 370	2	1 2		14			27	7 3.00 77	7						54 3.00	3 1		2	JO S		Replace pipe
2 3_Moderate 62	G034 3	Y ROBERT LN	9/2/2005 1283	24 12825 MHQ090015 MHQ09001	6 D/S 6421 SPQ090051	8 VCP	295 295.9	1 1 1	2		2		17	24 46	6 78	8 30 5.00 1 10.00			1		1 10 2	113 227					OBZ=OBJ (OBSTACLE IN JOINT), SAG	
4 3_Moderate 62	6 2264	Y GUINIDA 9213 Garden Grove	8/11/2006 920	01 9200 MHM010032 MHM01003	7 U/S 4503 SPM010020	8 VCP	110 494.6						17	17 34	4 2.00 124	24 10	3 3				1 5	141 288 2.04 1				2	Multiple reaches were evaluated with one inspection.	
1 3_Moderate 63 27 2 3 Moderate 63	19 G029 11	x Blvd.		77 9383 MHL130006 MHL130007 07 13008 MHS080005 MHS080000		8 VCP 3	170 168 330 330.8	1 7	1 1					17 45	7 2.08	18 5.00 1 18 5.00 1 10.00						0 0.00 25 46						Reline, Clear deposit
4 3_Moderate 63	6 2264	Y GUINIDA		95 9201 MHM010032 MHM01003		8 VCP	138 494.6		9 4 1				17	17 45	4 2 00 124	1 18 5.00 1 10.00	3 3				1 5	141 288 2 04 1				2	Multiple reaches were evaluated with one inspection.	
1 3_Moderate 64 3 2 3_Moderate 64		x 12252 Halelani St. NORMA LN	2/6/2004 112	16 11217 MNW13029 MNW13030 27 12228 MHQ070015 MHQ070016	DS 2393 SPO100021	8 VCP 3	265 279 285 287.6		1					26	6 2.89							27 0.52						Reline
	G023 1 51 29	LOMAY ALLEY		27 12228 MHQ070015 MHQ070010 03 7600 MHK160032 MHK16000			285 287.6 260 255	5	5 5					15 45 2 6	5 3.00	1 5.00						0 0 0.00						
4 3_Moderate 64	11 2351	Y CRESTWOOD	10/5/2006 896	82 8961 MHL040005 MHM040000	6 U/S 3672 SPM040029	8 VCP	285 577.6	1			+ + +		Ш	1 2	2.00 130	30	1 6		1			138 270 1.96	$\Box\Box$			0	Multiple reaches were evaluated with one inspection.	
1 3_Moderate 65 43 2 3_Moderate 65	17 R059 6	x 9052 Stanford Ave. Y EASEMENT		36 8487 MHL120022 MHL120023 23 11826 MHP140023 MHP140024		8 VCP 3	345 344 180 168.7	3 4	2	+++				25	5 3.13	9		3				39 0.54						Reline, Cut roots
2 3_Moderate 65 4 3_Moderate 65	11 2351	Y CRESTWOOD		23 11826 MHP140023 MHP140024 33 8962 MHL040005 MHM04000		8 VCP 8 VCP	180 168.7 285 577.6	1					18	21 45	200 120	30	1 6	 	1			4 6 138 270 1.96				0	Multiple reaches were evaluated with one inspection.	
1 3_Moderate 66 37	24	x 8372 Central Ave.	4/12/2004 767	79 7684 MHK140035 MHK14003	6 DS 763 SPK140033	8 VCP 3	330 330		1 3					25				3 2	2			55 1.13 2					тил опо паресной.	Replace pipe
	R063 7 49 33	Y PALOMA AV GILBERT		63 11464 MHQ140003 MHQ14000- 05 13904 MHL080001 MHL080002		8 VCP	290 299.1 212 161	10 7 3	2		1			22 44 1 3		3 1 5.00						44 89 0 0.00	1		1		MSA = JOM	
4 3_Moderate 66	10 2330	Y CHAMBERLAIN		9230 MHM030005 MHM03001:		8 VCP	145 486.3							8 18	8 2.25 62	2 29	5				1	97 188 1.94				0	Multiple reaches were evaluated with one inspection.	
	M011 8 49 45	GAIL LN SKYLARK		17 12224 MHQ080016 MHQ080020 30 10131 MHL080009 MHL080010			310 316.1 375 372	5 5 9	1	+++			++	20 44		7	+ + +	++++	++++			97 194 0 0 0.00				++		
4 3_Moderate 67	10 2330	Y CHAMBERLAIN	9/26/2006 922	27 9231 MHM030005 MHM030013	3 U/S 3601 SPM030017	8 VCP	335 486.3	2 2 4						8 18	8 2.25 62	2 29	5				1	97 188 1.94				0	Multiple reaches were evaluated with one inspection.	
1 3_Moderate 68 34 2 3_Moderate 68	9 M002 8	x 12871 Loma St. BOWLES AV		13 8414 MHK120018 MHK120039 0 MHK060040 MHL060040			130 326 195 195.4	8 9	1	+++		+++++	$\vdash \vdash \vdash$	25 17 43	5 2.08	5	5 1	1 1	1 1		+++	27 0.17 0 0	++1			+		Reline, Cut roots
	20 25		6/26/2007 903	39 9040 MHL100008 MHL100009	9 D/S 3506 SPL100020	8 VCP	221 225		1					1 2								0 0 0.00					Multiple reaches were evaluated	
4 3_Moderate 68 1 3_Moderate 69 46	7 2277	Y PALAIS x 12552 Edieth Dr.	8/21/2006 926 5/6/2004 948	9140 MHM020046 MHM020046 33 9482 MHM110007 MHM11000		8 VCP 3	99 453.4 300 302	1	2	+++	1		R	2 6	3.00 141 4 2.67	1 60 36	3 1	++++	++++		2	240 513 2.14 138 3.00				0	with one inspection.	Replace pipe
	R011 13			73 12956 MHP080008 MHP090029			305 303.1							15 43		15						1 2		1			M. Wiele reach	
4 3_Moderate 69 1 3_Moderate 70 27	7 2277	Y PALAIS	0.22000	02 9267 MHM020046 MHM02004 74 8475 MHL130003 MHL130004		8 VCP	345 453.4 212 212	2		+++			$\sqcup \sqcup$	2 6	3.00 141	11 60 36 46 5.00	1	++++	++++		2	240 513 2.14 0 0.00	\square			0	Multiple reaches were evaluated with one inspection.	Reline, Clear deposit
2 3_Moderate 70	R034 4	Y SUNGROVE ST	9/26/2005 127	38 12739 MHS090026 MHS09002	7 D/S 6550 SPS090013	8 VCP	301 298.5	6 1 4	1 1 3					16 42	2	16 5.00 1 20.00	1 42	1	1 1			62 83						iveiline, Crear deposit
	12 2366	Y KATELLA 12912 Shackelford		9014 MHL050052 MHL050051			370 382.7	5 1 3	+++			\Box	$\vdash \vdash \vdash$	9 20	0 2.22 75	5 70	+HT	+++			+++	145 360 2.48	3			9	Atlas indicates 15-inch pipe.	
1 3_Moderate 71 27 2 3_Moderate 71	7 G012 12	x Ln.	7/27/2005 805	32 9383 MHL120018 MHL130007 56 8006 MHK080031 MHK080030	0 U/S 2410 SPK080053		295 289 293 203.2	1 1 3 1 12	1 2	+++	+++		$\vdash \vdash \vdash$	15 42	3 2.09 2 2	2	+ + +	++++	++++		1	3 0.05	+++			++		Reline
4 3_Moderate 71	17 2478	Y GILBERT	1/18/2007 928	30 9279 MHL990003 MHL990002	2 U/S 3680 SPL990003	8 VCP	372 373.9	7 1						8 15		00					2	102 202 1.98				0		
1 3_Moderate 72 17 2 3_Moderate 72	5 G052 3	x 9770 Halekulani Dr. SANDRA PL		50 11551 MHM110035 MHM11003: 99 11900 MHP130034 MHP140004		8 VCP 3	250 259 650 653.7	1 4 5	1 3 4	+++	+++		$\sqcup \sqcup$	16 41	2 3.14	1 5.00	9 2	1 1	1 2		+++	56 1.74 17 31	+ + +			+		Reline, Cut roots
3 3_Moderate 72 PPT	22 15	MARLENE	7/3/2007 905	51 9052 MHL100020 MHL100021	1 D/S 3518 SPL100032	8 VCP	50 45	- - -	1					1 2	2.00		V 2		-			0 0 0.00						
1 3_Moderate 73 46		Y ROSEBAY x 12512 Pleasant Pl.	5/7/2004 948	59 9158 MHM990021 MHM990028 37 9488 MHM110014 MHM11001:	5 DS 3573 SPM110015	8 VCP 3	335 330.8 398 397	7 1 2	1 3				$oxed{oxed}$	8 15 22		3 47 25	5 2	1			1	138 268 1.94 4 0.25				0		Replace pipe
	R003 9	Y MAGNOLIA ST		99 10800 MHL080027 MHL080028			255 250.1	7 9	+	$+\Box$	$+\Pi$		\Box	16 41	1 4		7	+	$+\Pi\Pi$		1	12 16	$+\square$			Π	High water level. Reverse	
3 3_Moderate 73 PPT	24 28	Y MAGNOLIA	7/11/2007 905	54 9055 MHL100023 MHL110063	3 D/S 3521 SPL100035	8 VCP	300 305			1				1 5	5.00							0 0 0.00	1				inspection needed.	

				General	Pip	е				Structural Defec	ect Coding	Pipe nu	air	Rating cts	×		Operation	ional and Mainter	nance			ating		Construction Feature	es	ous	Aband. loned	
	S S	2 (Y)			amera	2	£					omed apsed age age	rt Repa	Struct F	act Ind							Aaint R fects dex Sc			Intruding Seal	cellane	urvey	
to to	on No.	Location Location	Exis	sting MH ID Previous MH ID	s Sewe	mment (f)	-ength		Fracture	Broken Hole B H	Joint .I	Surf Defe	Poir Sag	Duick S ructura	al Defe	D Peposits	Fine (F)	Roots (R)	Medium (M) Ball	Infiltration	Obstacles Vermin	M M De M De Tal	p (Lateral)	Line	Material IS	M Misk	s for S	
hase riority anking	ape No VD No ryb no reversa	VD Wa	00T/ B-/-		xisting xisting reviou ize (in)	oint Le	JVT2				O S		20 0	ACP Cotal St		AE Other		194 (17	J. J. G. B.		Other	ACP C otal Ot otal Ot otal Ot otal Ot otal Otal Otal Otal Otal Otal Otal Otal O	5 2 2 2		0011 000 001 7 0	otal Co	eason IS Ide	Summer Su
4 3_Moderate 73	3 2191	Y RANDOM	6/7/2006 928	9 9279 MHM990017 MHL990002	P. D/S 3444 SPL990007 8 VCP	337	323.4 4	2 L	CMSH	50 00 50 00 5	I S I W E	AVHP S LF	RP 5	6 14		2 /6	2 6	BLJCB	S L J C B L	J C G D R	2	122 236 1.93 1	FE BI BU	D L U K LU KU	SKH SKB SKL Z S	SA CU MC F	2 0	Comments Recommendations
1 3_Moderate 74	33 17	x 12641 Josephine St.			DS 3348 SPK110003 8 VCP	3 350		6	1					21	2.33							14 0.29 2						Reline, Repair lateral
2 3_Moderate 74 4 3_Moderate 74	G027 5 7 2278	Y PALAIS			5 D/S 6576 SPR080014 8 VCP 3 D/S 4507 SPM020009 8 VCP		339.0 1 2 348.6 2 4	3	4 5					15 41 7 11	1.57 114 13	18	1 1					2 2				0		
1 3_Moderate 75	12 10	x 13231 Adland St.	2/27/2004 1120	02 11203 MHO140013 MHO140014	4 DS 2295 SPO140051 8 VCP	3 332	330 2 3	1	3					21		2 5.00	2				1 5	41 1.75						Replace pipe
2 3_Moderate 75 4 3_Moderate 75	G033 3 8 2284	Y NIETA DR Y CHANTICLEER	8/23/2006 920	3 9268 MHM020003 MHM020002	2 D/S 4750 SPQ090023 8 VCP 2 U/S 3640 SPM020030 8 VCP	350		2	1 5	1				14 41 8 15		2 20.00	4		1 1 1		2	22 39 84 167 1.99				0		
2 3_Moderate 76	G004 3	DALE ST	7/15/2005 804	5 8046 MHJ060003 MHK060015	5 D/S 1899 SPK060036 8 VCP	259	258.1 2	1	+				17	20 41		32 5.00						32 96						CONTINUOUS DAZ & 2 SAGS Multiple reaches were evaluated
																												with one inspection. Inspection report shows MHM000010 to
																												MHM000008. MHM000010 is CO. Must be MHM000011 to
4 3_Moderate 76 1 3_Moderate 77	3 2203 27 17				3 U/S 3470 SPM000012 8 VCP 5 DS 3135 SPL130003 8 VCP		530.9 211 1 1	4	1 1					0 0	2.63	1 5.00					30	314 598 1.90 1				2		MHM000008 Reline, Clear deposit
2 3_Moderate 77	G009 5	DALE ST	7/22/2005 851	2 0 MHK080045 MHK080046	6 D/S 7085 SPK080049 8 VCP	210	199.9 1	1	1		1		15	19 41	2		25					27 29						189.8' (D/SL) JOM, SAG Multiple reaches were evaluated
																												with one inspection. Inspection report shows MHM000010 to
		V 00: 2::					500.0																			$\parallel \parallel \parallel \parallel$		MHM000008. MHM000010 is CO. Must be MHM000011 to
4 3_Moderate 77 1 3_Moderate 78	3 2203 27 10	Y COLCHESTER 12741 Gilbert St.		0 9160 MHM000011 MHM000008 4 8455 MHL120001 MHL120002	B U/S 5029 SPM000018 8 VCP 2 DS 3113 SPL120002 8 VCP	266 265	530.9 251 2	5	1					0 0	0.00 173 111 2.33	1 5.00			++++		30	314 598 1.90 1 0 0.00				2		MHM000008 Reline, Clear deposit
2 3_Moderate 78 4 3 Moderate 78	G057 2 5 2231	Y MAGNOLIA AV Y GUINIDA	12/11/2005 1084	14 10845 MHL060039 MHL070050	D/S 5331 SPL060043 8 VCP 3 U/S 3474 SPM010026 8 VCP	380		8	2		$\Pi\Pi$			17 40			1 14		1		2	124 245 222 430 1.94 3						
1 3_Moderate 79	48 23	12291 Christine Ln.		9 9535 MHM100032 MHM100033		240	244 4		1					1 2	3.33		. 14					11 0.60	+++	+++++		6		Replace pipe
2 3_Moderate 79	R048 13	DAPPLEGRAY RD			D/S 3965 SPR140037 8 VCP	360	347.0	2	1				15	18 40					1			1 3						
4 3_Moderate 79	5 2231	Y GUINIDA	7/17/2006 933	0 9329 MHM010005 MHM010003	3 U/S 3477 SPM010028 8 VCP	66	451.0 1	$\Box\Box\Box$	+ + +					1 2	2.00 145 61		1 14	$\Box\Box$	1		++++	222 430 1.94 3	\coprod	++++		6		Multiple reaches were evaluated with one inspection.
1 3_Moderate 80 2 3_Moderate 80	17 19 G057 1	x 9261 Stanford Ave. Y MACDUFF ST	3/6/2004 846		US 3123 SPL120008 8 VCP D/S D/S 2429 SPK050047 8 VCP	3 330	321	3 1	2		+++			20	2.86		2		++++		7	7 2.33	\square	++++		$+ + \bot$		Reline, Cut roots
2 3_Moderate 80 4 3 Moderate 80	5 2231	Y MACDUFF ST	7/17/2006	0 MHK050010 MHK050026 MHM010005 MHM010003			295.5 11 14 451.0 1				++++			26 39	200 145 61		1 14			 		0 0	+++					Multiple reaches were evaluated
4 3_Moderate 80	12 9	x 13181 Westlake St.		95 11101 MHO130024 MHO140030		3 550	563	6	1					1 2	2.50 145 61		2 14		1 1		++++	0 0 00		+++++		6		with one inspection. Reline, Cut roots
2 3_Moderate 81	G031 12	Y JOHN AV	8/30/2005 1256	67 12570 MHQ090029 MHQ090032	2 D/S 4740 SPQ090013 8 VCP	290		4 2	1 3					15 39	6 49 5.00		-					55 110						, some, our root
3 3_Moderate 81 PPT 4 3_Moderate 81	34 4 8 2282	DEWEY Y AIMES		55 10256 MHM050016 MHM050017 4 9347 MHM020008 MHM020013	7 D/S 4543 SPM050029 8 VCP 3 U/S 3488 SPM020033 8 VCP	275 399	282 406.5	1	1 1					2 6	3.00 119	11	1					0 0 0.00 1 131 272 2.08	1			0		
1 3_Moderate 82 2 3_Moderate 82	17 7	x 12692 Pleasant Pl. YORKSHIRE AV		52 10751 MHM110037 COM110036 38 10289 MHK070004 MHK070014	S US 2669 SPM110025 8 VCP	3 120	121 1 1	5	1					19	0.17							33 1.18						Reline
4 3_Moderate 82	G011 9 12 2361				I D/S 3873 SPK070005 8 VCP J D/S 3676 SPM040032 8 VCP		264.1 7 2	13						13 39 9 16		51	1				1	2 2 51 153 3.00				0		
1 3_Moderate 83	25 11	x 9160 Stanford Ave.	3/18/2004 848	5 8486 MHL120021 MHL120022	DS 3146 SPL120020 8 VCP	3 329	329	2 1	1 2					19	2.71 11		3	1				11 0.88 1						Reline, Clr D&R, Fix Lat
2 3_Moderate 83	R049 2	ROCKINGHORSE RD		12 10913 MHQ130033 MHQ140025		205	202.0	1					18	19 39								0 0						
3 3_Moderate 83 PPT	MIXE			7 9748 MHM050019 MHM050020			408		2 1					3 8	2.67							0 0 0.00	2					
4 3_Moderate 83 1 3_Moderate 84	D 1 2389 37 17	Y JEAN x 8332 Acacia Ave.	4/9/2004 769		DS 729 SPJ120009 8 VCP	235 3 256		2	1 2					2 2	2.38	1 10.00	3	1				18 34 1.89 5 2.50				0		Reline, Clear D&R
2 3_Moderate 84 4 3_Moderate 84	R005 6 8 2283	MARYLEE DR Y CHANTICLEER		13 10315 MHK080018 MHK080020 5 9346 MHM020009 MHM020010	D/S 5925 SPK080022 8 VCP D/S 3486 SPM020032 8 VCP	280	+ + + + + + + + + + + + + + + + + + + +	10 3						14 38	2 13 120 12	22						0 0				0		
1 3_Moderate 85	31 9	13251 Lucille St.	3/30/2004 1156	33 11564 MHL140001 MHL140002	DS 3098 SPL140024 8 VCP	313	313 2 1	4	1					19	1.00		1	1				0 0.00						Reline, Cut roots
2 3_Moderate 85 4 3_Moderate 85	G013 11 10 2329	Y ARTHUR DR Y CRIS			5 D/S 2422 SPJ080033 8 VCP 5 U/S 3602 SPM030018 8 VCP		252.8 264.9 4 3	1	1				18	19 38 8 14		2 20.00 5	3 2	1 1	1 1 1			133 266 40 80 2.00				0		SAG
1 3_Moderate 86	5 22	10732 Claussen St.		39 11138 MHO110019 MHO110020		370	358 19							18	2.25							0 0.00						Reline
2 3_Moderate 86 3 3_Moderate 86 PPT	R005 1 35 32	Y MACNAB ST KATELLA AVE			D/S 5889 SPK080017 8 VCP D/S D/S 5052 SPM050011 8 VCP	235		3	1		1		12	17 38	17 23 5.00	1 5.00						41 82 0 0 0.00						177.1' (D/SH) JOM, SAG
4 3_Moderate 86	8 2294				7 D/S 4515 SPM020017 8 VCP	375	376.8 1 1							2 3	1.50 81	6	1 2		1		1	92 187 2.03				0		
1 3_Moderate 87 2 3 Moderate 87	16 4	13281 Westlake St. CLOVER LN		06 11107 MHO140035 MHO140036	S DS 2357 SPO140022 8 VCP D/S 4338 SPL080023 8 VCP	335	0.0	3	1					18	2.57							0 0.00						Reline
3 3_Moderate 87 PPT		MAUREEN	8/22/2007 973	0 9731 MHM050029 MHM050030	D/S 5058 SPM050015 8 VCP	300	302 1	9	1					15 37 2 4	2.00							0 0 0.00						
4 3_Moderate 87 1 3_Moderate 88	8 2283 18 22	Y CHANTICLEER x 13390 Bowen St.			9 D/S 3485 SPM020031 8 VCP 2 DS 2902 SPN140010 8 VCP		290.8 2 1	3 1	1					7 17	2.43 78 32	24						134 292 2.18 1				2		Reline
2 3_Moderate 88	R018 8	CHAPMAN AV	8/29/2005 1301	15 13024 MHS090008 MHS090009	9 D/S 6231 SPS090035 12 VCP 3 D/S 4180 SPM050041 8 VCP	340	339.2 8	7						15 37								5 20	Ш			5		
3 3_Moderate 88 PPT 4 3_Moderate 88	36 43 12 2357	DEWEY Y ENDRY			3 D/S 4180 SPM050041 8 VCP 5 U/S 3674 SPL040006 8 VCP		281 592.1 7 1	++++	1 1					2 6		1 1 1 1 1 1 1		++++	++++	++++	++++	243 529 2.18				+ + + -	++	Multiple reaches were evaluated
1 3_Moderate 89	8 3	x 12621 Flower St.	2/16/2004 1126	35 11266 MHN110013 MHN110014	DS 2550 SPN110018 8 VCP	3 250	254 1	1	3	1				8 15		45	1				1	243 529 2.18 32 1.15 1	2			6		with one inspection. Replace pipe
2 3_Moderate 89 3 3_Moderate 89 PPT	R020 4	BUARO ST BROOKHURST	8/31/2005 1220	00 12201 MHR090023 MHR090024	D/S 5675 SPR090017 10 VCP U/S 4168 SPM050048 10 VCP	145	153.1 94	1	1		+++	++++	17	18 37 1 4		$H + H - \overline{I}$	+++	+++	++++	$HHH\overline{I}$	+++	1 2 0 0.00	$+ + + \top$	1		+++	+	SAG
4 3_Moderate 89	12 2357	Y ENDRY	10/9/2006 896	5 8964 MHM040008 MHL040005	U/S 3675 SPM040031 8 VCP	289	592.1 7 1							8 15	1.88 196	45	2					243 529 2.18	2			6		Multiple reaches were evaluated with one inspection.
1 3_Moderate 90 2 3_Moderate 90	47 15 G022 1	x 9532 Lambert Cir. Y JACALENE LN	5/11/2004 951 8/16/2006 1214	7 9519 MHM110025 MHL110059 19 13120 MHC077005 MHC080009	DS 3223 SPM110044 8 VCP D/S 5768 SPQ070028 8 VCP	3 215 250	213 1 252.8 1	1	4 1				40	17 19 37			7 1	5 1				12 1.71 50 100 1						Reline, Cut roots CONTINUOUS DAGS, SAG
3 3_Moderate 90 PPT		BROOKHURST			3 D/S 5016 SPM050019 10 VCP				1				16	19 37								0 0 0.00	Ш					
4 3_Moderate 90	6 2256	Y BIENVILLE	8/3/2006 017	5 9114 MHM010012 COM010001	U/S 4389 SPM010001 8 VCP	100	441.5							1 2	200 119	46	2					143 294 2 06						Multiple reaches were evaluated with one inspection. 8.1' & 47' JOM (D/SH)
1 3_Moderate 91	34 21	x 12551 Dale Ave.	4/5/2004 843	5 8436 MHK110027 MHK110028	B DS 3414 SPK110037 8 VCP	3.5 348	348 2		1					1 2		15	3 3		1			0 0.00	Ш					Reline, Cut roots
2 3_Moderate 91 3 3_Moderate 91 PPT	G030 3 36 14	CHAPMAN AV CAROLEEN	8/29/2005 1311 8/24/2007 1001	15 13116 MHQ090045 MHQ090046 10 10011 MHM060011 MHM070064	3 D/S 6272 SPQ090057 12 VCP 4 D/S 5540 SPM060013 8 VCP	148 210		1	2			 	16	19 37 2 4				++++	++++		++++	1 2 0 0 0.00	+++			+++		
4 3_Moderate 91	17 2481	Y GILBERT	1/22/2007	MHL000002 MHL990005	5 U/S SPL00002 8 VCP	571					ШТ			3 5	1.67 21	48					2	71 188 2.65				0		There are laterals 90.1' & 423.8'. GIS does not show this laterals.
1 3_Moderate 92 2 3_Moderate 92	29 23 G022 10	13271 Kelly St. JANETTE LN			DS 2949 SPL140034 8 VCP D/S 6312 SPQ070003 8 VCP			4	1 5		HH			17 11 36		2 5.00		H			+++	79 1.39 4 10	\Box	+HTH		$+ + \mp$	+ T	Reline
3 3_Moderate 92 PPT					3 D/S 3686 SPM060018 8 VCP			1	. 3					11 36		2 5.00						0 0 0.00	Ш					T
4 3_Moderate 92	17 2481	Y GILBERT	1/22/2007	MHL000002 MHL990005			571.2 2 1		+ + +					3 5	1.67 21	48					2	71 188 2.65	$\Box\Box$	++++		0		There are laterals 90.1' & 423.8'. GIS does not show this laterals.
1 3_Moderate 93 2 3_Moderate 93	20 2 R049 1	x 12601 Leroy Ave.		9 8480 MHL110037 MHL110038 I1 10912 MHQ130032 MHQ130033	3 DS 3141 SPL110034 8 VCP 3 D/S 4467 SPQ130032 8 VCP		376 1 203.4	3 2	+++		++++	 		16		1 10.00	10	4 3	5 5 1			24 2.00 1	+++	+++++		+++	++	Replace pipe
2 3_Moderate 93 3 3_Moderate 93 PPT		Y RD BARCLAY			B D/S 4467 SPQ130032 8 VCP D/S 4687 SPM060032 8 VCP		203.4		1				18	18 36 1 4								0 0 0.00	Ш			$\pm \pm \pm$	世	
4 3_Moderate 93	5 2238	Y PERDIDO		1 9180 MHM010021 MHM010019			565.7 2 5		ШП		ШП			7 9	1.29 150 59	26	2 13		1	ШПП		251 514 2.05	ЦΠ			$\bot \bot \bot$		Multiple reaches were evaluated with one inspection.
1 3_Moderate 94 2 3_Moderate 94	16 16 R064 6	12642 Susan Ln. Y EASEMENT	12/5/2005 673	8 6739 MHS130005 MHS130006	1 DS 2663 SPM110019 8 VCP 6 D/S 559 SPS130015 8 VCP			3	1				13	16 17 36		3 5.00	5 30 1	++++	3	++++	++++	0 0.00 59 91	+++			+++	++	Reline, Cut roots
3 3_Moderate 94 PPT	36 23	PARLIAMENT	8/27/2007 1002	23 10025 MHM060026 MHM060028	3 D/S 3690 SPM060022 8 VCP	282	284		1					1 2								0 0 0.00						Multiple reaches were evaluated
4 3_Moderate 94	5 2238	Y PERDIDO		2 9181 MHM010021 MHM010019			565.7 2 5		+++					7 9	1.29 150 59	26	2 13	++++	1			251 514 2.05	+++			+ + +		with one inspection.
1 3_Moderate 95 2 3_Moderate 95	17 6 G017 4	x 9731 Halekulani Dr. LA GRAND AV			2 DS 3074 SPM110056 8 VCP 2 D/S 3772 SPK050030 8 VCP		310 3 300.9 4	3 2	2 2		+++			16 13 35	2.29		+	+++	++++	++++	++++	0 0 0	+++	+++++		+ + +	+	Reline
3 3_Moderate 95 PPT	36 30	CAROLEEN	8/27/2007 1002	24 10025 MHM060027 MHM060028	B D/S 3691 SPM060023 8 VCP	237	237		1					1 2	2.00							0 0 0.00						
4 3_Moderate 95	9 2319	Y ANTIGUA	9/20/2006 920	4 9189 MHM020004 MHM020043	3 U/S 4513 SPM020015 8 VCP	300	295.6 1 1				$\perp \perp \perp \perp \perp$			2 3	1.50 97	50						147 344 2.34				0		

		Canaral				Shoot and Defeat Co	dina.			Operational and Maintenance			Construction Footures	I % T =: T	
		General	Pipe			Structural Delect Co	aing add e-n	Rating ects	×	Operational and Maintenance		Rating Score	Construction Features	eous eature: Aband	рвиор
io. D No. D No.			wer ID.	t (t)			sformed ollapsed amage ning Fa	ags Struct rral Def	efect In			Maint Defects Defect (Intruding Seal	uction I Survey	d Aban
No. O.	Existing N	MH ID Previous MH ID	ng Sev	h (ft)	Crack Fracture C F	Broken Hole B H	Joint A O O A I	Structu Structu	Deposits D	Roots (R) Fine (F) Tap (T) Medium (M) B	Infiltration Obstacles II (B) I OB		Line Material L IS	Comstr	dentifie
Phase Promit Tape DVD BY Reve Reve Promit Tape DVD Street Name	CCTV Date Start	End Start End	Direction Existif	GCT/ CCT/ C	MSHLCMS	H SV VV SV VV S M	SMLAVHPS LF	Total Total	AGS B % L % Z % E	3 L J C B L J C B L J C B	. J C G D R W C Z %	C R P A C T OR B BD C ED FT BI BD	D L U R LD RD SRH SRB SRL Z SA	R eas	© Comments Recommendations
1 3_Moderate 96 23 16 12802 Hazel Ave 2 3_Moderate 96 G025 10 KATHY LN			DS 3155 SPL120028 8 VCP D/S 5841 SPQ080041 8 VCP		5 1 4			12 35		2		2 2.00			Reline, Cut roots
3 3_Moderate 96 PPT 36 31 RAINIER			D/S 3693 SPM060025 8 VCP	240 239	3 3			6 18				0 0 0.00			
4 3_Moderate 96 D 2 2446 Y BERRY 12712 Aristocrat	12/18/2006 8339	8338 MHL040017 MHL040015	U/S 5021 SPL040015 8 VCP	307 635.3 10 2				12 22	1.83 27 1	5		33 61 1.85 1		2	Multiple reaches were evaluated with one inspection.
1 3_Moderate 97 32 16 Ave. ORANGEWOOI	4/1/2004 8386	8388 MHK120001 MHK120003	DS 3360 SPK120004 8 VCP	240 245 2	4			16	2.29			0 0.00			Reline, Cut roots
2 3_Moderate 97 R009 11 Y AV 3 3_Moderate 97 PPT 35 40 BARCLAY		10158 MHL070028 MHL070029 10100 MHM060034 MHM060035		360 359.3 ₂ ₁	6 3			12 35	94 5.00	3		97 191			
4 3 Moderate 97 PF1 33 40 BARCEAT MIXE 4 3 Moderate 97 D 2 2446 Y BERRY		8339 MHL040017 MHL040015		307 635.3 10 2	1 1 1			1 2	100 07			33 61 1.85 1			Multiple reaches were evaluated
1 3_Moderate 98 21 24 Grove Blvd.		12267 MHO130004 MHO130005		400 390 1 2				12 22	3.00	5		33 61 1.85 1		2	with one inspection.
2 3_Moderate 98 R061 11 Y NEWHOPE ST		MHQ140014- 11467 A MHQ150006		218 1144	1			16 17 26	3.00			7 0.44	1		- None
4 3_Moderate 98 2 2000 Y PARADE			D/S 3452 SPM990030 8 VCP	=	4			6 16	2.67 98 47			145 290 2.00		0	
1 3_Moderate 99 9 5 x 12635 Main St.	2/19/2004	MHO110004 MHO110003-A		112 112 1	1 1 2			15	3.00	1		11 1.83 2			Reline, Clear D, Fix Lat
2 3_Moderate 99 G004 1 Y EASEMENT 3 3_Moderate 99 PPT 36 39 VONS			D/S 1886 SPK060026 8 VCP D/S 4700 SPM060040 8 VCP	285 295.6 1 1 325 334	1 1	1		13 17 35	2.00			4 8 0 0.00			128.7' (D/SL) JOM, 2 SAGS
Р															
4 3_Moderate 99 COUN TY 3C 9 Y GILBERT		9343 MHL030040 MHL030037		300 328.3 4 2				6 10	1.67 37 19			30 86 142 1.65 5		15	
1 3_Moderate 100 12 13 x 13421 Adland St 2 3_Moderate 100 R022 1 ZETA ST			US 2529 SPO140053 8 VCP 3 D/S 5582 SPQ100002 8 VCP	305 306 1 320 321.5 1	2 1 1 1			15 13 16 34		3 1 1 1		0 0.00 25 31		\blacksquare	Reline, Cut roots
			D/S 4551 SPM080007 8 VCP	320 321.5 1 310 321	1 2			13 16 34		2		25 31 2 6 3.00			
															Multiple reaches were evaluated with one inspection. AT MH050055 (2015) https://doi.org/10.1009/
															(231.5') there is a possible lateral (NW) or another sewer line (Above). Atlas indicates 15-inch
4 3_Moderate 100 13 2369 Y KATELLA 1 3_Moderate 101 5 9 x 12362 Mc Leod		9632 MHL050054 MHL050056	D/S 4071 SPL050029 12 VCP DS 2386 SPO100019 8 VCP 3		1 2	++++++	++++++	7 14	2.00 85 33	 		6 124 275 2.22		0	pipe. Reline
2 3_Moderate 101 G032 10 NIETA DR		13062 MHQ090040 MHQ090041		15 354 3 3	3 2			16 22	2 500	3		3 0.35			CONTINUOUS FRACTURE CIRCUMFERENTIAL
3 3_Moderate 101 PPT 38 9 FLAMINGO			D/S 4648 SPM080015 8 VCP	540 540	2 1			3 8		2		2 2 1.00			
															Multiple reaches were evaluated with one inspection. AT MH050055
															(231.5') there is a possible lateral (NW) or another sewer line (Above). Atlas indicates 15-inch
4 3_Moderate 101 13 2369 Y KATELLA 1 3_Moderate 102 26 2 13311 Ontario D		9633 MHL050054 MHL050056	D/S 4072 SPL050030 12 VCP DS 2518 SPM140041 8 VCP	185 430.3 5 1 320 322 1 1	1			7 14	2.00 85 33			6 124 275 2.22 6 0.65		0	pipe. Reline. Cut roots
2 3 Moderate 102 G026 7 DEBBIE LN		13082 MHR080014 MHR080013		109 108.8 1	4			16 22	2.33	1		6 0.65			98.8' (D/SH) JOM, MHR080013 IS CLEANOUT
3 3_Moderate 102 PPT 38 1 Y FLAMINGO ALL	EY 8/29/2007 9624	9625 MHM070006 MHM070007	D/S 5044 SPM070010 8 VCP	304 306	1 13			1 3	3.00	1		2 5 2.50			Root treat and cut. Clean pipe.
4 3_Moderate 102 1 1936 Y STONYBROOK 2 3_Moderate 103 G018 16 Y ADAH ST			U/S 5028 SPM990033 8 VCP D/S 1831 SPK050018 8 VCP	280 294.0 8 1 360 362.3 2 5	4 1 2 1	1		9 17	1.00 00 12			122 244 2.00 12 24		0	
3 3_Moderate 103 PPT 38 2 FLAMINGO ALL	Y 8/29/2007 9625	10268 MHM070007 MHM070001	D/S 3697 SPM070037 8 VCP	295 299	1			1 3	3.00			0 0 0.00			
4 3_Moderate 103 17 2486 Y GILBERT 1 3_Moderate 104 42 13 x Blvd.	ve	9286 MHL000003 MHL000004 8402 MHK130003 MHK130004	D/S 3437 SPL000003 8 VCP DS 3377 SPK130006 8 VCP 3	290 302.7 2 4 347 347 1 2	' 			6 8	1.33 30 30			3 63 153 2.43 2		6	Reline, Repair lateral
2 3_Moderate 104 G028 9 CHAPMAN AV		12921 MHP090020 MHP090021		155 152.1	1 1 2			14	1./5			4 15 0.94 1			CONTINUOUS FRACTURE CIRCUMFERENTIAL
3 3_Moderate 104 PPT 38 8 FLAMINGO	8/30/2007 9626	10275 MHM070008 MHM070002	D/S 5045 SPM070011 8 VCP	255 265	1 13 1			1 2	2.00	1		2 5 2.50			
4 3_Moderate 104 13 2368 Y KATELLA 2 3_Moderate 105 M018 14 Y COLLEGE AV			U/S 4075 SPL050035 12 VCP D/S 4137 SPQ110013 8 VCP		9 1			13 28	2.15 86 10			96 202 2.10 2		6	Atlas indicates 15-inch pipe.
3 3_Moderate 105 PPT 37 35 SHANNON			D/S 4682 SPM070056 8 VCP	295 297	1			1 2	2.00			0 0 0.00 1			
															Multiple reaches were evaluated with one inspection. 400' to 500' continuous roots. Must clean and
4 3_Moderate 105 2 2057 Y ROSEBAY 2 3_Moderate 106 G031 1 JACALENE LN		9155 MHM990019 MHM980002	U/S 4373 SPM990001 8 VCP D/S 6455 SPQ090054 8 VCP	293 502.3 8 1 225 235.7 1	3 1 5			11 23 10 33	2.09 150 53 1	6 1 41 8 2		2 273 512 1.88 1		2	revideo
3 3_Moderate 106 PPT 39 16 SHANNON			U/S 4683 SPM070057 8 VCP	295 298	3 1 5			2 6	3.00	2 1		0 0 0.00			
															Multiple reaches were evaluated with one inspection. 400' to 500' continuous roots. Must clean and
4 3_Moderate 106 2 2057 Y ROSEBAY 1 3_Moderate 107 4 8 x 12422_Lee Ln.		9156 MHM990019 MHM980002	U/S 4374 SPM990002 8 VCP DS 3796 SPP100023 8 VCP 3	214 502.3 8 1	2			11 23	2.09 150 53 11	6 1 41 8 2		2 273 512 1.88 1		2	revideo
1 3_Moderate 107 4 8 x 12422 Lee Ln. 2 3_Moderate 107 G046 8 Y WILLOWOOD A			D/S 6498 SPS100016 8 VCP 3		4 8			16 32				5 31 57			Reline
3 3_Moderate 107 PPT 37 38 ORANGEWOOI 4 3_Moderate 107 1 1800 Y GREENWICH			D/S 4693 SPM070060 8 VCP U/S 4388 SPM990016 8 VCP	315 332 312 308.5 1 1	1			1 2 2		1 1		0 0 0.00 1 1 50 98 1.96		0	
1 3_Moderate 108 32 18 8841 Woolley Lr	4/1/2004 8388	8389 MHK120003 MHK120004	DS 3362 SPK120006 8 VCP	271 269 2				14	2.33			4 0.16		0	Reline
2 3_Moderate 108 M004 4 Y HOMEWAY DR 3 3_Moderate 108 PPT 37 39 ORANGEWOOD			D/S 5227 SPL060032 8 VCP D/S 4694 SPM070061 8 VCP	205 204.0 1 4 345 332	3 1 3 2	+++++	++++++	14 32	2 11 5.00 4 10.00	 	+++++++	6 23 40 1 0 0 0.00 1		+	
4 3_Moderate 108 10 2328 Y HARLE		8953 MHM030028 MHM030037		350 694.4 2	1			3 5	1.67 125 18 30			9 182 385 2.12		0	Multiple reaches were evaluated with one inspection.
1 3_Moderate 109 31 4 13211 Hazel St. 2 3_Moderate 109 G017 3 LA GRAND AV			DS 3105 SPL140029 8 VCP D/S 5939 SPK050041 8 VCP		3 1			14 22				22 0.81			Reline, Cut roots
3 3_Moderate 109 PPT 38 11 CANARY			D/S 4651 SPM080017 8 VCP	250 270	1 1 11 1			14 32	2.00	1 1		0 0 3 11 3.67			
4 3_Moderate 109 10 2328 Y HARLE		8942 MHM030028 MHM030037		340 694.4 2	1			3 5	1.67 125 18 30			9 182 385 2.12		0	Multiple reaches were evaluated with one inspection.
1 3_Moderate 110 29 27 x 8782 Dakota Aw 2 3_Moderate 110 G038 2 Y KATHY LN	9/12/2005 11718	11719 MHQ110009 MHQ110010	DS 2800 SPK140023 8 VCP 3 D/S 6289 SPQ110043 8 VCP		9 1	 		13 32		2 1	+++++++	18 1.20 1 47 95			Reline, Cir D&R, Fix Lat CONTINUOUS CRACK MULTIPLE
3 3_Moderate 110 PPT 38 13 HUMMINGBIRD	8/30/2007 9607	9608 MHM080015 MHM080016	D/S 4652 SPM080018 8 VCP	210 208	1			1 2	2.00	1		1 1 1.00			Multiple reaches were evaluated
4 3_Moderate 110 3 2200 Y STONYBROOK 12082 Shady Ac	9	9293 MHM990023 MHL990005			1	++++++	+++++++	10 19	1.90 183 42	 	+++++++	225 450 2.00		0	with one inspection.
1 3_Moderate 111 1 3 x St. 2 3_Moderate 111 R009 1 Y MURLINE DR	2/3/2004 11151	11152 MNW24026 MNW24027 10116 MHL050019 MHL050020	DS 2570 SPO090033 8 VCP 3 D/S 4704 SPL050039 8 VCP	310 316 2 1 292 292.7 1 2	2 1 1	++++++++++++++++++++++++++++++++++++	+++++++++++++++++++++++++++++++++++++++	12 32	1.56 6 5.00 4 5.00 1 5.00	4 1	+++++++	6 3.00		+	Reline, Clear deposit
3 3_Moderate 111 PPT 51 41 BLUEJAY			U/S 4655 SPM080021 8 VCP	235 251	1			1 4	4.00			0 0 0.00			Multiple greates upon great for
4 3_Moderate 111 3 2200 Y STONYBROOK			D/S 4378 SPM990006 8 VCP		1			10 19				225 450 2.00		0	Multiple reaches were evaluated with one inspection.
1 3_Moderate 112 3 21 x 10552 Mahalo W 2 3_Moderate 112 R051 4 HARBOR BLVD	11/2/2005 12743		DS 2559 SPO100026 8 VCP 3 D/S 5652 SPS110012 8 VCP	265 263 3 5 334 330.0 1	10		 	11 32		2	 	0 0.00			Reline, Cut roots
3 3_Moderate 112 PPT 35 2 CHAPMAN SHC	Р		D/S 5040 SPM080031 8 VCP	375 51	1			1 2	2.00			0 0 0.00	1		MSA = Material change
MIXE															
D P COUN V DUSTIC		14604 Mill 040000	DIE 9264 EDI 242222												The second pipe ID represents two
4 3_Moderate 112 TY2 6 Y RUSTIC 8504 Garden Gr 1 3_Moderate 113 43 5 Blvd.	ve	14601 MHL040023 MHL050055		219 204.0 2 2 331 331 1		 	+++++++++++++++++++++++++++++++++++++++	4 6	1.50 26	 	+++++++	2 28 54 1.93		0	current pipe IDs.
2 3_Moderate 113 R029 8 9TH ST	9/20/2005 12528	12529 MHP110025 MHP110026	DS 827 SPJ130019 8 VCP D/S 6052 SPP110003 8 VCP	310 318.8	2			3 13 16 16 32	3.23			0 0.00			Replace pipe 4 SAGS
3 3_Moderate 113 PPT 51 37 CHAPMAN	12/27/2007 10049	10048 MHM090021 MHM090020	U/S 4189 SPM090022 8 VCP	160 157		2		2 6	3.00			0 0 0.00			

	General	Structural Defect Coding	Derational and Maintenance	ce Construction Features	899 77 7
9 6 2 S	Pipe	par a di di par	kepair Act Ratin	The Paring Market Marke	in Featur (ey Aban andone
2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2	Sewer II (#) Annual Miles	Crack Fracture Broken Hole Joint J Special Control of the Control		Infiltration Obstacles Vermin State Vermin State	Miscell Struction (or Surv.
rionty (rionty VVD No.) ontracting app No.) over sell in the contraction of the contrac	revious ite (in) ite	C F B H J D X	WL 0 5 5 6 7 7 Medium	m (M) Ball (B) 1 OB V O O O O O O O O O O O O O O O O O	M
a. a. a. o. i. a. b. a.	Start End D W D O S 7 0 J O	L C M S H L C M S H SV VV SV VV S M L S M L A V H P S	LF RF S & F F Ø AGS O N C N Z N B L J G B L J G B L J	J (B E J (G D R W V 2 % C R L E E G F F E B B D E U R E K S R S R Z S R C C S R C C C C C C C C C	JUNIO F & 0 Comments Recommendations
D P COUN 4 3.Moderate 113 TY 2 6 Y RUSTIC 11/3/2007 14601 9632	MHL040023 MHL050055 D/S 8363 SPL040023 8 VCP 45 204.0		4 6 150 26	2 28 54 1.93	The second pipe ID represents two current pipe IDs.
2 3_Moderate 114 G024 9 9TH ST 8/18/2005 12995 12996	MHP070025 MHP070026 D/S 6318 SPP070004 8 VCP 125 134.1 MHM150010 MHM150008 U/S 2027 SPM150005 8 VCP 330 324	1 1 1 1 1	11 15 32 2 2	2 4 1 1 100	
1002004					Multiple reaches were evaluated with one inspection. MH020006
	MHM020005 MHM020008 D/S 4510 SPM020012 8 VCP 140 598.3	1 1	2 4 2.00 147 52	199 450 2.26	0 Doesn't exist on DVD. Must check.
	MHO120010 MHO120011 DS 5399 SPO120009 6 VCP 2 140 145 MHS130019 MHS130020 D/S 8375 SPS130005 8 VCP 313 314.9	1 2 1 1	13 2.60 20 1	1 5 0.39	Reline, Cut roots 314.9' MSA = ALIGNMENT LEFT OR JOINT SEPARATED LARGE
	MHS130019 MHS130020 D/S 8375 SFS130005 8 VCP 313 314.9 MHM150021 MHM150020 U/S 2454 SPM150023 8 VC 318 315	3 6 5 1	15 31 6 1 17 1	1 5 7 7 3.50	OR JOINT SEPARATED LARGE
					Multiple reaches were evaluated with one inspection. MH020006
	MHM020005 MHM020008 D/S 4511 SPM020013 8 VCP 150 598.3	1 1	2 4 2.00 147 52	199 450 2.26	0 Doesn't exist on DVD. Must check.
	MHL120020 MHL120021 DS 3145 SPL120019 8 VCP 316 317 MHQ080037 MHQ080038 D/S 5846 SPQ080046 8 VCP 330 330.4	1 2 1 1 1	13 2.17 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	3 1 32 53	Reline, Cut roots
3 3_Moderate 116 GGSD 24 824 BLAKE 10/19/2004 10549 10583	MHM160008 MHM160007 U/S 2455 SPM160019 8 CP 319 316	1	1 3 3.00	0 0 0.00	1
4 3,Moderate 116 9 2314 Y CHANTICLEER 9/19/2006 9207 9344	MHM020005 MHM020008 D/S 5034 SPM020045 8 VCP 295 598.3		2 4 200 447	100 450 2.00	Multiple reaches were evaluated with one inspection. MH020006 Dosen't exist on DVD. Must check.
	MHQ090016 MHQ090017 D/S 6453 SPQ090052 8 VCP 299 598.3 MHQ090016 MHQ090017 D/S 6453 SPQ090052 8 VCP 385.6	1 1 1 1 1 2 5 3 3	2 4 2.00 147 52 111 31 48 52 5.00 4 40.00 3 5.00 1 5	199 450 2.26	
	MHM160008 MHM160012 D/S 2196 SPM160004 8 VC 280 280 MHM990033 MHM990032 U/S 3451 SPM990029 8 VCP 184 184.0	8	1 3 3.00 8 16 2.00 60 2 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	0 0 0.00	2 0
	MHO140036 MHO140038 DS 2358 SPO140023 8 VCP 3 395 393	3 2 1	13 2.60 1 1	8 1.25	Reline, Cut roots
3 3_Moderate 118 GGSD 25 834 Y ERIN 10/25/2004 0 0	MH-L070010 MH-L080027 D/S 4832 SPL080038 8 V/CP 375 388.7 MHM160019 MHM170000 D/S 2206 SPM160014 8 V/CP 310 309 MHM020007 MHM020001 V/S 4288 SPM020001 8 V/CP 99 104.6	1 9 1	11 31 2 4 2.00	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	
1 3_Moderate 119 31 5 13272 Hazel St. 3/30/2004 11569 11570	MHL140005 MHL140006 DS 2945 SPL140030 8 VCP 342 340	2 1 1 1 1 4 1 1 1 4 1 1 1 1 1 1 1 1 1 1	4 8 2.00 23 1 1 1 1 13 2.60 4	1 26 53 2.04 2 0.40	0 Reline, Cut roots
	MHL060008 MHL060009 D/S 3725 SPL060012 8 VCP 330 322.0 MHM170015 MHM170016 D/S 2212 SPM170011 8 VCP 344 347	1 1 2 1 5 1 1 1 1 1 6 2	10 31 1 3 5.00 2 15.00 7 11 11 27 2.45 5 5 5 6 7 1 1	14 21 0 0 0.00	
	MHL040009 MHL040007 U/S 4920 SPL040007 8 VCP 307 633.2 MNE14009 MNE14011 DS 4436 SPP100042 8 VCP 320 325	9 4	13 22 1.69 5 61 2	15 83 149 1.80 3	Multiple reaches were evaluated with one inspection. Reline, Cut roots
2 3_Moderate 120 G020 11 MAC MURRAY ST 8/8/2005 10287 10858	MHK050023 MHK060029 D/S 3872 SPK050037 8 VCP 135 135.7 MHM170016 MHM170022 D/S 2213 SPM170012 8 VCP 80 84	1 1 1	12 15 31 2	2 4	
4 3_Moderate 120 MIXE D 2 2448 Y HARCOURT 12/18/2006 9012 9011	MHL040009 MHL040007 U/S 4921 SPL040008 8 VCP 307 633.2	9 4	13 22 1.69 5 61	15 83 149 1.80 3	Multiple reaches were evaluated 6 with one inspection.
	MHM170022 MHM170023 D/S 2219 SPM170018 8 VCP 265 267 MHL990002 MHL990001 U/S 3647 SPL990002 8 VCP 288 286.3	6	1 4 4.00 6 12 2.00 10	3 15 25 1.67	0
	MHO140041 MHO140042 DS 2362 SPO140028 8 VCP 330 335 MHL060037 MHL060038 D/S 5329 SPL060041 8 VCP 231 272.8	1 1 1 1 1 1 7 10 2	12 2.00	0 0.00	Reline
4 3_Moderate 122 12 2352 Y LARRY 10/5/2006 8946 8949	MHM190003 MHM190002 U/S 204 SPM190006 8 VCP 198 189 MHM030010 MHM030025 U/S 3661 SPM030037 8 VCP 375 356.2	5 1	1 3 3.00 6 11 1.83 32 18	0 0 0.00 1 50 118 2.36 50 118 2.36 50 118 2.36 50 118 2.36 50 118 2.36 50 50 50 50 50 50 50 50 50 50 50 50 50	0
5 3_Moderate 122 PPT 3-B5 6 Y STREET 9/19/2012 11884 11885	MHP130028 MHP130029 D/S 4292 SPP130019 6 VCP 545 538.2	2 1 1 1	10 5141 14 35 2.50 42 2	1 2G13 45 87 1.93	117.9' Small BVV . Moderate Defect. Patch Repair
ORANGEWOOD	MHO140039 MHO150009 DS 2839 SPO140026 12 VCP 370 369	1 3 1 1	12 2.40	53 1.45	Reline
3 3_Moderate 123 PPT 3 12 Y DONEGAL 3/29/2007 6935 6936	MHL070042 MHL070043 D/S 5224 SPL070042 8 VCP 185 187.5 MHM200016 MHM210001 D/S 228 SPM200015 8 VCP 296 311	5 5 5	15 30 58 1 5 5.00 1 5 5.00 1 5 5.00 1 5 5.00 1 5 5.00 1 5 5.00 1 5 5.00 1 5 5.00 1 5 5 5.00 1 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5	58 116	
4 3_Moderate 123 9 2310 Y HARRIET LN 9/13/2006 9776 9775 MAP MITCHELL	MHM020022 MHM020021 U/S 3648 SPM020041 8 VCP 72 80.1	3 3 3	9 18 2.00 25 1	26 51 1.96	0 290' Small BSV, End of the Sewer Line. Lateral @ 55.9' 90 % Patch Repair & Clean Lateral by
5 3_Moderate 123 PPT 3-B3-2 4 Y AVENUE 8/20/2012 11812 11813	MHP140039 MHP150035 D/S 4910 SPP140033 8 VCP 300 293.6 MHN140028 MHN140031 DS 2909 SPN140017 8 VCP 3 300 303	1 1 3	5133 4 14 3.50 23 12 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	1 1 1 5 4131 39 82 2.10 10 0.63 1	plugged with Deposits Home owner Spot Repair, Clr D, Fix Lat
	MHK080010 MHK080012 D/S 3890 SPK080014 8 VCP 240 235.2 MHN050013 MHN050014 D/S 4559 SPN050014 8 VCP 280 284	9 4 1 1 1 1 1 1 1	13 30 2 7 3.50 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	0 0 1 2 2.00	
4 3_Moderate 124 6 2261 Y HERTHALN 8/3/2006 9198 9197	MHM010036 MHM010034 U/S 4501 SPM010018 8 VCP 260 548.9		25 25 50 200 150 60 6	216 486 2.25	Multiple reaches were evaluated with one inspection. 537' JJOM(D/SL)
5 3_Moderate 124 PPT	MHK090028 MHK090029 D/S 1801 SPK090036 8 VCP 265 263.8		5133 8 23 2.88 7	2700 7 14 2.00	259.5 Small BSV, Close to Ending MH Patch Repair
2 3_Moderate 125 G032 3 Y NORMA LN 8/31/2005 12570 12572	MHQ090032 MHQ090036 D/S 4743 SPQ090016 8 VCP 295 296.7	1 2 2 2 4	11 30 14 35 5.00 2 10.00	51 102	Multiple reaches were evaluated with one inspection. 537
4 3_Moderate 125 6 2261 Y HERTHALN 8/3/2006 9199 9198	MHM010036 MHM010034 U/S 4502 SPM010019 8 VCP 280 548.9		25 25 50 2.00 150 60 6	216 486 2.25	0 JOM(D/SL) 2' From both MH MSA (U/S
5 3_Moderate 125 PPT 4-B1-6 19 MAP 4-B1-6 8 Y HOPE STREET 10/1/2012 7265 7266	MHN180001 MHN180012 D/S 138 SPN180001 8 VCP 95 4		5100 1 5 500	0000 0 0 0.000	SIPHON), 5' Small BSV. Inspection couldn't completed. Moderate Defect Patch Repair
1 3_Moderate 126 20 20 x 9741 Luders Ave. 3/11/2004 12011 12012	MIAMAGO20 MIAMAGO21 DS 2722 SPM140013 8 VCP 2 303 204	1 1 3 2 4 4 1 1 1	12 2.00 1 1 1 2 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	1 0.11	Reline, Cut roots 219' (D/SH) JOM
3 3_Moderate 126 PPT 30 39 SONGISH 8/2/2007 10346 9716	MHN050031 MHN050030 U/S 5008 SPN050056 8 VCP 330 329	8 1 5	1 3 3.00	0 0 0.00	0
1 3_Moderate 127 9 9 9 x 10392 Stanford Ave. 2/19/2004 11243 11244	MHN120010 MHN120025 DS 2532 SPN120011 8 VCP 3 202 203	3 3	11 2.20	1 4 4.00	Reline
MIXE	MHQ070016 MHQ070017 D/S 6441 SPQ070011 8 VCP 285 287.0 MHM040019 MHM040017 U/S 3615 SPM040005 8 VCP 211 487.6	1 1 3 5	10 30 2 1 5.00 8 15 188 49 2 2 2 1 1	3 7 7 134 1.74	Multiple reaches were evaluated 0 with one inspection.
1 3.Moderate 128 46 12 x 9761 Bixby Ave. 5/7/2004 9489 9490 2 3.Moderate 128 G027 4 Y REVA DR 8/2/2005 13076 13079	MHM100043 MHM100007 DS 3576 SPM100010 8 VCP 3 310 308	3 2 1 1 1 2 2 1 3 3 3 1 1 1 1 1 1 1 1 1	0 13 1.00 49 2 2 2 1 1 111 2.75 1 1 1 2.75 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	1 1 20 0 0.00 0 0.00 94 187	With one inspection. Reline, Clear obstacles
4 3_Moderate 128 MIXE D 1 2388 Y JEAN 10/31/2006 8348 8347	MHM040019 MHM040017 U/S 5414 SPM040050 8 VCP 235 487.6		8 15 1.88 49 2 2 21 1	2 77 134 1.74	Multiple reaches were evaluated 0 with one inspection.
June Map 2 5 3_Moderate 128 PPT B1 38 Y LAURIANNE LANE 6/11/2012 10121 10174	MHL050025 MHL060022 D/S 5180 SPL060009 8 VCP 319 321.6	9 7 21 13 1 1	4A3C 62 205 3.31 8 4	1 4 4100 17 28 1.00	
2 3_Moderate 129 R003 1 Y TRISTAN DR 7/27/2005 10798 10800		2 1 5 1 1 1 1 2 2 1 1 1 1 1 1 1 1 1 1 1	11 29 65 5.00 1 1 1 1 5 11 2.20	67 134	
MYE	MHL040014 MHL050052 D/S 5020 SPL040014 8 VCP 306 298.7	6 4	10 16 1.60 22 16	1 39 77 1.97	0
					Clean Deposits & Reline Pipe. Inspection Completed. Cracks & 101.8" to 148.8" (Plumber Snake)&
	MHG090020 MHG090021 D/S 1326 SPG090021 8 VCP 350 355.9	1 5 5 10 1 13	4A3B 45 126 2.80 69 5 3	4 2 5 2 362L 85 165 1.94 2	Fractures & Deposits. Moderate 145' to 178.9' (External Cable) 2 Defect times OBZ. Clean Obstacles
3 3_Moderate 130 PPT 33 34 ORANGEWOOD 8/14/2007 9885 9886	MHR100038 MHR100039 D/S 5776 SPR100004 8 VCP 328 330.7 MHN060006 MHN060007 D/S 6128 SPN060011 8 VCP 282 284 MHN060006 MHN060007 LIS 6128 SPN060011 8 VCP 282 284	2 3 5 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	12 28 2 74 5.00 1 5.00 25 10.00 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	104 233	DAZ=DSZ
MAP	MHM990002 MHM990001 U/S 4377 SPM990005 8 VCP 338 337.4		4 8 2.00 15 24 5	1 45 84 1.87 1	2 Cracks & Fractures. Moderate
5 3_Moderate 130 PPT 3-B2-3 8 Y REVA DRIVE 8/20/2012 8471 13076	MHR080003 MHR080005 D/S 6575 SPR080013 8 VCP 300 303.4	7 5 5 10 1 11 1	4A3B 40 114 2.85 46	2100 46 92 2.00	Defect Should Reline

	General	Structural Defec	ct Coding	Operational and Maintenance	Construction Features
(a) (b) (b) (c) (c) (c) (c) (c) (c) (c) (c) (c) (c	Pipe E Q Q		ned Pipe Sed Sed Sed Sed Sed Sed Sed Sed Sed Se		In Rating the state of the stat
N C N C L L L L L L L L L L L L L L L L	Existing MH ID Previous MH ID 90 00 00 00 00 00 00 00 00 00 00 00 00	Hole Crack Fracture Broken Hole	A Collap Turing	Deposits	U N W W N N N N N N N N N N N N N N N N
Phase Aanking Contract Contrac			MILSMILAVHP S IF RP S Strotted to Structure	D Fine (F) Tap (T) Medium (M) Ball (B) I OB V AE AE Other AGS B % LL % Z % B LL L C B LL L C B LL L C G D R W C Z % C R	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
	V10/2005 10839 10840 MHL060034 MHL060035 DIS 5233 SPL060038 8 VCP 242 V14/2007 9886 9887 MHN060007 MHN060008 DIS 6129 SPN060012 8 VCP 281		12 28		0 0 0 0.00 0 0.00 0 0 0 0 0 0 0 0 0 0 0
	1/30/2006 9313 8984 MHM000012 MHM000019 U/S 4523 SPM000014 8 VCP 266		1 1 2 2.00	0 129 156 1 1 1 65	352 795 2.26 0 Multiple reaches were evaluated with one inspection.
5 3 Moderate 131 PPT 4 1 Y LOUISE STREET 6	1/28/2012 8430 8431 MHK120032 MHK120033 D/S 3408 SPK120034 8 Tile 332	338.8	1 4A34 16 57 359		0000 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
1 3_Moderate 132 15 11 x 13490 Hope	3/4/2004 11314 11315 MHN140031 MHN150003 DS 7521 SPN140020 8 VCP 3 409 1/12/2005 11717 11718 MH0110008 MH0110009 D/S 6288 SPQ110042 8 VCP 290	412 2 1 2 299.0 1 3 3 3 3	11 2.73	5 76 3 1 5.00	2 2 200 1 1 Reline, Clean grease
	1/30/2006 8984 9263 MHM000012 MHM000019 U/S 5416 SPM000019 8 VCP 266		1 1 2 2.00	0 129 156 1 1 1 65	352 795 2.26 0 Multiple reaches were evaluated with one inspection.
5 3_Moderate 132 PPT 4-B2-1 17 HAVENWOOD DR	91/7/2012 11943 11958 MHP160002 MHP160014 D/S 5461 SPP160003 12 VCP 310	395.2 1 3 4 13	1 4A33 22 74 3.3		0000 0 0 0.00
1 3_Moderate 133 37 8 8422 Acacia Ave.	4/8/2004 7087 7650 MHJ120003 MHJ120001 US 821 SPJ120021 8 VCP 127	126 1 3 3 370.5 9 6 1	11 2.70 16 27		0 0.00 Spot Repair, Cut roots
3 3_Moderate 133 PPT 39 8 GARDEN	9/4/2007 10230 10231 MHN060016 MHN060017 D/S 4053 SPN060044 8 VCP 140	144 2 2 297.2 1	2 8 4.00		0 0 0.00 130 254 1.95
2 3_Moderate 134 G016 13 ADAH ST	3/2/2005 7968 7970 MHK050025 MHK050026 D/S 1841 SPK050027 8 VCP 325		15 27	3 50 20	0 0 CONTINUOUS CRACK CIRCUMFERENTIAL
3 3_Moderate 134 PPT 35 16 GARDEN 8	//17/2007 10231 9665 MHN060017 CON070002 D/S 4054 SPN060045 8 VCP 150	152 1 1 1	2 6 3.00		0 0 0.00
4 3_Moderate 134 TY 3C 3 Y HUBER 1	0/14/2007 8977 8975 MHM040023 MHM040021 D/S 4419 SPM040045 8 VCP 216	214.2 2 1		3	21 59 2.81
5 3_Moderate 134 PPT 3-5 1 NELSON STREET ;	//25/2012 12272 12273 MHO110010 MHO110012 D/S 3831 SPO110009 8 Tile 275	278.1 1 13	4A31 14 55 3.93	3	0000 0 0 0.00 2 Moderate
2 3_Moderate 135 M013 7 DOWNING ST		321.6 4 5 3 1	10 3.3	56	19 0.90 Spot Repair 90' (D/SL) JOM
MAP	8/2/2006 9186 9187 MHM010024 MHM010025 D/S 4491 SPM010009 8 VCP 284 (75/2017 11123 11124 MH0120022 MH0120023 D/S 2367 SPO120021 8 Tile 250	283.4 4 330.2 16 2 34 1 8	4 4 1.00 483F 61 171 2 9	0 96 21	117 255 2.18 0 0 Fractures & Cracks. Moderate 2/00 55 110 2.00 Defect. Should Reline
2 3_Moderate 136 M003 7 MARCHAND AV	3/8/2005 10159 10160 MHL070035 MHL070036 D/S 3721 SPL070023 8 VCP 300	302.1 10 1 2	13 27 10 18 1.8	30 2 1	2000 50 1101 2.00 Detect. Syloud reline 3 14
MAP			10 18 1.80		
	127/2012 13005 13006 MHS080003 MHS080004 D/S 6094 SPS080001 10 VCP 315 15 VCP 32 VCP 33 VCP 34 VCP 34 VCP 35	318.2 5 20 9 1 1 3 7 1	3 483A 50 111 2.22	2 6 10 10	261A 16 22 1.38 Moderate 40 2.29 Replace pipe
2 3_Moderate 137 M013 13 DOWNING ST	9/1/2005 12176 12177 MHR100025 MHR100026 D/S 5917 SPR100016 8 VCP 310	330 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	10 2.00	3 3 3	3 3
	5/4/2006 9301 9300 MHM990032 MHM990031 U/S 3450 SPM990028 8 VCP 200		1 3 3.00	66 3 1	0 0 0.00 0 0.00 0 0 0 0 0 0 0 0 0 0 0 0
5 3_Moderate 137 PPT 3-3 5 Y GAIL LANE ; 2 3_Moderate 138 G007 1 HOPI RD ;	/27/2012 12234 12235 MHQ070022 MHQ070023 D/S 6447 SPQ070017 8 VCP 285 /20/2005 7994 7995 MHK070018 MHK070019 D/S 1850 SPK070017 8 VCP 357		483A 32 83 2.50	9 15 1 1 1	2812 17 31 1.82 Defect Should Reline
3 3_Moderate 138 PPT 31 15 BROOKSIDE	98/2007 9843 9947 MHN060044 MHN060045 D/S 3845 SPN060054 8 VCP 365 7/2/2006 9336 9176 MHM010013 MHM010015 U/S 5032 SPM010038 8 VCP 385	370 1	1 2 2.00	3 126 125 1 1 1 4	0 0 0.00
June Mao 2 BROOKHURST					
2 3_Moderate 139 R045 6 HARBOR BLVD 1	0/27/2005 12140 12116 MHS090034 MHS090001 D/S 5834 SPS090023 8 VCP 257	3 /	473D 48 141 2.94 10 27	3 1	PP31 87 174 2.00 4 7
	36/2007 10191 10203 MHN070017 MHN070028 D/S 4225 SPN070049 8 VCP 382 32/202006 9236 9235 MHM030019 MHM030018 U/S 3605 SPM030021 8 VCP 160	384 1 1 148.0 3 1	1 4 4.00		0 0 0.00
MAP 2 July- 5 3_Moderate 139 PPT 3 7 Y MEADE STREET 6	V26/2012 9600 9601 MHL100034 MHL100035 D/S 3324 SPL100016 8 VCP 368	371.6 8 27 19 1 2 6 7	473C 70 153 2.19	9 24	2C12 26 50 1.92 Cracks & Fractures. Should Reline
	3/4/2004 10729 11329 MHM120007 MHM120001 DS 2732 SPM120017 8 VCP 3 385	364 1 3 1 1	10 2.5(1	2 2.00 Reline, Cut roots
	/15/2005 12947 12949 MHP080018 MHP080021 D/S 6198 SPP080014 8 VCP 288 288 VCP 156 VCP		12 13 27 1 4 4.00		0 0 SAG
					Multiple reaches were evaluated with one inspection. 341' There is
4 3_Moderate 140 MIXE D 2 2462 Y GARZA	1/9/2006 8335 8334 MHL040013 MHL040011 U/S 4924 SPL040011 8 VCP 307	607.8 6 3	9 15 1.6:	7 30 4 1 31 4 1 2	73 118 1.62 1 2 a lateral @ 9 O'clock. This lateral does not evist on database
5 3_Moderate 140 PPT 3 14 JOSEPHINE STREET 6	1/28/2012 8390 8393 MHK120005 MHK120008 D/S 3364 SPK120008 8 Tile 332	330.1 2 4 21 1 1 2 7	473C 38 113 2.97	,	Cracks & Fractures. Pipe ID was 3408. We checked GIS & changed It Should Reline
			12 26 5 14 2.80	1 71 5.00 1 5.00 1 4	78 152 0 0 0.00 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
					Multiple reaches were evaluated with one inspection. 341 There is
4 3_Moderate 141 MIXE D 2 2462 Y GARZA	1/9/2006 8336 8335 MHL040013 MHL040011 U/S 5018 SPL040012 8 VCP 307	607.8 6 3	9 15 1.67	7 30 4 1 31 4 1	73 118 1.62 1 2 a lateral @ 9 o'clock. This lateral does not exist on database
5 3 Moderate 141 PPT 4 2 Y LOUISE STREET (728/2012 8429 8430 MHK120031 MHK120032 D/S 3407 SPK120033 8 Tile 332	321.9 2 4 8 2 7	4738 23 64 2.76		1100 1 1 1 1.00 Moderate
2 3_Moderate 142 M015 1 BECK AV		313.9 2 3 5 1	11 26 1 2 2.00	1	1 3
			3 5 1.6		126 246 1.95
	9/8/2012 11683 12807 MHQ100014 MHQ100015 D/S 6461 SPQ100043 8 VCP 380		4734 14 44 3.14	4 1 1 1 1 1 1 1 1 1	1100 1 1 1 1.00 Moderate
ROCKINGHORSE	2/6/2004 11217 11218 MNW13030 MNW13031 DS 2394 SPO100022 8 VCP 3 265 1/1/2005 10910 10911 MHC/130031 MHC/130032 D/S 4466 SPC/130031 8 VCP 230		13 13 26	34 1 2 1	57 1.27 Spot Repair, Cut roots
3 3_Moderate 143 PPT 35 3 HILL (17/12/005 10910 10911 MIRAL30033 MIRAL30032 DJS 4466 SP4130031 8 VCP 285		13 13 26 4 15 3.75		1 3 0 0 0.000
MIXE D P					
		227.9 9 1 304 2 1 1	10 19 1.90		19 29 1.53 0 0 Spot Repair, Clear D&R
2 3_Moderate 144 G040 5 Y 9TH ST 5	\(\frac{17/2004}{17/2007}\) e999 \(\frac{949}{243}\) \(\frac{949}{241}\) \(\frac{949}{	313.6	13 13 26	76 91 5.00 2 40.00	20 0.97 Spot Repair, Clear D&R SAG & DEPOSITS SAG & DEPOSITS
4 3_Moderate 144 5 2235 Y MILENBURG 7		522.9 4 1	1 2 2.00	1 	179 389 2.17
5 3_Moderate 144 PPT 3-6 15 Y PARKWAY :	/26/2012 11838 13491 MHO120011 MHO120012 D/S 5400 SPO120010 8 Tile 355	513.8 5 4 27 1 5	1 65 463D 108 250 2.3		4233 169 327 1.93 1 1 1 1 1 513.8'MSA (LL). No Reversal Video
2 3_Moderate 145 G031 9 Y JOHN AV (/30/2005 12473 12567 MHQ090026 MHQ090029 D/S 4766 SPQ090030 8 VCP 290	288.6		3 50 5.00 1 5.00	10 0.67 Reline, Cut roots SAG
	0/24/2007 10209 10210 MHN070033 MHN070034 D/S 4036 SPN070038 8 VCP 249 (18/2006 9335 9336 MHM010012 MHM010014 D/S 3483 SPN070034 8 VCP 240	245 1 522.9 4 1	1 2 2.00 5 9 1.80	1 	0 0 0.00 Multiple reaches were evaluated
5 3_Moderate 145 PPT 3-6 13 Y MAIN STREET ;	/27/2012 11749 11750 MHO120001 MHP120037 D/S 4404 SPO120001 10 Tile 335	332.4 3 3 24 1 6	463C 37 107 2.89	20 27	312C 48 73 1.52 1 Moderate
2 3_Moderate 146 R039 9 Y ALLEY 9	/30/2005 12663 12664 MHT100045 MHT100046 D/S 3924 SPT100041 8 VCP 400		10 2.50	9 5 5.00 1 5.00	8 2.00 Spot Repair, Cut roots 15 30 2 SAGS
		330 1	1 2 2.00		0 0 0.00 116 228 1.97

	General Pipe	Structural Defect Codin	ing 60 80 80 80 80 80 80 80	Operational and Maintenance	Construction Features	ous Prend Prend
ON 10 Feb 1 V/O 10	10 Previous MH ID Previous MH I	Crack Fracture Broken Hole Jo	Deformed Collapsed Surface Damage Lining Faili Collapsed	Deposits Roots (R) Infiltration Obst.	tacles Vermin XX War XX	rruding Seal S
Street Name CCTV Date Start Ex	Previous Start (f) Community (C F B H	D X WI D S S M L A V H P S LF RP S S S S C C C C C C	D Fine (F) Tap (T) Medium (M) Ball (B) I Ot AE AE Other Ott		S
5 3_Moderate 146 PPT 3-83-5 6 COLLEGE 8/31/2012 11649 111	50 MHR110013 MHR110014 D/S 6083 SPR110030 8 VCP 325 332.6		463C 46 126 2.74		0000 0 0 0.00	Cracks & Fractures. Moderate Defect Should Reline
2 3_Moderate 147 R030 5 9TH ST 9/21/2005 12483 12-	116 MHJ140005 MHJ140030 DS 6836 SPJ140031 10 VCP 280 281 184 MHP120002 MHQ120006 D/S 5589 SPP120003 8 VCP 330 341.6	1 3	10 2.50	1 3	0 0.00	The second pipe ID represents two current pipe IDs. Spot Repair, Cut roots
4 3_Moderate 147 MIXE D 3 2488 Y BALL RD 1/25/2007 9318 93	119 MHN070037 MHN070038 D/S 4040 SPN070042 8 VCP 328 330 19 MHM000017 MHM000018 D/S 3466 SPM000009 8 VCP 250 243.0		2 3 1.50	80 45	13 138 263 1.91	0
	75 MHG090011 MHG090012 D/S 1063 SPG090015 8 VCP 350 349.7	17 1 6 12 2 6	463B 44 117 2.66	68 1 2	5132 71 147 2.07	Cracks & Fractures & Deposits. Moderate Defect Clean Deposits & Reline Pipe The second pipe ID represents two
2 3_Moderate 148 R046 14 Y PEARCE AV 10/28/2005 12770 12	16 MH-J140005 MH-J140030 DIS 6837 SP.1140031 10 VCP 280 281 71 MHR140005 MHR140006 DIS 6479 SPR140006 8 VCP 310 310.4 33 MHN080005 MHN080007 DIS 4147 SPN080005 8 VCP 300 302	1 2 1	10 2.50 13 13 26 4 9 2.25	8 11 1 1 1	0 0.00 21 34 0 0 0.00	current pipe IDs. Spot Repair, Cut roots SAG
MAP	94 MHM990026 MHM990025 U/S 3446 SPM990024 8 VCP 287 284.8		2 4 2.00	85 46 50 1 58 3 1	4 248 440 1.77	0
1 3_Moderate 149 20 10 12642 Lucille Ave. 3/10/2004 9367 93	01 MHN140018 MHN140019 DIS 2899 SPN140007 8 VCP 300 300.1 38 MHR110045 MHR110046 DIS 3304 SPL110047 8 VCP 300 300.1 37 MHR050030 MHR050031 DIS 2428 SPK950046 8 VCP 285 300.8	2 1 1	4635 25 71 2.84 10 2.50	15 2 1	2B13 18 32 1.78 0 0.00	Moderate Spot Repair
3 3_Moderate 149 PPT 37 25 SEACREST 8/29/2007 9867 98	75 MPHX090030 WPKX090031 DIS 2426 SPKX090040 8 VCP 260 300.6 47 MPHX090025 MPHX090009 DIS 5881 SPKX080025 8 VCP 325 310	2 5 4 2 1	13 25 2 7 3.50		0 0 0.00	Multiple reaches were evaluated
MAP	59 MHM590000 MHM590010 U/S 4385 SPM590013 8 VCP 99 419.2 74 MHN090018 MHN090019 D/S 2557 SPN090016 8 VCP 286 292.2		9 11 22 2.00	4 26 1	14 45 75 1.67	0 with one inspection. Cracks & Fractures, Major Defect Should Reline
1 3,Moderate 150 7A 12 11082 Walnut 2/19/2004 11785 11' 2 3,Moderate 150 M014 7 TWINTREE AV 9/2/2005 12115 12'	66 MHP100034 MHP110016 DS 5117 SPP100041 6 VCP 270 268 71 MHR100020 MHR100022 DIS 6033 SPR100034 8 VCP 135 134.4		453D 68 168 2.47 9 3.00		4 1400 4 4 1.00 0 0.00	Cracks & Fractures, Wellor Detect Should Reline Spot Repair
PCOUN	66 MHN080030 MHN080029 U/S 5371 SPN080030 8 VCP 290 291	1	1 3 3.00		0 0 0.00	Multiple reaches were evaluated
5 3_Moderate 150 PPT 3-5 12 Y MCLEOD STREET 7/24/2012 11210 11:	70 MHM990006 MHM990010 US 4386 SPM990014 8 VCP 323 419.2 47 MHO100019 MHO110030 D/S 2387 SPO100020 8 Tile 270 267.1	2 11 1 15 1 5	9 11 22 2.00 453B 33 88 2.67	4 26 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	2B11 19 37 1.95	0 with one inspection. 2 Moderate
2 3_Moderate 151 G058 10 Y HASTER ST 12/13/2005 13009 130			9 3.00 11 25 1 2 2.00	76 76 5.00	22 1.05 21 173 325 21 20 0.000 c	Spot Repair
	71 MHN080034 MHN080035 D/S 5376 SPN080034 8 VCP 345 353 32 MH1990004 MH1990005 D/S 3682 SPL990005 8 VCP 255 251.8		5 8 1.60	81	2 83 164 1.98	
1 3_Moderate 152 51 2 12401 Jerome St. 5/20/2004 9595 95	26 MHL090022 MHL090024 D/S 3337 SPL090020 8 VCP 282 283.9 56 MHL100029 MHL110006 DS 3319 SPL100011 8 VCP 334 327	1 1 1	453B 41 99 2.41 9 3.00	5 2 1 1	2K00 62 124 2.00 10 2.00	Cracks & Fractures. Major Defect Should Reline Spot Repair, Cut roots
3 3_Moderate 152 PPT 37 26 MELODY PARK 8/30/2007 9978 99	121 MH-0130022 COG130002 U/S 3708 SPO130001 8 VCP 140 136.1 79 MH-N080042 MH-N080043 D/S 538.3 SPN080042 8 VCP 210 214 57 MH-M0800009 MH-M0800009 U/S 4383 SPM990011 8 VCP 98 97.0		11 25 1 2 2.00 4 8 2.00	6 5.00 1 1 19 2	28 38 0 0 0 0.00 1 1 17 29 1.71	S (Dist.) JOM
1 3,Moderate 153 17 9 x 12681 Lanakila Ln. 3/5/2004 10753 111 2 3,Moderate 153 R001 7 Y FERRIS LN 7/25/2005 10141 101	551 MHM110038 MHM110039 DS 2671 SPM110027 8 VCP 3 192 191 93 MHL080019 MHL080021 D/S 5942 SPL080039 8 VCP 305 297.4	1 1 1 1 5 5	9 3.00	27 5.00 5 50.00	0 0.00	Spot Repair, Cut roots
	46 MHN090007 MHN090008 D/S 4178 SPN090010 15 VCP 252 253 28 MHM010014 MHM010003 D/S 3484 SPM010035 8 VCP 270 266.9	1 1	1 4 4.00 8 17 2.13	87 54 14 1 1 8 1 1	2 168 341 2.03 1	2
	76 MHK130037 MHK130040 D/S 710 SPK130038 8 Tile 260 254.3 13 MHJ120025 MHJ120026 DS 745 SPJ120017 8 VCP 132 141	2 12 5	453A 19 60 3.16		0000 0 0 0.00	Moderate Spot Repair
	009 MHP140010 MHP140011 D/S 4813 SPP140009 8 VCP 291 291.9 47 MHN100015 MHN100025 D/S 3500 SPN100051 8 VCP 350 359		11 12 25 1 2 2.00	15 5.00 6 5.00 3 1	25 52	CONTINUOUS DAE & DAZ
MIXE D P COIN						
1 3_Moderate 155 40 29 13401 Wilson St. 4/16/2004 7689 76	44 MHL030038 MHL030039 D/S 3656 SPL030004 10 VCP 337 332.0 90 MHK140039 MHK150011 DS 720 SPK140036 8 VCP 380 378		1 4 6 1.50 9 2.25	13 22	12 47 104 2.21 5 30 1.26	15 Spot Repair
3 3_Moderate 155 PPT 25 36 TYHURST 7/17/2007 9430 94	997 MHR070021 MHR070022 D/S 8019 SPR070028 8 VCP 323 320.4 46 MHR100023 MHR100024 D/S 3501 SPN100052 8 VCP 320 333 26 MHM010006 MHL010005 D/S 3476 SPL010007 8 VCP 261 247.8		11 12 25 2 4 2.00 6 12 2.00	77 15 4	0 0 1 3 3.00 1 96 188 1.96	0
	446 MHM120019 MHM110044 US 2497 SPM110049 8 VCP 335 344 70 MHL060014 MHL060015 D/S 3731 SPL060018 8 VCP 282 284.6	2 1 1 1	9 2.25	9 1 1 1	10 0.83	Spot Repair, Cut roots
3 3_Moderate 156 PPT 25 37 TYHURST 7/17/2007 9446 94	47 Mi-N100024 Mi-N100025 D/S 3181 SPN100035 8 VCP 160 151 18 Mi-M000007 Mi-M0000017 D/S 3489 SPM000011 8 VCP 328 325.0	1	1 2 2.00 7 12 1.71	90 30 8	0 0 0.00 16 144 280 1.94	0
1 3_Moderate 157 36 1 x 12750 Dale Ave. 4/6/2004 8439 84	71 MHL120014 MHL120015 D/S 3130 SPL120015 8 VCP 390 392.8 40 MHK120035 MHK120036 DS 3418 SPK120037 8 VCP 3 332 328	2 1 1	443E 51 131 2.57	7 7 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	3127 14 25 1.79 6 1.00 1 1 1	1 Cracks & Fractures. Moderate Should Reline Sport Repair, Cut R, Fix Lat
3 3_Moderate 157 PPT 25 16 MALINDA 7/13/2007 9450 94	882 MHK050012 MHK050013 D/S 3773 SPK050031 8 VCP 253 256.6 51 MHN100033 MHN100034 D/S 3185 SPN100039 8 VCP 355 332	3 1 2 6 2	12 24 2.00		0 0 0 0.00 4	Multiple reaches were evaluated
MAP 2 July-	16 MHM010006 COM010002 US 3478 SPM010029 8 VCP 106 402.1	2	2 4 2.00	61 41	102 245 2.40	0 with one inspection. Cracks & Fractures. Moderate
1 3_Moderate 158 25 12 x 12691 Hazel Ave. 3/18/2004 9373 93	74 MHL110051 MHL110052 DS 3210 SPL110053 8 VCP 3 250 248	15 13 24 2 2 2 4 1 1 1 3 1 1 3 1 1 1 1 1 1 1 1 1 1 1 1	443D 62 155 2.50 9 2.25	2 12 8 10 108 9 500 1 500 3	2A18 22 36 1.64 6 0 0.00	Defect Should Reline Spot Repair
3 3_Moderate 158 PPT 25 17 MALINDA 7/13/2007 9451 94	52 MHN100034 MHN100035 D/S 3186 SPN100040 8 V/CP 180 189 32 MHM010006 CCM010002 U/S 3479 SPM010030 8 V/CP 300 402.1	1	1 4 4.00	5 330 1 330 3	0 0 0.00 1	Multiple reaches were evaluated
5 3_Moderate 158 PPT	22 NIHMUTUOUG LORUNUUG LUS 3474 SPHOTUOUG 8 (VCP 300 4U.C.1 30 MHL130007 NHL130008 D/S 2973 SPL130042 8 Tile 1957. 36 NHH120028 NHH120029 DS 3154 SPL120027 8 VCP 333 336	2 13 1 24 1 4	443D 43 118 2.74	VI	0000 0 0 0.00	0 with one inspection. Cracks & Fractures. Moderate Defect Should Reline Soct Reseir
2 3_Moderate 159 G018 7 DEWEY DR 8/4/2005 10285 102	#b MH-L120028 MH-L120029 DS 3194 SPL120027 8 VCP 333 336 86 MH-K05002 MH-K05002 DS 3870 SPK-D60055 8 VCP 300 301-2 82 MH-N150015 MH-N150017 D/S 2228 SPN150010 8 VCP 299 302	5 1 2 2	9 1.29 2 12 24 1 4 4.00		0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	Spot Repair SMALL SAG
4 3_Moderate 159 TY 6 Y RANDOM 10/11/2007 9289 92	88 MHM990017 MHM990016 U/S 3440 SPM990020 8 VCP 322 320.5	2	2 4 2.00	18	9 27 45 1.67 1	2
	97 MHO140021 MHO140022 D/S 3943 SPO140008 8 VCP 280 292	6 24 2 4	1 443D 37 100 2.70	26	2000 26 52 2.00	2 Moderate
2 3_Moderate 160 R001 4 Y ARDIS DR 7/25/2005 10793 103		3 2 4 1	1 9 1.80 10 24 1 2 2.00	1 5.00 7 1 1 1	13 26	2 Roplace pipe
PCOUN						The second pipe ID represents two
4 3_Moderate 160 TY 3B 9 Y GILBERT 10/16/2007 8958 144 MAP 2_July- BROOKHURST	022 MHL040004 MHL050050 D/S 8261 SPL040005 10 VCP 288 248.3		6 9 1.50	40 16	56 112 2.00 1 2	g current pipe IDs.
5 3,Moderate 160 PPT 3 2 Y STREET 626/2012 9950 103	440 MHM060043 MHM060001 D/S 5017 SPM060001 10 VCP 350 331.9	2 11 15 8 4	4438 40 92 2.30		0000 0 0 0.00	Moderate LD
1 3_Moderate 161 15 12 x 10000 Central Ave. 3/4/2004 10708 11. 2 3_Moderate 161 R007 1 MAGNOLIA ST 8/5/2005 9651 97	938 MHN140005 MHN140000 DS 3084 SPN140037 8 VCP 3 360 362 49 COL050001 MHL050045 D/S 5079 SPL050027 8 VCP 135 129.9	3 2	9 3.00	85	3 20 1.00 2 1	

				General				-			Structural Defect C	odina		ō		Operatio	onal and Maintenance					Construction Feat	ures	1 8 1 5	5	
	0 4	Ö, Ç			ora o	Pipe	e					pa di bipe	epair epair ct Rating	efect Sc Index						ts t Score				aneous n Featur	andoned	
	Tape No.	ched? ()	Ex	xisting MH ID Previous MH ID	of Came	Sewer	gth (ft) ment	(t)) upu	ack Fra	cture Broken	n Hole	Deform Collaps Surface Damag	Point R Sags lick Stru	ictural D	Deposits		Roots (R)		Itration Obstacles V		Tap (Lateral)	Line	Intruding Seal Material	Miscell struction	affed Ab	
hase riority anking	VD No.	eversal VD Wat			riection xisting 8	revious ize (in)	IS Com	CTVLe	C F	В	0	J D X	ACP Qu	otal Stru tructural	AGS B % L % Z % B	Fine (F)	Tap (T) Medium (M	Ball (B)	Other Other	ACP Qual Osial Osi	T		IS	otal Cor	IS Identification of the second of the secon	
3 3_Moderate 161 PPT	8 2	DAWSON	4/26/2007 10	tart End Start End 1489 10507 MHN150025 MHN160	О14 D/S 2236 SPN1	0 ≥ 160011 8 VCP	250	238	1 1	M S H SV VV	V SV VV S W	LSWLAVHPS	2	⊢ σ 5 2.50	AGS B 76 L 76 Z 76 B	L J C	1 1	BLJCG	5 R W C Z %	1 2 2.00 S	3 FL BI BD	D L U R LD RI	SRH SRB SRL Z SA	A CU MC - A	2 6 Comments Recomm	nmendations
4 3_Moderate 161	P COUN TY 3B 9	Y GILBERT	10/16/2007 14	502 8959 MHL040004 MHL050	150 D/S 8262 SPL0	040005 10 VCP	288	2483 2 2						0 450	40 46					Ee 440 200	412				The second pipe ID represents two current pipe IDs.	
	MAP	PARTRIDGE						240.3 3 3						9 1.50	40 16					56 112 2.00	1 2			9	curent pipe tos.	
5 3_Moderate 161 PPT 1 3 Moderate 162	3-B4-1 16 20 5	Y STREET x 9182 Barbara Ave.		693 6694 MHS130017 MHS130 361 9362 MHL110039 MHL110			3 316	249.3 1 6	13 1	4	1		443A 26	9 3.00	10	1	1 1			2A11 13 27 2.08	1				Spot Repair, Cut	ut roots
2 3_Moderate 162 3 3_Moderate 162 PPT	G044 10 8 15	Y DUNKLEE AV	10/6/2005 12	378 12379 MHT120011 MHT120 492 10493 MHN150028 MHN150	012 D/S 5439 SPT1	120004 8 VCP					2		11 12	24 6 3.00	2 3 5.00 41 5.00					1 50 140		2 1				
	MIXE																									
4 3_Moderate 162	D P COUN TY 2 7	Y RUSTIC	11/3/2007 96	536 9637 MHL040022 MHL040	023 D/S 5521 SPL0	040022 8 VCP	215	214.2	1				1	2 2.00	90					1 91 181 1.99				0		
5 3_Moderate 162 PPT	MAP 3-B3-4 2	Y DORADA AVENUE	8/20/2012 11	729 12601 MHQ110021 MHQ110	123 D/S 4760 SPO1	110031 8 VCP	170	335.2 11 1	0 4 2	2			4434 26	74 0 70	30					2F00 39 78 2.00					Multiple reaches were evaluated with one inspection. Moderate	
	26 6 G001 3	9291 Imperial Y POES ST	3/19/2004 12	071 11521 MHL140016 MHL140 588 8589 MHJ070002 MHJ070	018 DS 2717 SPL1	140022 8 VCP		253	3 1 2	1	2		11	9 1.50	39	2 1 2				4 0.67					96.7(D/SL) & 99.1' (D/SH) JOM	t roots
3 3_Moderate 163 PPT		HOPE MILENBURG-N/O		493 10494 MHN150029 MHN150	030 D/S 2240 SPN1		350	352 1	1		2		2			1 3				0 0 0.00 1	1				After buried CO there is no MH.	
4 3_Moderate 163	5 2234	Y BIENVILLE	7/18/2006	MHM010012 NO MH	ID U/S	8 VCP	142	142.4					10 10	20 2.00	40 19 7					1 67 140 2.09				0	There is 1 lateral after CO.	
5 3_Moderate 163 PPT	MAP 3-B3-4 2			729 12601 MHQ110020 MHQ110			166	335.2 11 1	9 1 2	2			443A 26	71 2.73	39	+++		+ + + +	++++	2F00 39 78 2.00					Multiple reaches were evaluated with one inspection. Moderate	
1 3_Moderate 164 2 3_Moderate 164	6 1 G037 1	x 10602 Claussen St. Y JERRY LN		139 11140 MHO110021 MHO110 560 12540 MHQ100042 MHP100 496 10507 MHN150032 MHN160			3 289 300		2	3	1 1		9	9 3.00 24	2 6 5.00 3 5.00	1				2 2.00 3 17 33 1	1	1			Spot Repair, Cut 291' (D/SH) JOM	t roots
3 3_Moderate 164 PPT 4 3_Moderate 164	9 10 7 2265	TRAYLOR Y GUINIDA	5/3/2007 10- 8/11/2006 91	1496 10507 MHN150032 MHN160 195 9188 MHM010032 MHM010	014 D/S 2243 SPN1 026 D/S 4499 SPM0	160012 8 VCP 010016 8 VCP	330 300		2 1				2 6	3 1.50 12 2.00	98 63	1				0 0 0.00 162 386 2.38				0		
																									Inspection Report shows 259.4' BVV. It was Fracture Circumferential & we changed it.	
5 3_Moderate 164 PPT	MAP 3-5 16	Y EASY WAY		301 10669 MHQ070034 MHQ070			210		8 1	4			4439 17			3				1300 3 3 1.00			1		310.2' MSA (DROP CON). Close to Ending MH	
2 3_Moderate 165	35 9 M006 8	12801 Adelle St. Y RICKY AV	8/11/2005 13	424 8425 MHK120026 MHK120 195 13197 MHQ060003 MHQ060	005 D/S 5972 SPQ0	060005 8 VCP	350		4				12	9 3.00	96 93 5.00	1				190 379					Spot Repair, Cut	roots
3 3_Moderate 165 PPT 4 3_Moderate 165	9 4 13 2367	CYPRESS Y KATELLA		502 10503 MHN150038 MHN160 015 8333 MHL050052 MHL050					1	1			6	4 4.00 13 2.17	76 73					0 0 0.00	3			9	Atlas indicates 15-inch pipe.	
5 3_Moderate 165	2 July- 3 15	JOSEPHINE Y STREET	6/28/2012 83	378 8390 MHK110004 MHK120	005 D/S 3349 SPK1	Clay 120003 8 Tile	348	348.1	7	4		1 1	4437 13	40 3.08		3 1		,		3116 7 14 2.00		1 1				
1 3_Moderate 166 2 3_Moderate 166	2 15 M020 3			845 11030 MNE14003 MNE140 410 11411 MHP120004 MHP120			375 330		5 1			1		9 3.00 23	105 5.00 1 5.00	20				0 0.00 4 130 236					Spot Repair	
3 3_Moderate 166 PPT	51 21	WOODBURY EASEMENT	12/26/2007 10:	518 10517 MHN160004 MHN160	003 U/S 2183 SPN1	160003 8 VCP	40	36		1			1	4 4.00						0 0 0.00						
400	P COUN	V PE0//ED				240242		207.0																	Multiple reaches were evaluated with one inspection.	
4 3_Moderate 166 1 3_Moderate 167	TY 3B 6 27 18	Y DECKER 9241 Nicholas Dr.	3/23/2004 84	349 8975 MHM040020 MHM040 476 8477 MHL130005 MHL130	006 DS 3136 SPL1	130004 8 VCP		82	3					9 1.80	1 196					197 590 2.99				0	Spot Repair	
2 3_Moderate 167 3 3_Moderate 167 PPT	R047 1 9 18	GRANITE CR CYPRESS		773 12774 MHR130007 MHR130 506 10504 MHN160013 MHN160							1		11 12	3 3.00		4				0 0 0.00 1	1 1				SAG	
	P																								Multiple reaches were evaluated with one inspection.	
4 3_Moderate 167	TY 3B 6	Y DECKER	10/17/2007 89	975 8976 MHM040020 MHM040	009 D/S 4417 SPMC	040043 10 VCP	330	987.0 4 1					5	9 1.80	1 196					197 590 2.99				0	265.6' MSA (High Water Level). No	
5 3_Moderate 167 PPT 1 3_Moderate 168	4-B2-3 3 34 1	ALLEY 12551 Loma St.		940 6935 MHM200015 MHM200 408 8409 MHK110017 MHK110			376 316	265.6 317	3 1	4			4434 8	28 3.50 9 2.25	1					3100 1 2 2.00 0 0.00			1		Reversal Video Spot Repair	
2 3_Moderate 168 3 3_Moderate 168 PPT	G035 11 9 11	Y FREDRICK DR TRAYLOR		573 12574 MHQ090037 MHQ090 507 10508 MHN160014 MHN160			140 196		1	1			10 12	23 4 4.00	100 69 5.00 1 5.00	1 2				1 175 346 1	3				SAG & DEPOSITS	
	P COUN																								Multiple reaches were evaluated with one inspection.	
4 3_Moderate 168	TY 3B 6	Y DECKER	10/17/2007 89	976 8966 MHM040020 MHM040	009 D/S 4418 SPM0	040044 10 VCP	328	987.0 4 1					5	9 1.80	1 196					197 590 2.99				0	with one inspection.	
5 3_Moderate 168 PPT 1 3_Moderate 169	MAP 4-B2-1 16 37 12	HAVENWOOD DR	9/7/2012 11:	960 11961 MHP160018 MHP160 593 7694 MHJ120005 MHJ120	019 D/S 5463 SPP1	160018 12 VCP	150 300	262.2 2	2 1	4 1	1		4432 9	28 3.11 8 4.00	1					2100 1 2 2.00					Spot Repair	
2 3_Moderate 169 3 3_Moderate 169 PPT	R015 7	CLIFFWOOD AV Y 15th ST	8/22/2005 13	099 13089 MHR070024 MHQ070 1514 10515 MHN170015 MHN170	043 D/S 5727 SPR0	070019 8 VCP	300	297.6	2	1	1		10 11		88 5.00					88 176 0 0 0.00 2					294' (D/SH) JOM, SAG	
4 3_Moderate 169	MIXE D 3 2477	Y ORANGE		290 9155 MHM980001 MHM980			265						5	6 1.20	13 11	11				35 59 1.69				0		
5 3_Moderate 169 PPT	MAP 3-B3-5 18	KATELLA AVE	8/31/2012 96	634 9635 MHL050057 MHL050	058 D/S 4076 SPL0	050032 12 VCP	40	41.4		4			4431 6	20 3.33						0000 0 0 0.00					Moderate	
1 3_Moderate 170	40 25	x 8172 Larson Ave.		052 7053 MHJ130018 MHJ130			3 150	187		2				8 4.00		1	2 1			0 0.00					Spot Repair, Cut CONTINUOUS FRACTURE	t roots
2 3_Moderate 170	G018 10	Y DEWEY DR		286 10287 MHK050022 MHK050					9		1			22		3 24				27 27					CIRCUMFERENTIAL, 255' (D/SL) JOS	
3 3_Moderate 170 PPT	Р	15th ST	5/16/2007 69	969 6970 MHN170022 MHN170	J2J D/O 254 SPN1	170010 8 VCP	121	244	++++					3 3.00					+++++	0 0 0.00						
4 3_Moderate 170	COUN TY 3B 9	Y GILBERT	10/16/2007 89	957 8958 MHL040002 MHL040	004 D/S 3669 SPL0	040004 10 VCP	288	286.6 2 1					3	5 1.67	64 16	\coprod				80 160 2.00	4			12		
5 3_Moderate 170 PPT	MAP 3-B3-4 28	ROAN ROAD	8/29/2012 11:	978 11979 MHR130014 MHR140	026 D/S 3859 SPR1	140027 8 VCP	290	294.9 2	32 1	3			433E 38	115 3.03						3100 1 3 3.00	1				Moderate	
1 3_Moderate 171 2 3_Moderate 171	45 15 M012 6	8701 Garden Grove Blvd. Y CHAPMAN AV		352 7653 MHK130021 MHK130 250 12251 MHT090034 MHT090			155 340	158		2				8 2.67	80 54 500	\prod				132 1.65					Spot Repair	
2 3_Moderate 1/1 3 3_Moderate 171 PPT 4 3_Moderate 171	M012 6 6 28		4/12/2007 69	250 12251 MH1090034 MH1090 973 6974 MHN170026 MHN170 330 9334 MHM010005 MHM010	027 D/S 258 SPN1	170022 8 VCP	216	217	1		2		3	-	80 54 5.00				1 5	135 272 0 0 0.00 1						
4 3_Moderate 171 PPT 5 3_Moderate 171 PPT	5 2229 MAP 2-1-2 16	Y GILBERT STREET		330 9334 MHM010005 MHM010 456 8457 MHL120003 MHL120			333		31	3			433E 48	4 2.00 124 2.58	98 12 7	1 21 1	1	4		3 115 237 2.06 1 4431 35 55 1.57				2	Moderate	
1 3_Moderate 172 2 3_Moderate 172	50 4 M023 3	x 12541 Gilbert St. CHAPMAN AV	10/26/2005 12	520 9521 MHL110060 MHL110 989 12990 MHQ090050 MHQ090	051 D/S 6144 SPQ0	090025 12 VCP	330		6	1			10	8 2.67 22	4 44	1	6 1	2		0 0					Replace pipe	
3 3_Moderate 172 PPT	6 25 P			976 6977 MHN170029 MHN170						1				4 4.00		HH				0 0 0.00 1	1					
4 3_Moderate 172	TY 3 A 6	Y GILBERT	10/12/2007	0 0 MHL010003 MHL020	001 D/S 3958 SPL0	010004 8 VCP	259	802.2 3					3	6 2.00	159 2					7 198 359 1.81	3			9	Multiple reaches were evaluated with one inspection.	
5 3_Moderate 172 PPT	MAP 2 July- 2 1	Y SHELLEY DRIVE		818 10819 MHL070011 MHL070				362.7 1 6	27	2			4220 -	404 0.70	37					3 2F1C 61 99 1.62					Cracks & Fractures. Moderate Defect Should Reline	
	37 10			818 10819 MHL070011 MHL070 694 7696 MHJ120006 MHJ120					1	1			4330 37	8 2.67	21 11 5		3 1			3 2F1C 61 99 1.62 6 2.00					Spot Repair, Cut	it roots
2 3_Moderate 173	G030 10			022 13023 MHS080002 MHS0800	D/S 6102 SPS0		364						11 11	22						2 6		1	1	1 1	131.6' MSA= CAMERA BLOCKED, LINE RIGHT, MMC=PVC	
3 3_Moderate 173 PPT	6 26	DEANANN	4/12/2007 69	977 7296 MHN170030 MHN170	031 D/S 47 SPN1	170003 8 VCP	275	277	1				1	2 2.00						0 0 0.00						

General		Structural Defect Coding	p 8 Operational and Maintenance	Construction Features
9 o o o o o o o o o o o o o o o o o o o	Pipe	add pos	Uct Ratin	In Rating cts
2 2 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	r Sewer agth (ft)	E Galler Grack Fracture Broken Hole Joint OO V		Infiltration Obstacles Vernin Obstacles O
P	Previous Size (in) Material Joint Le	0 S O C C M S H L C M S H SV VV SV VV S M L S M L A V H P S	F RP S Q L P P S G AGS B % L % Z % B L J C B L J C B L J C B L J C	C B L J C G D R W C Z % C R A D D D D D D D D D
P COUN TY3				Multiple reaches were evaluated with one inspection.
4 3_Moderate 173 A 6 Y GILBERT 10/12/2007 9325 9326 MHL010003 MHL020001 D/S 395	9 SPL010005 8 VCP 260 802	802.2 3	3 6 2.00 159 2	37 198 359 1.81 3 9 Wall the hispector.
5 3_Moderate 173 PPT B1 63 Y HOMEWAY DRIVE 6/13/2012 10840 10841 MHL060035 MHL060036 D/S 523		260.4 2 9 21 1 1 1 2 2	433D 10 1	1 2A12
1 3_Moderate 174 38 10 Ave. 4/13/2004 7068 7069 MH-J140016 MH-J150002 DS 80 2 3_Moderate 174 R025 13 DUNGANLN 9/12/2005 11666 11660 MHR120019 MHR120011 U/S 606	1 SPR120023 8 VCP 97 91		8 2.00 2 1 11 11 22	0 0.00 Spot Repair, Cut roots 1 1 1 1 SAG
3 3_Moderate 174 PPT 6 31 HOPE ST 4/12/2007 7264 7265 MHN170033 MHN180001 D/S 13	7 SPN170007 8 VCP 151 15	157	2 8 4.00	0 0 0.00 Multiple reaches were evaluated
4 3_Moderate 174 A 6 Y GILBERT 10/12/2007 9326 9115 MHL010003 MHL020001 D/S 398	0 SPL010006 8 VCP 142 802	802.2 3	3 6 2.00 159 2	37 198 359 1.81 3 9 with one inspection.
5 3_Moderate 174 PPT 3-3 6 Y GAIL LANE 7/27/2012 12235 12236 MHQ070024 D/S 644		286.4 2 4 14 3	4338 23 62 2.70 11	2400 11 22 2.00 Moderate
1 3_Moderate 175 8 14 St. 2/17/2004 10888 11324 MHN110025 DS 262 2 3_Moderate 175 G032 7 WEST ST 8/31/2005 13070 13063 MHQ080052 MHQ080044 D/S 611	0 SPQ080034 10 VCP 310 304		8 2.67 5 9 22 4 1 5.00	0 0.00 Spot Repair 5 11 299.3' (D/SH) JOM, SMALL SAG
3 3_Moderate 175 PPT 2 14 OASIS AVE 3/23/2007 10529 10530 MHN170035 MHN170036 DIS 202	1 SPN170036 8 VCP 370 37	373 1 2	3 7 2.33	0 0 0.00 Multiple reaches were evaluated
4 3,Moderate 175 A 6 Y GILBERT 10/12/2007 9115 9338 MHL010003 MHL020001 D/S 405	9 SPL020007 8 VCP 145 802	802.2 3	3 6 2.00 159 2	37 198 359 1.81 3 9 with one inspection.
5 3_Moderate 175 PPT 4-B3 2 Y LAMPSON AVE 9/24/2012 8696 8697 MHJ110015 MHJ110016 D/S 412			5 433A 32 85 2.66 28	452D 28 76 2.71 1 5 Video Video
1 3_Moderate 176 40 13 13082_Jefferson St. 4/15/2004 7681 7682 MH_U130009 MH_U130010 DS 71: 2 3_Moderate 176 R028 1 Y LAMPSON AV 9/19/2005 12538 MHQ110044 MHP110028 D/S 608	0 101	214 1 1 1 1 354.0 3	5 9 22 96 5.00	8 0.67 Spot Repair Spot Repair HIGH FLOW, 352 (DISH) JOM, SMALL SAG
3 3_Moderate 176 PPT 2 15 OASIS AVE 3/23/2007 10530 10560 MHN170036 MHN170011 DS 256 4 3_Moderate 176 9 2320 Y CHANTICLEER 9/20/2006 9204 9203 MHM020004 MHM020003 US 456	7 SPN170040 8 VCP 382 38	384 1 1 1	2 6 3.00	0 0 000 1 0 0 1 0 0 0 0 1 0 0 0 0 1 0
5 3_Moderate 176 PPT 3-2 2 Y KATELLA AVE 7/23/2012 9126 9127 MHO050031 MHN050057 D/S 426			4339 17 46 2.71 11 1 1 1	Inspection Report shows 83.7 & 187.3 JOL. These are JOM & we changed them.
1 3_Moderate 177 16 19 12681Edieth Dr. 3/4/2004 10749 10728 MHM10033 MHM12006 DS 286 2 3_Moderate 177 G019 2 YANA DR 8/5/2005 8054 8602 MHK050038 MHK050037 DIS 245	6 SPM110022 8 VCP 300 29	299 2 2 1 1	8 2.67	7 0.88 Raline, Cut roots
2 3_moderate 177 PPT 2 18 READING AVE 326/2007 10531 10532 MHN170038 MHN170039 DIS 202			19 21 1 1 5.00 7 2 6 3.00	9 12 0 0 0.00
P COUN 4 3,Moderate 177 TY4A 2 GILBERT 11/15/2007 9340 9339 MHL020002 MHL020003 U/S 386	2 SPL020002 8 VCP 142 27:	273.0 1 1 1	2 3 150 5 63	GIS length is 142.
5 3_Moderate 177 PPT 3-8-33 19 Y LE ANN DRIVE 8/22/2012 11847 11848 MHP100005 MHP100006 D/S 52				5 1500 5 5 100
1 3_Moderate 178 17 14 x 9661 Halekulani Dr. 3/5/2004 12044 12043 MHM110042 MHM110040 US 249	4 SPM110046 8 VCP 3 80 27	371.6 22 5 8 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2	1 4338 38 83 2.18 8 2.00 3 1	5 1500 5 5 1.00
2 3 Moderate 178 G025 1 SAMUEL DR 8/19/2005 13206 13126 MH-Q070006 MH-Q070007 D/S 598 3 3 Moderate 178 PPT 9 17 11th ST 5/4/2007 6899 6890 MH-N180008 MH-N180003 D/S 19			10 21 3 3 3 4 12 3.00	3 3 1 106.8 & 226.6 (DISL) JOM
MXE				
4 3.Moderate 178 COUN TY 4 6 Y FRALEY 10/26/2006 8976 8978 MHM040022 MHM040024 U/S 442	0 SPM040046 8 VCP 216 218	215.0 1 1	2 3 1.50 67 7	74 155 2.09 11
5 3_Moderate 178 PPT 3-83-3 16 NIETA DRIVE 8/23/2012 12575 12576 MHQ090039 MHQ090040 D/S 474			4336 12 35 2.92	Moderate. Same MH & Pipe ID with Mag 3-82-3 #1. Use This one & delete other
1 3_Moderate 179 20 8 9122 Lucille Ave. 3/10/2004 9365 9366 MHL110043 MHL110040 DS 320 2 3_Moderate 179 M007 4 KATHY LN 8/12/2005 13202 13203 MHQ060010 MHQ060011 D/S 597	9 SPQ060012 8 VCP 350 34	347.5 3 3 2	8 2.67 1 10 21	0 0.00 Spot Repair, Cut roots 0 0 0 5.2' & 342.6' (D/SH) JOM
3 3_Moderate 179 PPT 39 9 PALM VISTA 9/6/2007 9788 9772 MH-0050040 MH-0050007 D/S 456 1 3_Moderate 180 36 27 12622 Wynert Dr. 4/6/2004 7707 7708 MH-1/10009 MH-1/110010 D/S 74/6 2 3_Moderate 180 G007 8 H-0PI PD 7/20/2005 8000 8009 MH-00700024 MH-K070026 D/S 188	SPJ110005 8 VCP 266 26	267 2 1	2 4 2.00 8 2.67	1 2 2.00 Spot Repair
2 3 _Moderate 180 G007 8 HOPI RD 7/20/2005 8000 8009 MHK070024 MHK070026 D/S 185 3 3 _Moderate 180 PPT 33 14 TACOMA 8/13/2007 9912 9913 MHO060008 MHO060009 D/S 522			8 21 3 1 2 2.00	3 6 208.1 (D/SL) JOM
5 3_Moderate 180 PPT 3-85 26 EUCLID STREET 9/6/2012 11893 11894 MHP130005 IMFP130006 D/S 444 1 3_Moderate 181 42 24 8052 Trask Ave. 4/20/2004 7079 7115 MHJ150006 D/S 77		60 3 3 3 261 2 1	4333 6 21 3.50 8 2.67	0000 0 0 0.00 Moderate Spot Repair
2 3 Moderate 181 G041 8 Y FALLINGLEAF ST 9/23/2005 12736 12737 MHS000025 MHS100051 D/S 654 3 3 Moderate 181 PPT 33 3 ORANGEWOOD 8/13/2007 9813 9815 MHO000009 MHO0000011 D/S 558			6 21 1 1 5.00 61 1 1 3 3.00	64 68 4.6 (D/SH) JOM
1 3_Moderate 182 50 20 9351 Catherine Ave. 5/19/2004 9597 9599 MHL100031 MHL100033 DS 332 2 3_Moderate 182 G002 10 NEARING DR 7/13/2005 8581 8582 MHJ070019 MHJ070020 DIS 208	1 SPL100013 8 VCP 285 30 0 SPJ070020 8 VCP 300 301	302 1 1 1 1 301.8 1 4 3 2	8 2.00	28 0.71 Spot Repair
3 3_Moderate 182 PPT 28 11 Y CLARISSA 7/24/2007 9939 9940 MHO060017 MHO060016 DIS 459	8 SPO060007 8 VCP 316 31	317	0 0 0.00	1 1 15 16 4 400
5 3_Moderate 182 PPT 3-5 7 AVENUE 7/26/2012 12309 11832 MHO120003 MH0120004 D/S 443 1 3_Moderate 183 46 27 x 9961 Lampson Ave. 5/10/2004 9479 9480 MHM110003 MHM110004 D/S 325			4331 4 15 3.75 28	2D00 28 56 2.00 2 Moderate 28 1 65 Replace pipe
2 3_Moderate 183 G034 9 JOHN AV 9/2/2005 12818 12819 MHQ090009 MHQ090010 D/S 641	5 SPQ090045 8 VCP 95 96	96.1 10	10 20 1 1 5.00	CONTINUOUS FRACTURE CIRCUMFERENTIAL
3 3_Moderate 183 PPT 27 35 LA DONA 7/23/2007 9782 9783 MHO070034 MH0070035 D/S 471 5 3_Moderate 183 PPT 2-2-1 10 SYCAMORE 7/6/2012 7100 7101 MH-J120016 MH-J120017 D/S 83	Clau		1 2 2.00 4331 11 29 2.64	0 0 0.00 Moderate
1 3_Moderate 184 48 4 x 9672 Blanche Ave. 5/12/2004 9560 9561 MHM090032 MHM090033 DS 325	0 SPM090032 8 VCP 3 322 32	324 1 3 1	8 2.00 5 1 2 1	2 4 2.00 Reline, Cut roots
2 3 _Moderate 184 R008 11 HOMEWAY DR ST 8/8/2005 9753 9754 MHL050031 MHL050032 D/S 507 3 3 _Moderate 184 PPT 26 40 WOODWARD 7/19/2007 10653 10654 MHO080021 MHO080022 D/S 421	8 SPL050026 8 VCP 171 168	168.0	10 10 20 1 2 4 200	0 0 0 SAG
5 3_Moderate 184 PPT 2-2-2 4 TRASK AVENUE 7/20/2012 7666 8360 MHK150901 MHK150007 U/S 70-1 3_3/koderate 185 19 10 12801 Melody Dr. 3_3/k2004 8449 8450 MHM120303 MHM120331 DS 310			4331 4 15 3.75 8 1.00 2	0000 0 0 0.00 Spot Repair, Cut roots
3 3_Moderate 185 PPT 28 35 EASY 7/27/2007 9798 9797 MHO080036 MHO070042 U/S 520	5 SP0070040 8 VCP 303 30	304	1 2 2.00	0 0 0.00
5 3_Moderate 185 PPT 2-2-2 18 STREET 7/23/2012 9357 9356 MH-L120036 MH-L120036 U/S 316 1 3_Moderate 186 1 4 Ave. 2/3/2004 11150 11151 MNW/24025 MNW/24026 DS 256		302.1 8 3	4328 11 28 2.55	1300 3 3 1,00 Moderate
1 3_Moderate 186 1 4 Ave. 2/3/2004 11150 11151 MNW24025 MNW24026 DS 255 2 3_Moderate 186 G031 11 NORMALN 8/30/2005 12569 12570 MH0090031 MH0090032 DIS 474 3 3_Moderate 186 PPT 27 24 OLD FASHION 7/23/2007 9907 10568 MH0090043 MH0090017 DIS 525	2 SPQ090015 8 VCP 245 253		8 2.67 9 20 2 5 5	0 0.00 Reine 7 9 247.2 (D/SL) JOM
MAP				
5 3_Moderate 186 PPT 3-83-1 19 WALNUT AVENUE 8/2/2012 11780 11782 MHP100029 MHP100031 D/S 464 1 3_Moderate 187 29 26 8832 Dakota Ave. 3/29/2004 11575 11576 MHL140011 MHK140000 D/S 23 2 3_Moderate 187 G035 7 REXPORD RD 8/2005 12811 0181 MH0100011 MH0100002 D/S 634	2 SPL140037 8 VCP 255 26	261 1 2	4300 3 12 4.00 2 2 3 3 4 4 4 5 5 6 6 7 6 7 6 7 6 7 6 7 6 7 6 7 6 7 6	1
		359.1 1 2 1 1 2 1		Obstacles at 93.2 ft (60% blocked).
3 3_Moderate 187 PPT 25 26 Y CHAPMAN 7/16/2007 0 0 MHO090012 MHO090011 US 626		93 1 1 1 1 1 1	2 6 3.00	1 0 61 4 4.00 1 1 Reverse inspection needed. Clean debris at 93.2 ft or spot repair
5 3_Moderate 187 PPT 3-38-31 13 GARDEN GROVE 8/3/2012 117.35 12260 MHO130002 MHD130003 D/S 385 1 3_Moderate 188 42 16 12871 Fem St. 4/19/2004 7714 7715 MHJ120019 MHJ120020 DS 74	7 SPJ120019 8 VCP 295 29	296 2 1 1	423E 31 95 3.06 7 2.33	0000 0 0 0.00 Moderate Spot Repair
2 3 _Moderate 188 G033 1 JOHN AV 9/1/2005 11895 12815 MHQ090003 MHQ090006 D/S 64 3 3 _Moderate 188 PPT 25 19 CHAPMAN 7/16/2007 10621 10622 MHQ090014 MHQ090015 D/S 417	3 SPQ090062 8 VCP 280 282	282.7 3 2 1	6 20 2 1 5.00 1 1 1 1 2.75 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	DAZ=DNF 20.7" (DISL) JOM
5 3_Moderate 188 PPT 2-1-4 18		281 19 8 25 4 3 2	423D 61 163 2.67 6 1 1 15	261B 22 29 1.32 Cracks & Fractures. Moderate Defect Should Reline
1 3_Moderate 189 20 9 112571 Lucille Ave. 3/10/2004 9366 9367 MHL110044 MHL110045 DS 320	300 300 300 300 300 300 300 300 300 300	300 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	7 3.50 2 1	Spot Repair, Cut noots

Sinctural Delect Coding	Intruding Seal Line Meterial Line Meterial Meterial
98 9 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	Intruding Seal Seal Page Page Page Page Page Page Page Page
9 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	
	L IS M D D B B B B B B B B B B B B B B B B B
2 3_MODBIRGID 189	L U R LD RD SRH SRB SRL Z SA CU MC 5 S S C Comments Recommendations DSZ=DFPOSITS INGRESSES FINE (DNF) FINE (DNF)
3 3,Moderate 189 PPT 25 21 CHAPMAN 7/16/2007 9924 10668 MHO990176 MHO990176 MHO99017 D/S 4275 SP099040 15 VCP 269 265 1 2 2 8 4.00 1 2 8 4.00 1 1 0 0 0 0.00 1 1 0 0 0 0.00 1 1 0 0 0 0	
1 3_Moderate 190 49 15 9542 Charlene Cir. 5/17/2004 9539 9540 MrH.100034 MrH.100034 MrH.100037 8 VCP 250 256 1 1 1 1 2 1 9 1 9 1.04 9 1 1 2 1 9 1 9 1.04 9 1 1 1 2 1 9 1 9 1.04 9 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	Spot Repair, Cut roots 377.1' MSA=PROBABLE DEPOSITS
3 3 Moderate 190 PPT 22 19 DIANE 7/3/2007 12345 12344 MHO990028 MHO990027 UIS 5428 SP099014 8 VCP 340 369 1 1 1 2 2.00	1 DEFOUND
5 3_Moderate 190 PPT 3-82-4 1 Y HASTER STREET 8/27/2012 13006 13007 MHS080004 MHS080005 D/S 6095 SPS080002 10 VCP 330 132.1 11 23 14 1 2 2 2	
1 3,Moderate 191 20 6 12572 Barbara Ave. 3/9/2004 9362 9363 MHL110040 MHL110041 DS 3167 SPL110042 8 VCP 310 301 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	Spot Repair, Cut roots
2 3 Moderate 191 R012 13 Y WAVERLY DR 8/15/2005 12949 12951 MHP080021 MHP080023 DIS 6200 SPP080016 8 VCP 390 387.7 1 5 4 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	
5 3,Moderate 191 PPT 2-2-2 23 PENTAGON STREET 7/16/2012 9091 9097 MHK100014 MHK110034 DIS 3238 SPK100014 10 Tile 220 217.5 4 15 2 2 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	2
1 3,Moderate 192 42 9 8801 Anthony Ave. 4/19/2004 8398 8399 MHK120015 MHK120016 DS 3372 SPK12016 8 VCP 350 348 1 1 1 1 7 3.50 2 2 1 1 1 1 2 2 2.00 1 1	Spot Repair, Cut roots
2 3 Moderate 192 M011 10 Y GAILLN 8/25/2005 1225 1291 MHQ080029 MHQ080025 D/S 6438 SPQ080023 8 VCP 245 234.6 1 4 1 2 2 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	134.6' (D/SL) & 138.3' (D/SH) JOM 1 MSA = Debris
1 3 Moderate 193	Spot Repair, Cut roots 58' (D/SL) JOM
3 3_Moderate 193 PPT 11 37 TAFT 5/17/2007 12285 12283 MHO130017 MHO130015 UIS 3935 SPO130014 8 VCP 450 462 1 1 3 3.00 1 1 3 3.00 1 1 3 3.00 1 1 1 3 3.00 1 1 1 3 3.00 1 1 1 3 3.00 1 1 1 3 3.00 1 1 1 3 3.00 1 1 1 1 3 3.00 1 1 1 1 3 3.00 1 1 1 1 3 3.00 1 1 1 1 3 3.00 1 1 1 1 3 3.00 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	
5 3_Moderate 193 PPT 2-1-2 14 Y GALWAY STREET 7/11/2012 11547 11548 M=MINI2013 M=MINI201	Spot Repair
2 3 Moderate 194 PPT 11 40 PROF 195 PPT 11 40 PROF 1970 1282 1292 MHO14001 MHO140017 DIS 3934 SPO140002 8 VCP 275 269 1 1 1 2 1 1 2 1 2 1 1 2 1	66' (D/SH) JOM
5 3_Moderate 194 PPT 2-2-2 20 Y JACKSON STREET 7/17/2012 7072 7073 MHJ140018 MHJ140019 D/S 811 SPJ140020 8 Tile 340 318.8 16 1 12 1 2 1 1 1 2 1 1 1 2 1 1 1 2 1 1 1 2 1 1 1 2 1 1 1 2 1 1 1 1 1 2 1	
	rca mer a
1 3_Moderate 195 7A 21 7A 22 Alley 2/19/2004 MHP120023A MHP130010 DS SPP120027A- 6 VCP 143 143 1 1 1 1 7 2.33 7 2.	no no fit Replace pipe
2 3 Moderate 195 G010 15 ABERDEEN LN 7/25/2005 10294 10296 MHK070011 MHK070011 B VCP 165 170.3 15 1	
5 3,Moderate 195 PPT 3B3-3 24 V STREET 8/22/2012 11231 11137 MHN100009 MHN110034 D/S 2566 SPN10009 8 VCP 265 266.7 6 1 12 2 2 3 3 423A 24 63 2.63 85 3 3 1 2 2 1 2 1 3 3 423A 24 63 2.63 85	
1 3,Moderate 196 37 1 1 x 12891 Jackson St. 4/8/2004 7711 7712 MHJ110012 MHJ120025 DS 744 SPJ110008 8 VCP 3 272 269 1 1 2 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	Spot Repair, Cut roots
2 3_Moderate 196 G038 8	
5 3, Moderate 196 PPT 22-1-1 6 LAMPSON AVE 7/6/2012 13626 9036 MHK110037 MHL110034 DIS 7147 SPK110024 12 VCP 290 240.3 6 11 2 2 11 1 1 2 1 1 1 1 1 1 1 1 1 1 1	
1 3_Moderate 197 23 3 X 8002 Belfast Dr. 3/15/2004 10754 10755 M=MH/30015 M=M	Spot Repair, Cut roots MHS090023 IS CLEANOUT, 3.5 & 88.4" (D/SH) JOM
2 5, MADERIAN 197 PPT 9 1 1 CYPRENGTON 14 1 PRELIMBERP 51 18/23/2005 12/35 12/	d our (dioi) dom
5 3,Moderate 197 PPT 3-5 8 V ADME 7/25/2012 11258 11259 MENI 11000 DIS 2544 SPNI 10010 2 8 Tile 430 434.6 1 2 10 2 2 1 1258 11259 MENI 11000 DIS 2544 SPNI 10010 2 8 Tile 430 434.6 1 2 10 2 1 1258 11259 MENI 11000 DIS 2544 SPNI 10010 DIS 2544 SPNI	Spot Repair, Cut roots
2 3_Moderate 198 G052 2 Y SANDRA PL 11/16/2006 10876 1189 MP130034 ID S 905 PP13004 12 VCP 646 648.6 1 1 2 1 1 1 1 1 7 18 3 5.00 12 7 3 3 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	433.2' (D/SH) JOM
3 3,Moderate 198 PPT 3-5 10 Y AVENUE 7/25/2012 11136 11137 MHO110018 MHN110034 DIS 2373 SPO110025 8 Tile 300 301.5 8 2 8 2 2 2 1 4230 4 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	
1 3_Moderate 199 19 5 9632 Stanford Ave. 3/8/2004 12029 12030 MHM120019 MHM120020 DS 2737 SPM12019 8 VCP 100 104 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	Spot Repair, Cut roots
2 3 Moderate 199 G036 12 GLENST 97/2005 12604 12603 MHQ100023 MHQ1	189.9' (D/SH) JOM
MAP GLENCOVE	
5 3_Moderate 199 PPT 3-B3-3 6 STREET 8_127/2012 11478 13181 MHO050035 MHO050036 DIG 4260 SPO050004 8 VCP ANAHEIM 80 219.5 3 8 2 2 1 423	Replace pipe
2 3 Moderate 200 FPT 9 3 3 CYPRESS 5/1/2007 10432 10502 MHO150040	339.1° (D/SL) JOM
5 3,Moderate 200 PPT B1 9 PERDIDO STREET 6/4/2012 9219 9220 MHM020039 MH020039 MH0020039 MH00200	
1 3_Moderate 201 20 3 1 12712 Leroy Ave. 3/9/2004 8480 9385 MHL110038 MHL120020 DS 2975 SPL120040 8 VCP 130 147 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	Spot Repair, Clear D&R
3 3_Moderate 201 PPT 8 23 Y WOODBURY ST 4/30/2007 10433 10436 MHO150041 MHO150044 DIS 2155 SPO150032 8 VCP 352 355 J 1 1 1 1 2 2.00 J 1 2 2.00	
1 3_Moderate 202 4 10 11072 Walnut 2/10/2004 1178 1178 MH=100027 MH=10029 105 4841 SPP10034 6 VCP 275 287 2 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	Spot Repair, Cut roots 105.2' (D/SH) JOM
MAP Ciay	
5 3_Moderate 202 PPT 2-2-2 21 TRASK AVENUE 7/23/2012 7643 7644 MHK150006 MHK150006 DIS 999 SPK150004 8 Tile 275 326.5 2 6 2 1 3 3,00	Spot Repair, Cut roots
2 3_Moderate 203 R006 16 ROSANNA AV 8/4/2005 10786 10788 M=1.08004	
3 3_Moderate 203 PPT 10 39 LINNELLAVE 5/14/2007 10883 10884 MHO160026 DIS 6007 SPO160003 8 VCP 15 15 15 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	1
1 3_Moderate 204 31 6 1 13341 Hazel St. 3/30/2004 11570 11571 Melt.140006 Melt.140007 DS 2946 SPL140031 8 VCP 343 340 1 2 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	Spot Repair, Cut roots
3 3_Moderate 204 PPT 9 29 LINNELL 5/4/2007 10413 10465 MHO160040 MHO160041 DIS 2269 SPO160040 8 VCP 300 302 1 1 2 2.00 1 1 2 2.00 1 1 2 2.00 1 1 2 2.00 1 1 2 2.00 1 1 2 2.00 1 1 2 2.00 1 1 2 2.00 1 1 2 2.00 1 1 2 2.00 1 1 2 2.00 1 1 2 2.00 1 1 2 2.00 1 1 1 2 2.00 1 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2	
5 3, Moderate 204 PPT 3-5 3 NELSON STREET 7/25/2012 12270 12271 MHO110006 MHO110007 D/S 5409 SPO110007 8 Tile 125 129.6 1 5 2 423 8 24 3.00 18	
1 3_Moderate 205 41 1 Grove Blvd. 4/16/2004 11018 11022 MHP130002 MHP130002 MHP130003 DS 4441 SPP130004 10 VCP 331 332 1 2 1 1 1 1 1 1 1 1 1 1 1 1 1 1	Spot Repair, Repair lateral
3 3_Moderate 205 PPT 9 23 RANNEY 5/4/2007 10418 10420 MHO160046 INS 2147 SPO160016 8 IVCP 346 349 1 1 2 2.00 1 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2	
5 3_Moderate 205 PPT 22-3 2 TRASK AVENUE 7/17/2012 7691 7060 MHX150012 MHJ150010 DIS 771 SPK150019 8 Tile 240 228.4 2 4 9 2 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9	Spot Repair, Cut roots
2 3,Moderate 208	118.9' (D/SL) JOM
5 3_Moderate 206 PPT 3-6 12 MAIN STREET 7/27/2012 11750 11751 MHP120037 MHP120038 DIS 4405 SPP120038 10 Tile 335 329.7 1 4 2 2 3.14	
1 3,Moderate 207 2 17 12282 Betry 2/5/204 11845 11848 MNE14003 MNE14006 DS 5238 SPP10009 8 VCP 263 264 2 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	Spot Repair CONTINUOUS ROOT FINE
2 3_Moderate 207 G035 2 COMSTOCK RD 96/2005 12807 12807 12807 MROINNGSIDE 4/10/2007 6884 728 MRO170025 MRO	JOINT, 194.4' (D/SH) JOM
5 3_Moderate 207 PPT 3-B3-1 23	
5 3, Moderate 20/ PPT 34531 Z3 AVENUE 8/2/2012 12586 12587 MHPT10021 MHPT10022 US 5088 SPPT10013 6 Tile 130 126.4 1 1 4 2 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	Spot Repair

			General			I		Structural Defect Codin	ig .	p 8		Operational and Maintenar	nce			Construction Features		g g g	
o o	ν. γ)			Pipe Pipe					sed Pipe e B B Failure Repair	uct Ratin Defects Defect Sy	xepul				nt Rating		aneous	r reature ey Abar	
n No.	DAD No. Or Decorrection	Exist	ting MH ID Previous MH ID	of Cam Sewer II	gth (ft) ment ment ngth (ft)	Crack	Fracture	Broken Hole Joi	Deform Collapa Surfac Damag Lining	Sags Lick Str. Lctural [Deposits	Roots (R)		Infiltration Obstacles V	Tap (Lai	eral) Line	Intruding Seal State Material Seal Seal Seal Seal Seal Seal Seal Se	for Sun	T. Double
hase froity ontractc ontractc	eversal eversal VD Wat			xisting (xisting (sevious revious aterial	IS Com	С	F	B H O	J D X	ACP QL otal Str.	AE AE Other	Fine (F) Tap (T) Med	lium (M) Ball (B)	OB Other	ACP Qu		IS M 5	easons IS Ident	
2 3_Moderate 208 G003 12	Ž Ž ☐ Street Name YANA ST	7/14/2005 8041	t End Start End 1 8042 MHK060013 MHK060014	☐ ☐ ☐ ☐ ☐ Ø ≥ I D/S 1894 SPK060034 8 VCP	182 177.6	L C M S F	1 L C M S F	H SV VV SV VV S M L S	SMLAVHP S LF RP	S & F F	AGS B % L % Z % B	L J C B L J C B I	LJCBLJC	3 D R W C Z %		I BD D L U R LD RD SR	RH SRB SRL Z SA CU MC F	- & O	Continuous crack Circumferential
3 3_Moderate 208 PPT 6 12 1 3_Moderate 209 48 13		4/12/2007 6958		5 D/S 246 SPO170037 8 VCP 4 DS 3230 SPM100026 8 VCP	292 295 280 238		1 1			1 2	2.00		1 1		0 0 0.00				Spot Repair, Cut roots
2 3_Moderate 209 R004 16 3 3_Moderate 209 PPT 7 24	Y MACGILL ST	7/28/2005 1031	1 10313 MHK080016 MHK080018	3 D/S 5892 SPK080020 8 VCP 3 D/S 249 SPO170040 8 VCP	292 287.0 316 322	4 1		1		6 12	2 5.00				1 4 7 0 0 0.00 1	1			283.9' (D/SH) JOM
MAP	IMPERIAL						1			1 2	2.00				0 0 0.00 1				
5 3_Moderate 209 PPT 3-B3-2 19 1 3_Moderate 210 47 8	AVENUE 9652 Lenore Dr.	8/8/2012 11186 5/10/2004 9513	6 11191 MHO140003 MHO140048 3 9411 MHM110021 COM110004	3 U/S 2279 SPO140038 8 VCP 4 DS 3435 SPM110038 8 VCP	145 148.3 130 165	2 1	2 1 2			4233 8 23 6	2.88				0000 0 0 0.00				Spot Repair
2 3_Moderate 210 G039 7 3 3_Moderate 210 PPT 6 19		9/13/2005 12592	2 12593 MHP090014 MHP090015	5 D/S 4754 SPP090018 8 VCP 1 D/S 382 SP0170014 8 VCP	285 294.4 256 259	1	3 1	1		5 12 1 2	2.00				0 0 0 0.00 1				82.2' (D/SH) JOM
MAP																			
5 3_Moderate 210 PPT 3-B3-5 20 1 3_Moderate 211 25 5			2 10371 MHK050051 MHK050050 3 10764 MHM130028 MHM130029	0 U/S 4781 SPK050052 8 VCP 0 DS 2335 SPM130014 6 VCP	34 35.1 5 320 327	1	2 2	1		4233 5 17 6	3.40 2	2	3		0000 0 0 0.00				Replace pipe
2 3_Moderate 211 G037 9 3 3_Moderate 211 PPT 7 19	Y CHESTER AV McCLURE		3 12514 MHQ110028 MHQ110030	D/S 4134 SPQ110010 8 VCP D/S 384 SPQ180032 8 VCP	160 285.3 300 302	1 2	1		1	5 12	3 75 5.00 1 10.00	1 3			84 165	1			DAE=DAR (DEPOSITS ATTACHED RAGGING)
MAP	SAFFORD				300 302					2 0	3.00				0 0 0.00				
5 3_Moderate 211 PPT 3-B3-3 10 1 3_Moderate 212 50 24			5 11476 MHQ140032 MHQ140033		230 224.9 4 310 360	4 3	2			4233 9 25	2.78				2100 1 2 2.00				Spot Repair. Cut roots
2 3_Moderate 212 R027 10	Y LAMPSON AV	9/16/2005 12525		D/S 6049 SPQ110022 8 VCP	368 366.1	1	1	1	2	3 11	9 5.00	1 .	4 1		9 18				HIGH FLOW, 111.8' (D/SL) JOM
3 3_Moderate 212 PPT 7 22 MAP 5 3_Moderate 212 PPT 2-2-1 26	KERN ADELLE STREET		3 7259 MHO180014 MHO180015 6 9388 MHK120028 MHK130047	5 D/S 134 SPO180030 8 VCP 7 D/S 3404 SPK120030 8 Tile	300 303 353 307.9	2 2 2	1 2			4233 0 22	3.00				0 0 0.00 3				
1 3_Moderate 213 36 13		4/7/2004 7702	2 7703 MHJ110004 MHJ110006	5 DS 735 SPJ110002 8 VCP 7 D/S 5635 SPR100006 10 VCP	3 260 259 180 180.2	1 1	1			6	2.00 3	3			0 0.00 1				Spot Repair, Cut R, Fix Lat
2 3_Moderate 213 M017 10 3 3_Moderate 213 PPT 7 23				7 D/S 386 SPO180034 8 VCP	300 301	1	1	1		2 5	2.50	2			57 112 0 0 0.00 2				7.6 (D/SL) 30W
5 3_Moderate 213 PPT 2-1-3 4 1 3_Moderate 214 8 16	CROSBY AVE 12851 Flower St.		8 12051 MHM130020 MHM130021 7 11248 MHN120013 MHN120014	1 D/S 3076 SPM130053 6 VCP 1 DS 2535 SPN120014 8 VCP	319 319.9 340 343	1 2	2			35 4232 40 85	2.13				0000 0 0 0.00				Spot Repair
2 3_Moderate 214 M016 6 3 3_Moderate 214 PPT 7 6	MERRILL ST	9/8/2005 11685	5 11646 MHR100011 MHR110009	3 D/S 6166 SPR100039 8 VCP 3 D/S 71 SPO180005 8 VCP	350 345.9 285 322	1 1	1	1		4 9	2.50	1			1 1 0 0.00				248.6' (D/SL) JOM
5 3_Moderate 214 PPT 7 6 MAP 5 3_Moderate 214 PPT 3-5 5	NELSON STREET		0 12331 MHO100015 MHO110027	Clay	370 367	3 1	1 2			4232 7 20	2.86 68				2L00 68 136 2.00				
1 3_Moderate 215 13 5 2 3_Moderate 215 M018 8	13122 Benton St. SAFFORD ST	3/1/2004 11162		5 US 2580 SPO130037 8 VCP 7 D/S 4018 SPQ120017 6 VCP	180 164 320 322.1	1 1	2	1		6 4 9	1.50				23 1.29				Spot Repair 14.2' (D/SL) JOM
3 3_Moderate 215 PPT 4 11 MAP	KERN IMPERIAL	4/4/2007 6814	4 6817 MHO180027 MHO180030	D/S 77 SPO180011 8 VCP	266 268		1			1 2	2.00				0 0 0.00				
5 3_Moderate 215 PPT 2-2-2 27 1 3_Moderate 216 47 11	AVENUE x 12562 Jane Dr.		1 7080 MHJ140028 MHJ140027 2 9513 MHM110020 MHM110021	U/S 817 SPJ140026 8 Tile 1 DS 3434 SPM110037 8 VCP	360 331.4 3 216 213	2 1 2	1			4232 7 19 6	2.71 2.00 2	4 5		1 40	1500 4 6 1.50 9 0.84	1			Spot Repair, Clear R&OB
2 3_Moderate 216 M007 10 3 3_Moderate 216 PPT 5 2	Y KATHY LN	8/12/2005 13148	8 13149 MHQ070029 MHQ070030	D/S 5897 SPQ070036 8 VCP D/S 81 SPO180015 8 VCP	380 383.4 350 353	2	1 1	1		3 9	3.00				111 222 0 0 0.00 1				6.6' (D/SL) JOM
1 3_Moderate 217 2 9		2/4/2004 11863	3 11866 MNE27004 MNE27007	DS 3800 SPP090009 8 VCP	285 284	1 1	1			6	2.00 4	1			5 0.71				226.7' MSA= JOM, 226.7' & 227'
2 3_Moderate 217 M019 2 M 3 3_Moderate 217 PPT 4 13	019 3 STANFORD AV KERN		5 11706 MHQ120013 MHQ120015 0 7245 MHO180033 MHO180034	5 D/S 6211 SPQ120043 8 VCP 4 D/S 173 SPO180036 8 VCP	240 246.8 316 318	1	1	2		3 8	4.00	4	1 1 1		7 15 0 0.00		1		(D/SH) JOM
5 3_Moderate 217 PPT 2-2-1 8	SYCAMORE AVENUE		2 7103 MHJ120018 MHJ130005		86 85.4	6 2 2	2			4232 12 28	2.33				1100 1 2 2.00	1			
1 3_Moderate 218 22 2 2 3 Moderate 218 R040 11	9921 Russell Ave.		2 11078 MHN140012 CON140001 2 12613 MHT090001 MHT090002		185 183 225 211.3	1 1	1			6	2.00	1			4 1.00				Spot Repair, Cut roots 183.7' (D/SH) & 190.3' (D/SH) JOM
3 3_Moderate 218 PPT 6 3	HAZARD			2 D/S 314 SPO190022 10 VCP	341 338	1	2			3 7	2.33				0 0 0.00				
5 3_Moderate 218 PPT Map 1 24			8 8137 MHS150017 MHS150019		264 62.7	3 2	2			4232 7 20	2.86				0000 0 0 0.00				
1 3_Moderate 219 49 8 2 3 Moderate 219 M013 4 M	12091 Gilbert St. D13 5 MAYPOLE DR		9 9563 MHL090038 MHL090039 8 12179 MHR090004 MHR100027	DS 3269 SPL090003 10 VCP	375 363 339 352 4	1 1	1			6	2.00	1			1 1.00				Spot Repair, Cut roots 343' MSA= JOM, 343' (D/SH) JOM
2 3_Moderate 219 M013 4 M 3 3_Moderate 219 PPT 5 1				7 D/S 5919 SPR090003 8 VCP 5 D/S 83 SPO190001 8 VCP	339 352.4 330 333	2 1	1	1		4 8	3.50	8			0 0 0.00		1		343' MSA= JOM, 343' (D/SH) JOM
5 3_Moderate 219 PPT 3-5 2			1 12272 MHO110007 MHO110010		125 124.2	2	2			4232 4 14	3.50				0000 0 0 0.00		2		
1 3_Moderate 220 37 4 2 3_Moderate 220 R034 2				5 DS 742 SPJ120016 8 VCP 2 D/S 6494 SPS100012 8 VCP	264 266 100 215.9	1 1	1	1		3 8	2.00	1			0 0.00				Spot Repair, Cut roots 66.3' (D/SL) JOM
3 3_Moderate 220 PPT 5 4 June		4/11/2007 6824	4 7246 MHO190007 MHO190008	3 D/S 174 SPO190025 8 VCP	320 322		1			1 4	4.00				0 0 0.00 1				
5 3_Moderate 220 PPT B1 45	GILBERT STREET ALLEY	6/11/2012 9727	7 9726 MHM050027 MHM050026	5 U/S 5053 SPM050012 8 VCP	285 274.8	2 2	1 1			4232 6 19	3.17				0000 0 0 0.00				
1 3_Moderate 221 42 15	Acacia Ave./Fern St.	4/19/2004 7700	7099 MHJ120012 MHJ120015	5 DS 757 SPJ120028 8 VCP	330 330	2	1			6	3.00				46 1.19				Spot Repair 63.5' & 283' MSA=?, 63.5' TO
																			283' NO INSPECTION,. MATERIAL CHANGE CAST IRON
	010 2 Y EASEMENT		3 8596 MHJ080025 MHJ080028		310 90.5	1	++++	2		3 7	2		+++++	+ + + + + +	3 8		2 1 1		PIPE, 47.1' & 18' (D/SL) JOM, 26.1' (D/SH) JOM MHO190013 corrected to
3 3_Moderate 221 PPT 4 1	Y SAIL ST.	4/2/2007 6830	0 6834 MHO190014 MHO190018	3 D/S 93 SPO190011 8 VCP	258 260	+++	1			1 2	2.00		+++++	+++++	0 0 0.00		+++++		MHO190014
5 3_Moderate 221 PPT Map 1 2	SPRINGDALE Y STREET 12802 Magnolia		7 7358 MHF090011 MHF090012		200 114.4	1 1	1 1	1		4231 4 12	3.00 20		+++++		0000 20 40 2.00				
1 3_Moderate 222 43 25	x Ave.		5 9356 MHL120034 MHL120036		3 116 303	2	++++			6	3.00 10	1 2 4	+++++		20 0.72	1	+++++		Spot Repair, Cut roots
2 3_Moderate 222 M015 6 3 3_Moderate 222 PPT 4 4	Y HOGGAN AV SAIL ST.	9/6/2005 0 4/2/2007 6838		U/S 5956 SPR100027 8 VCP D/S 99 SPO190019 8 VCP	167 166.0 107 105	2	1 1	1		4 7 1 4	4.00	2		1 10	51 102 0 0 0.00		1		166' MSA= JOM, 166' (D/SL) JOM
5 3_Moderate 222 PPT 3-4 13	LAMPSON AVENUE	7/25/2012 11254	4 11137 MHN110002 MHN110034	D/S 2919 SPN110020 8 Tile	310 272	1	1 2			4231 4 13	3.25 7				2700 8 16 2.00	1	1		272' MSA (DAGS). No Reversal Video
1 3_Moderate 223 47 19 2 3_Moderate 223 M019 1			5 9547 MHM100038 MHM100040 4 11705 MHQ120012 MHQ120013	DS 3277 SPM100041 8 VCP D/S 6210 SPQ120042 6 VCP	3 310 317 252 253.9	1	1			6 4 7	3.00 6	1	1 2		19 0.92		+++++		Spot Repair, Cut roots 96.4' (D/SL) JOM
3 3_Moderate 223 PPT 4 3				5 D/S 175 SPO200020 8 VCP	400 399					1 2									Inspection Report shows 309.2'
5 3_Moderate 223 PPT 2-1-5 11	Y DALE STREET			B D/S 1915 SPK080040 8 VCP	315 312.4		1	1	1	4231 3 9	3.00 14				2A00 14 28 2.00				JOL & BVV. JOL is a JOM & BVV is RPP
2 3_Moderate 224 G005 6 3 3_Moderate 224 PPT 4 11	Y MACDUFF ST SCHOONER	7/18/2005 8064 4/3/2007 6845	4 8065 MHK070028 MHK070029 5 6846 MHO200010 MHO200011	9 D/S 1916 SPK070031 8 VCP 1 D/S 105 SPO200006 8 VCP	274 278.3 297 298	1	1 1	1		3 7 1 2		2			5 7 0 0 0.00				5' (D/SL) JOM
5 3_Moderate 224 PPT 3-4 15	NELSON STREET		4 12275 MHO110013 MHO110014		125 65.6		2			4200 2 8					2200 16 32 2.00				Moderate
1 3_Moderate 225 4 1 1 2 3_Moderate 225 G022 3	REVA DR	8/16/2005 12980	0 13121 MHQ080011 MHQ080009	DS 3792 SPP100019 8 VCP U/S 6304 SPQ080002 8 VCP	175 176 220 221.0	2		1		3 7	2 5.00								Spot Repair, Cut roots 13.7' (D/SH) JOM
3 3_Moderate 225 PPT 6 2	Y WARD CANNERY	4/12/2007 7301	1 7302 MHO200023 MHO210018	3 D/S 391 SPO200019 8 VCP	212 214		++++			0 0	0.00 1		+++++	+++++	1 2 2.00		+++++		Same inspection Map 2-1-5 #7. Use this one & delete other, U/S
5 3_Moderate 225 PPT 2-2-2 7 1 3_Moderate 226 39 12	STREET		3 11582 MHL130042 MHL130041 2 7663 MHK140011 MHK140012	U/S 2955 SPL130037 8 Tile 2 DS 700 SPK140026 8 VCP	150 140.7 330 332	1 2	2			4200 3 11	3.67 2.00 6		+++++	+ + + + + +	0000 0 0 0.00		+++++		Use this one & delete other, U/S MH is CO Spot Repair, Cut roots
2 3_Moderate 226 M018 2	SAFFORD ST	9/12/2005 12489	9 12488 MHQ120022 MHQ120021	U/S 5593 SPQ120012 6 VCP B D/S 4900 SPP140026 8 VCP		2		1		3 7					0 0 0 0.00				159.2' (D/SL) JOM
3 3_Moderate 226 PPT 12 33 1 3_Moderate 227 1 6				US 2572 SPO090035 8 VCP				2		2 6					2 0.40				Spot Repair, Cut roots

		o l		General	Pipe				Structural Dete	ect Coding	lure air Aating	ect Sco dex	Operational and N	Maintenance		Rating	Construction Features	eous Feature	- Aband doned	
	O No.	ad? (Y)			Camera wer ID.	£ £					ollapsec urface amage ning Fa oint Rep ags sgs	ural Def				Maint Defects Defect S	Intruding Se		Survey d Aban	
e by the ling actor	No. No. retion N rsal Ta	Nation Location	E	xisting MH ID Previous MH ID	frial (in)	Comme Th (ft)	Crack	Fracture F	Broken Hole B H	Joint J		Structi	Deposits Root	oots (R) T) Medium (M) Ball (I			Lateral) Line Material T L IS	M M	ons for dentifie	
Phase Priori Ranki Contr	Tape DVD Inspe Reve	Street Name	CCTV Date St	tart End Start End	Direct Existi	GIS C	L С М S Н	L C M S F	H SV VV SV VV S	MLSM		Total	AGS B % L % Z % B L J C B L J	ЈСВ L Ј СВ L Ј	C G D R W	Other D D D D D D D D D D D D D D D D D D D	BI BD D L U R LD RD SRH SRB SI	RL Z SA CU MC	Reas GIS N	Comments Recommendations
2 3_Moderate 227 3 3_Moderate 227 PPT	R001 5 12 28	CENTURY			U/S 5191 SPL080016 8 VCP D/S 5289 SPP140036 8 VCP	260 277.3 140 181	+++	2		1	2 2					0 0 0.00				177.1' (D/SL) JOM
5 3_Moderate 227 PPT	MAP	MAGNOLIA Y STREET		749 9756 MHL050045 MHL050042		274 256	6 10 25	1			413D 52	121 2.33	3			0000 0 0 0.00				
1 3_Moderate 228 2 3_Moderate 228	31 17 G040 4				DS 3102 SPL140028 8 VCP D/S 6585 SPP090002 10 VCP	265 264 380 395.6	1	1 1		1	2	6 3.00	105 5.00 1 25.00 3	1		2 2.00 3 114 223 1				Spot Repair, Cut roots 26.8' (D/SL) JOM
3 3_Moderate 228 PPT					U/S 5288 SPP140035 8 VCP	50 51		1				4 4.00)			0 0 0.00				20.0 (0.02) 00.11
5 3_Moderate 228 PPT	Map 2 B1 86	Y MAC STREET	6/15/2012 79	988 7996 MHK060001 MHK070020	D/S 1845 SPK060003 8 VCP	385 385.9	8 13 26 1	5			413D 53	124 2 34	1			8 1900				
1 3_Moderate 229	38 15	13432 Balos Dr.	4/13/2004 70	078 7079 MHJ140023 MHJ150005	DS 816 SPJ140025 8 VCP	300 298	2					6 1.00	1			0 0.00				Spot Repair, Cut roots
2 3_Moderate 229 3 3_Moderate 229 PPT	M018 6 14 37			491 12496 MHQ120024 MHQ120029 938 11936 MHP150026 MHP150024	0 D/S 5596 SPQ120015 6 VCP U/S 5457 SPP150024 12 VCP	150 146.3 320 327	3 1			1	5 1	3 3.00	4			0 0 0.00				
5 3_Moderate 229 PPT	MAP 2-1-5 18	Y TRASK AVE	7/26/2012 10	478 10479 MHN150010 MHN150012	2 D/S 2192 SPN150007 8 VCP	325 325.7	2 25 19	3 1			413B 50	96 1.92	2 58 4 10	1 1		3 4131 77 144 1.87				
1 3_Moderate 230	1 1	12002 Shady Acre St.	2/3/2004 11	148 11149 MNW24023 MNW24024	DS 2567 SPO090030 8 VCP	185 201	6					6 3.00	<u> </u>			0 0.00				Reline
2 3_Moderate 230 3 3_Moderate 230 PPT	M010 6	WOODBURY		969 11968 MHP150029 MHP150028	1 D/S 5850 SPQ080050 8 VCP 3 U/S 5282 SPP150053 6 VCP	235 239.2 250 250	2			1	3	5 250				0 0 0 0.00 1				MSA = Sharp turn
5 3 Moderate 230 PPT	MAP 2-1-1 14	STANFORD AVE		969 11908 MHF130029 MHF130028 462 8463 MHL120006 MHL120007		323 325.2	5 10	1		1	413B 25	66 264				0 0 0.00 1	1	1		MSA = Shaip tum
1 3_Moderate 231	2 13	12341 Schrandt Dr.		847 11846 MNE14005 MNE14004		125 122	2				4130 23	6 3.00				0 0 00				Spot Repair
3 3_Moderate 231 PPT	15 27 MAP	WOODBURY			D/S 3854 SPP150056 8 VCP	165 158		1			1	2 2.00				0 0 0.00 1				
5 3_Moderate 231 PPT 1 3_Moderate 232	2-1-4 14 35 10	FAYE AVE 13040 Newland		272 11273 MHN090017 MHN090018 354 7653 MHK130023 MHK130023	B D/S 2556 SPN090015 8 VCP 2 US 690 SPK130026 8 VCP	145 145.7 320 264	7 2 18	1			413B 28	74 2.64	4			0000 0 0 0.00				Spot Repair
2 3_Moderate 232	R065 1	Y EASEMENT	12/8/2005 12	833 12832 MHQ100044 MHQ090053	3 U/S 5476 SPQ090056 6 VCP	240 207.1				2	2	6	22 2 3	1		28 52		2		43.7' (D/SH) & 46' (D/SL) JOM, MHQ090053 IS BURIED MH
3 3_Moderate 232 PPT	11 15 MAP	FERNWOOD	5/15/2007 10	948 10949 MHP150045 MHP150046	6 D/S 4008 SPP150042 8 VCP	255 258		1			1	2 2.00	2	2 1		3 7 2.33 1				
5 3_Moderate 232 PPT	2 July- 4 6	LORNA STREET	6/27/2012 84	409 8410 MHK110018 MHK110019	D/S 3387 SPK110027 8 Tile	316 314.6	18				413B 19	58 3.05	,			0000 0 0 0.00				
1 3_Moderate 233	35 20	8242 Central Ave.			DS 788 SPJ140006 8 VCP	250 242	2					6 3.00			+	0 0.00				Spot Repair DAZ=DNF (DEPOSITS
2 3_Moderate 233	G039 1			702 11701 MHQ120010 MHQ120009		340 367.2				2		6	2 1 5.00 1 10			15 21				INGRESSED FINE), 6.2' & 37' (D/SH) JOM
3 3_Moderate 233 PPT	14 33 MAP		6/5/2007 11	960 11958 MHP160018 MHP160002	2 U/S 5462 SPP160016 12 VCP	90 397				1	1	3 3.00				0 0 0.00	4			
5 3_Moderate 233 PPT	2 July- 1 12	BROOKHURST STREET	6/20/2012 99	960 9961 MHM090001 MHM090002	2 D/S 5366 SPM090003 8 VCP	345 350.7	1 2 15	1			413B 19	53 2.79	68			2L00 68 136 2.00				
1 3_Moderate 234	35 22	8172 Central Ave. GARDEN GROVE			B DS 675 SPJ140003 8 VCP	330 334	2					5 2.50				5 0.48				Spot Repair
2 3_Moderate 234 3 3_Moderate 234 PPT	G049 4 14 31	Y BLVD ANITA		248 12761 MHS130008 MHR130001 963 11962 MHP160021 MHP160020	D/S 6524 SPR130013 8 VCP U/S 5328 SPP160020 6 VCP	240 242.1 320 335				2	2	6 3 3.00	2 1 10.00			3 7 0 0 0.00				213.4" (D/SH), 215.6" (D/SL) JOM
1 3_Moderate 235 2 3_Moderate 235	37 19 S005 7		4/9/2004 77	710 7711 MHJ110011 MHJ110012	2 DS 743 SPJ110007 8 VCP	265 265 120 121.4	1	1			2	5 2.50	2 1			5 2.50				Spot Repair, Cut roots 5.2' (D/SL) & 90.2' (D/SH) JOM
3 3_Moderate 235 PPT					9 D/S 5987 SPP160028 8 VCP	252 255	1	1 1		2		9 3.00				0 0 0.00				5.2 (DISE) & 90.2 (DISH) JUM
5 3_Moderate 235 PPT	MAP 3-B2-5	FIREBRAND STREET	9/29/2012 12	733 12708 MHS090022 MHS100015	5 D/S 6512 SPS100026 8 VCP	390 388	4 45				4138 20	E2 2.00				0000 0 0 000				Moderate
1 3_Moderate 236	41 9	8560 Garden Grove		434 8443 MHK130009 MHK130010		3 325 329	1	1			413B 20	5 2.50				1 5 1 0 0.00				Spot Repair, Clear obstacles
2 3_Moderate 236	M016 4	LEDA LN		164 12165 MHR110036 MHR110037		201 73.3				2	2	6				0 0		1		73.3' MSA= JOM, 21.7' (D/SH) & 73.3' (D/SL) JOM
3 3_Moderate 236 PPT	10 37 MAP				B D/S 5999 SPP160040 8 VCP	194 259		1 1			2	6 3.00				0 0 0.00				
5 3_Moderate 236 PPT 1 3_Moderate 237	2-1-1 3 48 20	GILBERT STREET 12346 Loretta Cir.		286 9287A MHL000004 MHL010006 532 9533 MHM100030 MHM100031	5 D/S 3438 SPL000004 8 VCP 1 DS 3237 SPM100033 8 VCP	318 319.1 250 255	1 3 10	1		1	1 413A 17	44 2.59				0000 0 0 0.00				Moderate Spot Repair
2 3_Moderate 237	G006 2	ORANGEWOOD AV		032 7987 MHK070047 MHK070048		290 293.8	1	1		1	3	6	3 1 3			1 8 11				5' (D/SL) JOM
3 3_Moderate 237 PPT 1 3 Moderate 238	8 5 51 9				D/S 3900 SPP170001 8 VCP DS 3338 SPL090021 8 VCP	330 332 330 325		1		2		6 3.00 5 1.67				0 0 0.00				Spot Repair
2 3_Moderate 238	R060 6	Y NEWHOPE ST		MHQ130010- 456 11458 A MHQ130012		425 391.9	1			1	2	6	7 5.00			8 15				302.7' (D/SL) JOM, CONTINUOUS DAE
3 3_Moderate 238 PPT	8 11	CAPITAL	4/27/2007	0 0 MHP180007 MHP180008	3 D/S 4001 SPP180007 8 VCP	321 315				2	2	6 3.00				0 0 0.00 1				
5 3_Moderate 238 PPT	MAP 3-B3-5 7	Y DUNGAN LANE	8/31/2012 11	666 11665 MHR120018 MHR120019	9 D/S 6159 SPR120028 8 VCP	170 172.2	0 8	1 1			4139 20	50 2.50	18			2B00 18 36 2.00				Inspection Report Shows 169.7' BVV. This was FC & we changed it
1 3_Moderate 239	13 1				B DS 2929 SPO140055 8 VCP	332 329	1	2				5 1.67	7			0 0.00				Spot Repair
2 3_Moderate 239	M018 4 M018	5 SAFFORD ST	9/12/2005 12	490 12491 MHQ120023 MHQ120024	1 D/S 5595 SPQ120014 6 VCP	260 264.2	1			1	2	6	1			1 1				201.8' (D/SH) JOM, MSA= JOM 90% Flow blocked by rocks.
3 3_Moderate 239 PPT	13 13	Y WOODBURY	5/29/2007 11	483 13320 MHQ150010 MHQ150009	9 U/S 6712 SPQ150005 8 VCP	365 349		1			1	4 4.00	<u> </u>			0 0 0.00	2	1		Inspection was stopped 16 ft short of U/S MH. Spot repair at 349.1 ft
5 3_Moderate 239 PPT	MAP 4-B2-2 7	WESTMINSTER BOULEVARD	9/21/2012 11	039 11344 MHL170018 MHI 170900	D/S 2301 SPL170018 8 VCP	328 197.8	2 8				4139 12	35 202	,			0000 0 0 0 0				Moderate
1 3_Moderate 240	28 26	12927 Brookhurst Wy.		333 11337 MHM120005 MHM130001		300 307	1 0	2			4139 12	5 2.50			+++	47 143				Spot Repair
2 3_Moderate 240 3 3_Moderate 240 PPT	G014 1 13 14	Y MAC MURRAY ST WOODBURY	7/29/2005 10	811 10323 MHK080021 MHK080022	2 D/S 4730 SPK080003 8 VCP 2 D/S 4305 SPQ150007 8 VCP	210 203.5 280 275	2	1		1	2	5 8 2.67	3			3 6 0 0 0.00				7' (D/SH) JOM
S_Modelate 240 PPT	MAP	, TOODBORT	5/28/2007 TT	11900 Miliagioco II Miliagio0022	OF Q100007 0 VOP	200 215	2	1 1		+++		2.0/	 		+++	0 0 0.00				
5 3_Moderate 240 PPT		TRASK AVE			D/S 7780 SPT140022 10 VCP	280 241.7	3 2 7	2 1	++++	+++	4139 15	39 2.60	4		+++	0000 0 0 0.00		+++++		
1 3_Moderate 241 2 3_Moderate 241	33 16 G042 9	12571 Josephine St. Y SPINNAKER ST		376 8377 MHK110002 MHK110003 404 12386 MHT100034 MHT110006	3 DS 3347 SPK110002 8 VCP 5 D/S 3981 SPT110025 8 VCP	350 351 85 92.3	1	1 1	++++	1		5 1.25	5 1 1 10.00 18 2 2 9 1 15.00	++++++	+++	10 0.94				Spot Repair, Clear D&R 11.6' (D/SH) JOM
3 3_Moderate 241 PPT					U/S 4314 SPQ150016 8 VCP	275 275		1				4 4.00	1 1000			0 0 0.00 1				
5 3_Moderate 241 PPT	MAP 3-B3-5 4	Y ALLEY	8/31/2012 11	631 12205 MHR100039 MHR100005	5 D/S 5777 SPR100005 8 VCP	330 326.8	2 1 8				4138 22	53 2.41	36 1			3 2G14 40 76 1.90				
1 3_Moderate 242	8 13	12621 Groveview St.	2/17/2004 10	687 10688 MHN110024 MHN110025	5 DS 2622 SPN110031 8 VCP	316 311	3	1				5 2.50	3	1	+	6 0.67				Spot Repair, Cut roots
2 3_Moderate 242	M009 4	TRASK	8/16/2005 12:	207 12210 MHQ070004 MHQ080004	D/S 6326 SPQ070008 8 VCP	250 252.8	1			1	2	5	76 5.00 1 5.00			77 154				248.1' (D/SH) JOM
3 3_Moderate 242 PPT	MAP	EASEMENT			U/S 4848 SPQ150029 8 VCP	305 65	+++	1	++++	+++	1 1	3 3.00	 	++++++	+++	0 0 0.00		1	H	MSA = HWL under freeway
5 3_Moderate 242 PPT		WYNANT DRIVE		595 7696 MHJ120007 MHJ120008		300 296.3 285 285	8 4 8	1		+++	4138 21	48 2.29	 		+++	0000 0 0 0.00		+++++	\vdash	0.000
1 3_Moderate 243 2 3_Moderate 243	38 6 G045 6	13292 Jefferson St. Y HASTER ST		092 7063 MHJ140009 MHJ140011 1658 12644 MHT100040 MHT100004		285 285 183 182.7	1	1 1				5 1.25	3 3 3		+++	23 25			H	Spot Repair, Cut roots MMC AT 162.3' PVC-VCP, 162.3' (D/SL) JOM
2 3_Moderate 243 3 3_Moderate 243 PPT					9 U/S 4957 SPR150020 8 VCP	183 182.7 275 264	1	1			2 2	5 2.50	21			23 25 0 0 0.00		2		(Coop com
5 3_Moderate 243 PPT	MAP 3-5 17	EASY WAY 12561 Groveview	7/23/2012 98	300 9801 MHO080038 MHO080039	D/S 5208 SPO080042 8 Tile	335 324.7	5 8	1			4138 14	38 2.71			+++	0000 0 0 0.00				
1 3_Moderate 244	8 11	St.	2/17/2004 10	686 10687 MHN110023 MHN110024		322 323	3	1	++++	+++		5 1.25	5 2	++++++	$+\!+\!+\!+$	0 0.00				Spot Repair, Cut roots 21.2' MSA= JOM, 21.2' (D/SL)
2 3_Moderate 244 3 3_Moderate 244 PPT	M016 7	MERRILL ST A BETTER WAY	9/8/2005		3 U/S 5475 SPR100047 6 VCP 3 U/S 4857 SPQ160020 8 VCP	60 21.2 100 111		++++	++++	1	1	3 6 3.00			1	1 4 0 0 0.00		1		JOM 21.2 (6/3L)
1 3_Moderate 245	9 10	10412 Stanford Ave.	2/19/2004 11:	244 11245 MHN120025 MHN120011	DS 2533 SPN120012 8 VCP	87 86	3	1				5 2.50			+++	0 0.00				Spot Repair
	G039 3				U/S 6209 SPQ120041 8 VCP	298 298.2				1	1	3	1 4			5 6				131.3' (D/SL) JOM

		1		General						Structural Def	fect Coding		Bu log		Operational	and Maintenance			- P a -		Construction Features		ures	D. D.
	No. No. 35. No. 7 (7)				r ID sr ID.	Pipe	£					apsed Pic ace age age Failure	itruct Rati	oct Index					faint Rati			ellaneous	tion Feat urvey Aba	Abandon
y y sector	No. No. ction No. rsal Tape rsal Inspe	ocation	Exist	ting MH ID Previous MH ID	in of Ca	ial Length (f	h (ft)	Crack C	Fracture F	Broken Hole B H	Joint J	Surf Darr Poir	Structura	Deposits D	Fine (F) T	Roots (R) ap (T) Medium (M)	Infilt Ball (B)	ration Obstacles Ver	Tap	(Lateral)	Line M	uding Seal	Construc	dentified
3 3_Moderate 245 PPT	ede	eet Name CC	TV Date Start	t End Start End 88 10869 MHQ160009 MHQ160010	D/S 4807 SPQ160011 8	VCP Your	330 328	L C M S	H L C M S	H SV VV SV VV S	S M L S M	M L A V H P S LF RP	S A D D D D D D D D D D D D D D D D D D	로 AGS B % L % Z % I	B L J C B	LJCBLJC	BLJCGD	R W C Z % C	R A T T T A CF	FL BI BD D	L U R LD RD SRH S	SRB SRL Z SA CU M	Reas Total	© Comments Recommendations
5 3_Moderate 245 PPT	MAP WEST	AKE		12 11105 MHO140031 MHO140034			350 345						4137 15 39						0000 0 0 0 00					
1 3_Moderate 246	11 15 11060° Ave.	Sherman 2/2	23/2004 1188:	12 11883 MHP130021 MHP130022	DS 4287 SPP130014 8	VCP	155 149	1	1				15 39	2.50					0 0.00					Spot Repair
2 3_Moderate 246 3 3_Moderate 246 PPT		L 6/	1/2007 1150	1 8552 MHJ080020 MHJ080021 16 11952 MHQ160016 MHP160008	D/S 3846 SPP160024 8	VCP	245 238.6 200 199	2	1		1		1 3 3					1	4 7 0 0 0.00					234.4' (D/SL) JOM
1 3_Moderate 247 2 3_Moderate 247 3 3_Moderate 247 PPT	16 12 9971 L G005 5 Y MOEN 20 2 CARDI	ST 7/	18/2005 8546	H 10743 MHM110026 MHM110028 6 8547 MHJ080012 MHJ080013 10 10879 MHR150009 MHR150008	D/S 2046 SPJ080013 8	VCP	300 302 180 186.5 85 84	1	1		1		1 3	2.50					3 6 0 0 0.00					Spot Repair 5.9' (D/SL) JOM
	MAP												1 2	2.00					0 0 0.00					
5 3_Moderate 247 PPT 1 3_Moderate 248	24 19 13280			0 10866 MHQ140018 MHQ140019 9 12073 MHM140007 MHM140010		VCP VCP	340 337.3 254 255	3 1 5	1 1				4136 11 29	2.64					0000 0 0 0.00					Spot Repair
2 3_Moderate 248	G005 13 Y AV	7/	18/2005 8502	2 8710 MHK070038 COK070001	U/S 2086 SPK070041 8	VCP	100 101.4				1		1 3	1		1			2 5					15.1' (D/SH) JOM
5 3_Moderate 248 PPT	3-B3-1 2 GLEN:	_a Vaughn		0 12601 MHQ110022 MHQ110023		VCP	370 382.5 350 347	4 6	1				4136 11 30	2.73	1				1100 1 1 1.00					Spot Repair
3 3_Moderate 249 PPT	28 2 St. WOOD			13 11544 MHL140034 MHL140035 9 7540 MHR150011 MHR150012		VCP VCP	350 347 378 374	1	1		2		2 6	3.00					0 0 0.00					Spot кераіг
5 3_Moderate 249 PPT		REET 9/	19/2012 6906	6 6907 MHM180004 MHM180005	D/S 200 SPM180003 8	VCP	382 381.5	1 4	1		2		4136 8 23	2.88					5100 1 3 3.00	1				
1 3_Moderate 250 2 3_Moderate 250	5 7 x Ave. G005 8 Y MACDI	2/ JFF ST 7/	18/2005 8066	7 11136 MHO110030 MHO110018 6 8067 MHK070030 MHK070031	D/S 1918 SPK070033 8		180 196 168 170.3	2 1			1		5 1 3	2.50 1	0	2 1	3		28 1.42					Spot Repair, Cut roots 5' (D/SL) JOM
3 3_Moderate 250 PPT	June Mao 2			2 7513 MHR160001 MHR160002		VCP	398 401	++	1		+++		1 2	2.00		++++			0 0 0.00			+HHT		
	B1 3 GILBEI 26 1 x 9452 L	uders 3/	19/2004 1207	2 9283 MHL990005 MHL000001 76 12077 MHM140013 MHM140014	DS 2514 SPM140037 8		300 306.7 385 385	2 1 5	1				4135 9 24 5	2.67 60 1.67 12 2					2K00 60 120 2.00 5 0.75					Spot Repair, Clear D
2 3_Moderate 251 3 3_Moderate 251 PPT				5 8596 MHJ080027 MHJ080028 3 7514 MHR160002 MHR160003			120 117.9 398 397	\prod	2		1		1 3 2 8	4.00					1 2 0 0 0.00					115.8 (D/SH) JOM Inspection Report shows 281.1
5 3_Moderate 251 PPT				7 8498 MHL120031 MHL130011		VCP	303 303.8	3 4 5			+++	1	4135 13 27	2.08 16 3		++++			2B00 19 38 2.00	+++		++++		BVV. This is RPP
1 3_Moderate 252 2 3_Moderate 252 3 3_Moderate 252 PPT	G028 7 CHAPN	IAN AV 8/2	25/2005 1291	9 12561 MHP120016 MHP120017 9 1751 MHP090019 MHP090018 4 7515 MHR160003 MHR170001	U/S 6262 SPP090027 12		331 330 330 329.6 374 403	2 1			1		1 3		2 1				3 0.66 1 3 0 0 0.00					Spot Repair, Cut roots 303' (D/SL) JOM
	MAP										1									1				
5 3_Moderate 252 PPT 2 3_Moderate 253	3-B3-3 5 BANNE G045 7 Y EASEN			4 10893 MHQ140026 MHQ140015 7 12658 MHT100039 MHT100040		VCP	180 293.8 320 315.9	5 1 5	1		1		4135 12 30 1 3	2.50				1	5 9				2	292.6' MMC, 298' PVC-VCP, 180.2' (D/SH) JOM
3 3_Moderate 253 PPT	15 10 ENTER	PRISE 6/	9/2007 7518	B 7519 MHR160005 MHR160006	D/S 489 SPR160005 8	VCP	206 202		1				1 2	2.00					0 0 0.00					
5 3_Moderate 253 PPT 1 3_Moderate 254				15 11440 MHQ140017 MHQ140018 12 11153 MNW24027 MNW24028		VCP VCP	345 339 365 365	4 4	1 1				4135 10 27 5	2.70					5100 1 3 3.00 2 0.56	1				Spot Repair, Clean grease
2 3_Moderate 254 3 3_Moderate 254 PPT	G050 5 Y PALM:		27/2005	MHR130004- MHR130005- A A A 1 7536 MHR160023 MHR160019	D/S SPR130004-A 8		281 281.4 265 262				1		1 3	1 5.00					4 11 0 0 0.00		2	1		1.8' (D/SL) JOM
5 3_Moderate 254 PPT	MAP			14 11685 MHR100010 MHR100011		VCP	351 337.6				2		4125 0 40	0.47					2125 00 04 0.04					
1 3_Moderate 255	16 17 12681	Susan Ln. 3/	0.00.0	6 10729 MHM110031 MHM120007 MHR130005- MHS140001	DS 2664 SPM110020 8	VCP	300 336	1 1	1				5	2.50			1		2 0.59	1				Spot Repair, Cut roots
2 3_Moderate 255 3 3_Moderate 255 PPT	G050 6 PALM: 27 12 HARBO		27/2005 20/2007 7553	A A 3 7554 MHR160025 MHR160026	D/S SPR130005-A 8 D/S 853 SPR160027 12	VCP VCP	280 279.5 272 279	1	1 1		1		1 3	2 4 5.00					9 24 0 0.00		1 1	1		
5 3_Moderate 255 PPT		T 8/2		4 10865 MHQ140013 MHQ140014		VCP	215 212.3	5	1				4135 6 19	3.17					0000 0 0 0.00					
1 3_Moderate 256 2 3_Moderate 256 3 3_Moderate 256 PPT	G041 5 OTIS A	V 9/2	23/2005 1273	70 11173 MHO130042 MHO130045 15 12858 MHS090024 COS090002 4 7555 MHR160026 MHR160027	U/S 6514 SPS090009 8	VCP	310 315 110 111.3	1 1			1		1 3	2.50					1 2 0.40					Spot Repair, Cut roots 6' (D/SL) JOM
	MAP 2 July-						280 280		1				1 4	4.00					0 0 0.00					
5 3_Moderate 256 PPT 1 3_Moderate 257	44 31 12765	/illage Dr. 4/2	28/2004 1203	17 10798 MHL080025 MHL080026 12 12031 MHM120022 MHM120021 MHR130004	US 2739 SPM120021 8	VCP	300 302.5 130 170		1				4134 7 19	2.71	1	1			1100 1 1 1.00					Spot Repair, Cut roots 394.2' (D/SH) JOM,
2 3_Moderate 257 3 3_Moderate 257 PPT	G050 8 Y MARBI 17 36 PARTE			8 12764 MHS130011 A 2 6700 MHS140024 MHS130024	D/S 6527 SPS130017 8		405 395.9 165 167				1		1 3	3.00	12				17 22 0 0 0 0.00		1			CONTINUOUS ROOT FINE JOINT
5 3_Moderate 257 PPT				2 11113 MHO140040 MHO140041			255 245.1	1 2 4	1		ШГ		4134 8 20	2.50	1				1100 1 1 1.00					
1 3_Moderate 258 2 3_Moderate 258	49 19 9391 M G050 9 Y FLINT	PL 10/	27/2005 1275	9 9570 MHL110010 MHL110011 19 12765 MHS130012 MHR130005-	A D/S 6528 SPS130018 8	VCP	230 227 405 395.4	1 1					5 1 3	3	3	1			7 11					Spot Repair, Cut roots 393.5' (D/SH) JOM
3 3_Moderate 258 PPT	June			9 7438 MHS140034 MHS140035			240 242		1		+++		1 4		1	+++++			1 1 1.00 2	+++		++++		
5 3_Moderate 258 PPT 1 3_Moderate 259	4 16 11332	ampson 2/	10/2004 1102	9 7990 MHK060008 MHK060009 88 11029 MHP110011 MHP110012	DS 5236 SPP110008 8	VCP	182 175.6 340 343	1 8 4					4134 14 26 5	2.50					0000 0.00					Spot Repair
2 3_Moderate 259 3 3_Moderate 259 PPT	M018 7 SAFFC	RD ST 9/	12/2005 1249	3 12492 MHQ120026 MHQ120025 B 7469 MHS160003 MHS160004	U/S 5597 SPQ120016 6	VCP	90 89.4 366 366				1		1 3						0 0 0.00					24.7' (D/SL) JOM
5 3_Moderate 259 PPT				IS 11988 MHR140029 MHR140032			180 176.1	- - -	1				4134 8 21					1 1 15	3100 2 8 4.00					
1 3_Moderate 260 2 3_Moderate 260	27 9 12741 1 1741 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	Gilbert St. 3/2	22/2004 8454	4 8453 MHL120001 MHL110001 11 11464 MHQ140038 MHQ140004	US 3112 SPL120001 8 D/S 4209 SPQ140019 8	VCP VCP	80 84 275 274.6	1 1			1		1 3		2			1	4 5	1				Spot Repair 123.9' (D/SL) JOM
3 3_Moderate 260 PPT 5 3_Moderate 260 PPT	MAP LAURE 1 4 AVENU	LTON IE 5/	15/2012 8273	6 7507 MHS160017 MHS160018 3 8274 MHG090010 MHG090011	D/S 1062 SPG090014 8	VCP	328 336 150 149.9		2 1 1		1		1 3 4133 4 13						2D00 28 56 2.00	3				
1 3_Moderate 261 2 3_Moderate 261	30 15 8681 T R045 4 Y HARBO	rask 3/3 DR BLVD 10/	30/2004 7641 27/2005 1213	1 7642 MHK150003 MHK150004 19 12138 MHS090033 MHS090032	DS 997 SPK150002 8 U/S 5832 SPS090021 8	VCP VCP	330 331 320 319.5	1 1			1		5 1 3						0 0.00					Spot Repair 198.9' (D/SH) JOM
3 3_Moderate 261 PPT	MAP			3 7508 MHS170005 MHS170006			353 353	1	1		+++		2 3						0 0 0.00	3			+	
5 3_Moderate 261 PPT 1 3_Moderate 262	4-B1-4 7 FLOWI	Mickey St. 3/3	31/2004 1152	0 10481 MHN150013 MHN150015 9 14107 MHL140025 MHL150007	DS 2703 SPL140011 8	VCP		2 3			+++		24 4133 30 63 5	2.50					2Q00 77 154 2.00 0 0.00					Spot Repair
2 3_Moderate 262 3 3_Moderate 262 PPT	18 32 DOWN			12 12693 MHS120042 MHS120043 0 MHT140012 MHT140031			240 231.6 265 259				1 1		1 3 3		2				2 2 0 0.00					46.6' (D/SL) JOM
5 3_Moderate 262 PPT		T 9/2		5 7006 MHK160015 MHK160015			194 192.7	10 1	2 1				4133 14 33						0000 0 0 0.00					
1 3_Moderate 263 2 3_Moderate 263	S006 9 Y FORES	T DR 10/	18/2005 1269	1 7702 MHJ110002 MHJ110004 32 12094 MHS120042 MHS120041	U/S 6035 SPS120059 8	VCP	260 260 300 294.2				1		1 3		1			1 5	2 5					Spot Repair 194.1' (D/SH) JOM
3 3_Moderate 263 PPT 5 3_Moderate 263 PPT	MAD			9 9090 MHK100012 MHK100013		Otto	435 431 105 105.8	-	1		1		1 3 4133 6 17	2.83					0 0 0 0.00					
																								<u> </u>

g 6 Z S	General Pipe	Structural Defect Coding	Operational and Operational an	Maintenance Construction Features Supplies Part Supplies
Wing Wing Wing Wing Wing Wing Wing Wing	D Previous Sewer II Camp Sewer	Crack	WL O Deposits Ro Dep	1
	d Start End S N S S S S S S S S S S S S S S S S S	L C M S H L C M S H SV VV SV VV S M L S M L A V H P	LF RP S X D D D D D D D D D D D D D D D D D D	C B L J C B L J C B L J C G D R W C Z % C R 2 5 5 5 5 5 5 5 5 5
3 3_Moderate 264 PPT 18 25 ROBERTA 6/19/2007 6678 6671	7 MHT140023 MHT140022 U/S 506 SPT140023 8 VCP 120 113 77 MHP130015 MHP130016 D/S 3806 SPP130008 6 VCP 250 254.9	1	1 2 200	000000000000000000000000000000000000000
2 3_Moderate 265 R008 6 Y ALWICK CR 8/8/2005 9745 9751	2 MH-L100025 MH-L100026 DS 3315 SPL100007 8 VCP 372 372 172 11 MH-L050027 MH-L050028 DJS 5560 SPL050033 8 VCP 366 389.2 3 MH-T140029 MH-T140028 UJS 510 SPT140028 8 VCP 208 212		4 4.00 2 4 1 1 3 3 12 5.00 1 1 1 1 4 4.00	15 0.71 Spot Repair, Cut roots 9 25 40 299.6' (D/SL) JOM 299.6' (D/SL) JOM
	32 MHP050006 MHP050004 U/S 5614 SPP050004 8 VCP 280 284 4 MHL110041 MHL110042 DS 3168 SPL110043 8 VCP 300 300	1 3 1	4133 5 14 2.80 4 4.00 4 1 2	0000 0 0 0.00 Spot Repair, Cut roots
CAPDEN CROVE	44 MHP100037 MHP100039 DIS 6061 SPP100007 10 VCP 170 104.4 5 MHU130006 MHU130005 UIS 357 SPU130005 8 VCP 260 259	1	1 3	10.4 MSA.HIGH FLOW, CAMERA UNDER WATER, 10.4' (DSL) JOM
5 3_Moderate 266 PPT 3-8-42 11 CHAPMAN AVE 10/2/2012 12959 1295	54 MH0090001 MH0090011 DIS 6298 SP0090001 15 VCP 50 46.7 0 MHL110049 MHL110048 US 3207 SPL110050 8 VCP 290 291	3 1	4133 4 13 3.25 4 4 4.00 3 1 2	0000 0 0 0.000 Spot Repair, Cut roots
2 3_Moderate 267 R039 4 Y ALLEY 9/30/2005 12678 1265	99 MH-1100091 MH-1100041 D _{IS} 4034 SPT080033 8 VCP 150 146.6 7 MH-1030011 MH-130016 D _{IS} 364 SPU30012 8 VCP 291 293		1 3 7 1 10.00	9 20 2 29.7 (D/SH) JOM
1 3_Moderate 268 40 21 13082 Monroe St. 4/15/2004 7721 7722	05 MH0100026 MH0100027 D/S 4763 SP0100020 8 VCP 235 243 2 MHJ130012 MHJ130013 DS 785 SPJ130007 8 VCP 220 220 52 MHT100043 MHT100044 D/S 3922 SPT100038 8 VCP 225 220.3	1	4133 5 15 3.00 3 3 3 4 4.00 1 1 1 1 1 1 1 1 1 3 3 1 1 1 1 1 1 1 1	1 1 4131 5 5 1.00 Spot Repair, Cut roots
3 3_Moderate 268 PPT 19 23 LEWIS 6/22/2007 6629 6643 MAP ROCKINGHORSE	3 MHU140008 MHT140002 DIS 371 SPT140001 8 VCP 214 220 14 MH0140025 MHQ140026 DIS 4469 SPQ140042 8 VCP 370 350.7	1 1	2 6 3.00 4133 12 29 2.42	0000 0 0 000
2 3_Moderate 269 R040 4 Y HASTER ST 10/3/2005 12680 1267	81 MH0140043 MH0140045 DS 2274 SP0140034 8 VCP 170 331 79 MHT090041 MHT090040 U/S 6362 SPT090037 8 VCP 385 384.7	1	1 3 2	2 0.59 Spot Repair, Cut roots 2 4 Spot Repair, Cut roots 1 1 VCP VCP
1 3_Moderate 270 13 18 10942 Lampson Ave. 3/2/2004 12304 1100	0 MHG090012 MHG090013 DIS 1318 SPG090055 8 VCP 350 317.4 38 MHC0110028 C00110001 US 3951 SP0110019 8 VCP 250 218 43 MH0080044 MHQ080045 DIS 5854 SPQ080054 8 VCP 230 233.2	1	4132 7 17 2.43 62 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	1 1 312K 63 127 2.02 2 Inspection Completed 2 0.40 Spot Repair, Cut roots
Euclid St/Pinehurst	2 MHK070015 MHK070016 DIS 1847 SPK070014 8 VCP 385 390.4 46 MHP120033 MHP120034 DS 4400 SPP120034 8 VCP 35 30	2 1 1 1	4132 5 12 2.40 18	2C00 2 2 00 Spot Repair, Cut roots
2 3 Moderate 271 S003 6 DUNKLEE AV 10/12/2005 12466 1240 5 3 Moderate 271 PPT 3-5 11 FRIEDA PLACE 7/24/2012 11208 1113	09 MHT120013 MHT120014 D/S 4587 SPT120029 6 VCP 293 293.0 34 MH0100017 MH0110016 D/S 2385 SPO100018 8 Tibe 259 266.1	2 1	3 3 3 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	2 4 JSM at 202.8:
2 3_Moderate 272 S002 10 ARLETTA CR 10/11/2005 12380 1238	0 MHM100008 MHM100007 US 3577 SPM100011 8 VCP 95 102 31 MHT120018 MHT120019 DIS 5441 SPT120006 8 VCP 130 126.8 2 MHK130009 MHK120034 UIS 3410 SPK120036 8 Tile 311 318.4	1	4 4 400 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	0 0.00 Spot Repair, Cut roots 0 0 0 7.0' JOINT SEPARATED MEDIUM
MAP	9 MHK120008 MHK120016 DS 3367 SPK120011 8 VCP 325 325 59 MH0130040 MH0130041 D/S 2585 SPO130044 8 VCP 360 360.4		4132 4 111 2 75	0 0.00 Spot Repair
5 3_Moderate 274 PPT 3-2 6 EUCLID STREET 7/24/2012 13154 1279	88 Mi-Mitt00018 Mi-Mitt00017 US 3424 SPM100020 8 VCP 130 133 35 Mitt000010 COO050001 U/S 6603 SPO050021 8 VCP 135 136.3 7 Mitt000014 Mitt000015 DS 3329 SPL090012 8 VCP 225 218		4 4.00 4132 4 11 2.75 4 2.00	0 0.00 Spot Repair 0 000 0 0 0.00 Spot Repair
5 3_Moderate 275 PPT 3-83-5 16 ORANGEWOOD AVE 8/31/2012 10373 1083	34 MHK070050 MHL070044 D/S 4784 SPK070051 8 VCP 36 33.7	2 1 1	4132 4 12 3.00	0000 0 0 0000
5 3_Moderate 276 PPT 3-B3-1 21 LAMPSON 8/2/2012 12588 1252	32 MHM120003 MHM120004 DS 2816 SPM120003 10 VCP 4 235 245 77 MHP110023 MHP110024 DIS 5092 SPP110023 6 Tile 300 299.8	1 2 1	4132 4 12 3.00 223 1.99	1 2 0.12 Spot Repair, Clear D&R
Map 1	2 MHM100024 C0M100001 US 3283 SPM100046 6 VCP 4 80 95 7 MHD090011 MHD090015 DIS 1925 SPD090010 8 VCP 259 256.3	1 1	223 1,99 4431 446	15 0.26 1 1 Replace pipe Inspection Report shows 252.6' BVV. It was FM & we changed it Inspection Report shows 72.3'
MAP	3 MHK130009 MHK130008 U/S 3411 SPK130021 8 Tile 140 151.8 51 MHP90012 MHP10009 D/S 3901 SPP100024 8 Tile 315 316.5		4131 8 16 2.00 23	2C11 24 48 2.00 1 1 BVV. This is FM.
MAP OAKWOOD	2 MHJ070001 COJ070002 U/S 2009 SPJ070001 8 Tile 109 107.7 53 MHP100013 MHP100014 D/S 3788 SPP100015 8 VCP 394 399.4	1 1 1	4131 3 9 3.00 1 1 1	1200 2 2 1.00
MAP	78 MHP100025 MHP100027 D/S 4639 SPP100032 6 Tile 230 222.7	1 1	4131 2 7 3.50 1	1100 2 5 2.50 1 I Inspection Report shows 48.1' BVV. This is RPPIPatch repair) &
5 3_Moderate 285 PPT 3-6 9 3-6 19 Y PARKWAY 7/27/2012 11734 1173	33 MHP120023 MHP120022 U/S 4298 SPP120026 6 Tile 385 148	3 1	1 4131 5 11 220 3	We changed it 14.3.3 MSA (DAE) 8.4.7 MSA (TB). Inspection 3123 5 11 2.20 1 1 1 1 1 Couldn't Completed.
MAP	23 MH0080019 MH0080017 U/S 5770 SP0080036 6 VCP 160 165 4 MHG110047 MHG110048 D/S 927 SPG110003 8 Tile 536 536.9	1 1 1	1 4131 3 7 2.33 13 11 412A 13 28 2.15 5 32	9 2A19 22 35 1.59 Inspection Report shows 3 BV/ This is RPP (Patch Repair) 1 11 412F 49 89 1.82 DS MH was 8394, We changed it as 8294
MAP BOLSA AVE	6 MHG110048 MHG110050 D/S 928 SPG110004 8 Tile 120 131.8 77 MHO200023 MHO200022 U/S 179 SPO200024 8 VCP 330 45.4	2 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	2 4122 3 8 2.67 9 7	1 2B11 18 37 2.06 1 1 45.4 MSA (MCU). No Reversal Video
MAP MAGNOLIA	95 MHQ140016 MHQ140017 D/S 4361 SPQ140038 8 VCP 240 248.7 8 MHL100046 MHL100047 D/S 3538 SPL100047 8 VCP 20 40	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	4121 3 7 2.33 4112 3 6 2.00	0000 0 0 0.00
MAP	8 MHK150029 MHK150030 D/S 662 SPK150032 8 VCP 324 324.1	1 1	4111 2 5 2.50 8 63	281K 71 79 1.11
MAP 2. July-	00 MHL080008 MHL080005 D/S 3740 SPL080018 8 VCP 215 207.6 44 MHM080035 MHM080034 U/S 3839 SPM080044 8 Tile 400 326.4		4111 2 5 2.50 1 1	2200 2 4 2.00 326.4 MSA (DAE). No Reversal Video
MAP	94 MHMUBUUU35 MHMUBUU34 UIS 3839 SPMUBUU44 8 IIIe 400 3265.4 2 MHK150033 MHK160022 DIS 652 SPK150036 8 VCP 349 347.5		4100 1 4 4.00 24 4	2011 25 50 2.00 1 1 1 6 Video

		ø	. No.	۶		General	O Q	Pipe			Structural Defe	ect Coding	sed Pipe	ge Repair Repair Lot Rating	Defects Defect Scor			Operational	and Maintenance			int Rating	A Score		Construction Featu	ires	laneous n Features	vey Aband.	
se rity	k Ing tractor	e No.) No. ection No. ersal Tape N	ersal DVD Ne ersal Inspec.	Location	Existing MH ID	Previous MH ID	sting Sewer II	erial t Length (ft) Comment Comment	Crack	Fracture Brok	en Hole	Joint J	X Collaps	Damag Lining I Point F Sags SP Quick Stru	Structural [AE	Deposits D AE Other	Fine (F) T	Roots (R) Tap (T) Medium (I	(M) Ball (B)	I OB Other		al O&M Defection of the control of t	Tap (Lateral)	Line L	Intruding Seal Material IS	M Miscell M Constructio	Identified At	
Prio Pha	Con	May Folder	Rev Rev	Street Name	CCTV Date Start End	Start End	Exis	Matrice GIS	LCMS	H L C M S H SV	/V SV VV S	M L S M L A	V H P S	S LF RP S &	Tota Tota Stru	AGS B %	L % Z %	B L J C B	L J C B L J	CBLJCGE	0 R W C Z %	C R A	Tota O&n	FD FL BI BD C	L U R LD RD	SRH SRB SRL	Z SA CU MC	Secondary Comments Recondary	ommendations
5 3_Moderate 2		MAP		ACACIA AVE		MHF120004 MHF120008 U/			0.7	1					0 1 4 4.00		3						3 6 2.0					0' MSA (Void Bottom Of Pipe). No	
5 3_Moderate 2 5 3_Moderate 2	97 PPI 98 PPT	MAD		TAFT STREET CENTURY BOULEVARD		MHO150008 MHO150007 D/ MHO130034 MHO130900 U/			.2	1					1 4 4.00 10 1 4 4.00							1100	0 0 0.0	10	1		1	Reversal Video 7.2' MSA (LL). No Reversal Video	
	99 PPT 00 PPT	MAP		WEST STREET EUCLID STREET		MHR120036 MHR120053 D/			0	1					0 1 4 4.00		1	1				4121	2 5 2.5	60					
5 3_Moderate 3		MAP		LARSON AVENU	IE 7/6/2012 7050 7051	MHJ130016 MHJ130017 D/	S 790 SPJ130011 8	Clay 3 Tile 100 7		1					0 1 4 4.00							0000		10					
5 3_Moderate 3	02 PPT	2-2-1 19 MAP		LORNA STREET	7/2/2012 8026 8023	MHK090016 MHK090015 U/	S 1877 SPK090016 8	3 Tile 170	58	1				410	1 4 4.00			2				1200	2 2 1.0	10					
5 3_Moderate 3 5 3_Moderate 3		MAP		NEWHOPE STREET		MHQ130037 MHQ140039 D/				1					0 1 4 4.00							0000	0 0 0.0	10					
5 3_Moderate 3	06 PPT	MAP 3-6 8		MARSHALL LAN	E 7/26/2012 12273 12313	MHO110012 MHO110011 U/	S 5127 SPO110030 6	Clay 315 3	8.8	1				410	00 1 4 4.00			21				1000	27 54 2.0	10 1	1				
5 3_Moderate 3		MAP		CHAPMAN AVE		MHR090008 MHR090009 D/				1					1 55 156 2.84							0000		10				321.9' Unmapped MH	
5 3_Moderate 3 5 3_Moderate 3	08 PPT 09 PPT	MAP		Y LAMPSON AVE Y GILBERT STREE		MHJ110013 MHJ110014 D/ MHL120004 MHL130001 D/		3 VCP 396 5 3 VCP 323 :		6					D 86 226 2.63 24 58 152 2.62	140		6 1		1			8 10 1.2						
5 3_Moderate 3	10 PPT	MAP 2 July- 3 10		LORALEEN STREET	6/27/2012 9590 9591	MHL100024 MHL100025 D/	S 3314 SPL100006 8	3 VCP 372 3	0.1 8 28	1				3D2	21 37 94 2.54			2	2			3222	4 8 2.0	10					
5 3_Moderate 3	11 PPT	MAP 3-B3-1 27		CIVIC CENTER Y DRIVE	8/2/2012 11016 11017	MHP120013 MHP120014 D/	S 5134 SPP120012 6	Clay Tile 332 3	8.6 2 23			1		3C2	22 26 76 2.92		82					2000	82 164 2.0	10					
5 3_Moderate 3	12 PPT	MAP 3-B2-3 14		CANDY LANE	8/16/2012 13086 13069	MHR080017 MHQ080051 D/	S 5714 SPR080026 8	3 VCP 267 2	8.3 9 13 14 1	1				3B2	'A 38 78 2.05							0000	0 0 0.0	10					
5 3_Moderate 3	13 PPT	2 July- 2 6 June		BIXBY AVE	6/25/2012 9026 9564	MHL090024 MHL090040 D/	S 3340 SPL090023 8	3 VCP 343 3	4.4 3 10 15	1				3B2	24 29 63 2.17							0000	0 0 0.0	10					
5 3_Moderate 3	15 PPT	Map 2		MACMURRAY STREET	6/14/2012 10283 10287	MHK050018 MHK050023 D/	S 3775 SPK050033 8	3 VCP 200 2	3.4 4 18 10	1 1				3A2	25 34 61 1.79							0000	0 0 1.0	10					
5 3_Moderate 3	16 PPT	MAP 3-B2-2 11 MAP		LOARA STREET	8/13/2012 12925 12926	MHP070005 MHP080009 D/	S 6176 SPP070007 8	3 VCP 380 4	5.1 2 6 13	1		1		3A2	23 23 52 2.26							0000	0 0 0.0	10					
5 3_Moderate 3	17 PPT	2 July- 3 1 June		MAGNOLIA STREET	6/26/2012 10386 10844	MHL060039A MHL060039 D/	S 5330 SPL060042 8	3 VCP 380 2	7.6 1 5 12	1				3A2	19 45 2.37							0000	0 0 0.0	10					
5 3_Moderate 3	18 PPT	Map 2 B1 49 June		BROOKHURST STREET	6/12/2012 9147 9148	MHM030002 MHM030003 D/	S 4369 SPM030004 8	3 VCP 300 3	2.7 12 14	1				3A2	27 56 2.07		55					2J00							
5 3_Moderate 3 5 3_Moderate 3		Map 2 B1 16 MAP 2-1-4 4		CREW DR		MHM030017 MHM030007 D/ MHN130031 MHN130032 D/						1			8 20 44 2.20 15 17 41 2.41							0000 3200	2 6 30	10 2			1		
5 3_Moderate 3		June Map 2		WASCO ROAD		MHK060007 MHK060012 D/				1					4 15 37 2.47							0000	2 0 3.0	0 2					
5 3_Moderate 3	23 PPT	MAP 3-3 9 June		DANIEL AVE		MHQ070013 MHQ070017 D/			0.5 3 9	1					1 13 32 2.46							0000	0 0 0.0	10					
5 3_Moderate 3	24 PPT	Map 2 B1 14		THOMAS DR		MHM030024 MHM030009 D/	S 3660 SPM030036 8	3 VCP 363 3	5.3 1 8	1				382	1 10 27 2.70		68					2L00	68 136 2.0	10					
5 3_Moderate 3	25 PPT	MAP 4-B2-2 6		WESTMINSTER BOULEVARD	9/21/2012 11044 11048	MHL170900 MHL170019 D/	S 3046 SPL170900 8	3 VCP 6 5	3.2 1 7	1				381	1 9 25 2.78							0000	0 0 0.0	10					
5 3_Moderate 3	26 PPT	June		CHOISSER ROA	D 8/29/2012 12137 12097	MHS100050 MHS100010 D/	S 5831 SPS100053 8	3 VCP 270 2	7.2 2 7	1				372	1 10 25 2.50							0000	0 0 0.0	10					
5 3_Moderate 3	27 PPT			LA GRAND AVE	6/14/2012 10282 10338		S 3774 SPK050032 8	3 VCP 195 1	8.2 2 7 5			1		362	12							0000	0 0 0.0	10					
5 3_Moderate 3	28 PPT	MAP 4-B1-4 8 MAP 2 July-		FLOWER STREE	FT 9/18/2012 10479 10480	MHN150012 MHN150013 D/	S 2226 SPN150008 8	3 VCP 180 1	6.5 6	1				362	20 2.86		33					2F00	33 66 2.0	10					
5 3_Moderate 3	29 PPT			STREET	6/20/2012 9961 9962	MHM090002 MHM090003 D/	S 5367 SPM090004 8	3 VCP 226 2	5.9 6	1				362	1 7 20 2.86	47						2H00	48 98 2.0	14 1					
5 3_Moderate 3		June Map 2		ADAMS STREET		MHE120006 MHE120007 D/						6			0 6 18 3.00		3						3 6 2.0						
5 3_Moderate 3	31 PPT	B1 36		GARZA AVE		MHL040013 MHL040014 D/				1					1 7 18 2.57								0 0 0.0						
5 3_Moderate 3	32 PPT	MAP		PICKETT LANE		MHQ100024 MHQ100025 D/						1			1 5 15 3.00								0 0 0.0	0					
5 3_Moderate 3 5 3_Moderate 3	33 PPT 34 PPT	3-B2-1 14 June Map 2 B1 46		ROBERT LANE GILBERT STREE		MHQ060008 MHQ060009 D/ MHL050046 MHL050047 D/		3 VCP 355 3		1 1					1 10 19 1.90							0000	0 0 0.0	10					
5 3_Moderate 3	34 PPT	MAP		Y 9TH STREET		MHQ120006 MHQ120007 D/		Clay 3 Tile 300 2		1 1					10 4 12 3.00							0000	0 0 00	10					
5 3_Moderate 3		MAP		GILBERT STREE	T 7/23/2012 12053 12040	MHM130041 MHM130010 U/	S 2748 SPM130035 1	0 VCP 315 3	0.4 2			1		5 332	8 19 2.38					1			1 4 4.0						
	37 PPT	MAP		JACALENE LANI		MHQ070036 MHQ070037 D/			5.4 5 3	1					9 16 1.78								0 0 0.0	10				Inspection Report shows 299.9'	
5 3_Moderate 3 5 3_Moderate 3	40 PPT 41 PPT	MAP		Y CROSBY AVE CENTRAL AVE		MHM130044 MHL130015 D/ MHN140009 MHN140007 U/		3 VCP 304 3 3 VCP 300 3				3			1 4 10 2.50		1	1 1				3112 0000		10				JOL. It was JOM & we changed it.	
5 3_Moderate 3		MAP		DUNKLEE AVE		MHT120014 MHT120015 D/						1			1 4 10 2.50								0 0 0.0	10					
5 3_Moderate 3	43 PPT	MAP		TRASK AVENUE				3 VCP 192 5				3			0 3 9 3.00								0 0 0.0				1		
	44 PPT	MAP		EMERSON AVE	7/17/2012 10704 11295	MHN130029 MHN130030 D/		3 VCP 360 4				1			0 3 9 3.00							0000	0 0 0.0	10			1	45.4' MSA (JOM). No Reversal Video	
5 3_Moderate 3	45 PPT	2-1-5 10 MAP		GALWAY STREE		MHM130007 MHM130012 D/						2			8 11 23 2.09								0 0 0.0				2	Pipe ID was 3826. We checked GIS & changed it	
5 3_Moderate 3 5 3_Moderate 3	46 PPT 47 PPT	MAP			ET 8/27/2012 11478 11477 = 7/30/2012 13191 13192					1 1		1			7 16 2.29 1 3 8 2.67								0 0 0.0					GIS & cnanged it	

	General Pipe	Structural Delect Coding	Construction Features
S	Or Of Campara Or Of Campar	Crack Fracture Broken Hole Joint O X WILL O X O X O X O X O X O X O O	
98 4 4 5 10 10 10 10 10 10 10 10 10 10 10 10 10	d Start End Q w d d Start End Q w d d Start End Q w d d d d d d d d d d d d d d d d d	O S S S S S S S S S S S S S S S S S S S	Q 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
5 3_Moderate 348 PPT 3-B3-5 8 CHAPMAN AVE 8/31/2012 13523 135	35 U/S 6969 new 8 VCP 11 255.5	1 1 1 322	3221 3 8 2.67 0000 0 0 0.00 Pipe ID wasn't exist
5 3_Moderate 348 PPT May 11 GERTRUDES 5/16/2012 8623 862	24 MHD080024 MHD080025 D/S 1607 SPD080023 8 VCP 258 257.7	1 1 1 1 322	3221 0000
MAP	98 MHQ080007 MHP080028 D/S 6427 SPQ080012 8 VCP 300 302.3 16 MHN140032 MHN140033 D/S 3085 SPN140038 6 VCP 355 88.2		3221 6 11 1.83 0000 0 0 0.00 1 1
MAP	18 MHO230002 MHO230003 D/S 160 SPO230019 8 VCP 350 348.6		3201 2 6 3.00 47
5 3_Moderate 354 PPT 3-B3-4 9 TRASK AVENUE 8_602012 10918 139			2200 2 6 3.00
MAP	45 MHT090030 MHT090029 U/S 6021 SPT090014 10 VCP 290 291	2 322	3200 2 6 3.00
5 3_Moderate 356 PPT 3-B5 16 NELSON STREET 9/6/2012 13391 133 MAP GARDEN GROVE			3200 2 6 3.00 0000 0 0 0.00 72.5 MSA (TBI). No Reversal
MAP	94 MHN130026 MHN130027 D/S 3080 SPN130039 6 VCP 365 72.5		3200 2 6 3.00 1 1 1 Video
MAP	95 MHQ090002 MHQ090003 D/S 6206 SPQ090035 8 VCP 210 211 77 MHN180005 MHN180006 D/S 193 SPN180033 8 VCP 312 103		3200 2 6 3.00
MAP	77 MrHN180005 MrHN180006 D/S 193 SPN180033 8 VCP 312 103 37 MrH0080042 MrH0080039 U/S 5849 SP0080049 8 VCP 175 168.4		3200 2 6 3.00 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
MAP	34 MHM120013 MHM120012 U/S 2655 SPM120012 8 VCP 260 263.5	 	22.0 2 6 3.00 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
5 3_Moderate 363 PPT	01 MHQ160019 MHQ170014 D/S 4318 SPQ160004 8 VCP 300 281.4	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	221.4 wSA (SAU) & inspection Report shows 221.4 JOL. This is JJOM & We changed it. No Reversal Video
MAP	60 MHP050007 MHP050008 D/S 5611 SPP050007 8 VCP 263 263.5	 	3121 3 6 2.00
5 3,Moderate 365 PPT 4-B1-2 13 WEST STREET 9/7/2012 10933 109	22 MHQ160003 MHQ170001 D/S 4855 SPQ160018 8 VCP 334 333.6	1 1 312	3121 2 4 2.00
5 3_Moderate 366 PPT 3-84-1 2 EUCLID STREET 9/6/2012 12960 129	64 MHO080001 MHO080002 D/S 6243 SPO080001 10 VCP 165 524.7	1 1 311	3111 2 4 2.00 0000 0 0 0.00 Inspection Report Shows 343.3'
5 3_Moderate 367 PPT 4-B2-2 13 NEWLAND Y STREET 9/13/2012 7622 696	96 MHK160040 MHK160018 D/S 670 SPK160040 8 VCP 642 685.5	1 310	JOL. This is JOM & we changed it. 6285.2 & 35.09 there are 2 unmarked MH 4
5 3_Moderate 368 PPT May 67 ADAMS STREET 5/30/2012 8934 893	95 MHE110047 MHE110048 D/S 1360 SPE110018 8 VCP 155 189.8	1 310	3100 30 2E00
5 3,Moderate 369 PPT	11 MHN170014 MHN170012 U/S 2255 SPN170012 8 VCP 374 260.3	1 310	3100 1 3 3.00 15 Inspection Report shows 14.7 JOL. This is JOM & we changed it
WESTERN	38 MHP190005 MHP190006 D/S 62 SPP190005 8 VCP 106 150.8	1 1 310	3100 1 3 3.00 2 2 2200 2 4 2.00
5 3_Moderate 371 PPT 1-2 4 Y NT 7/19/2012 8079 807	78 MHI080004 MHI080003 U/S 781 SPI080008 6 Tile 320 26.2	1 310	3100 1 3 3.00 1 1 5 3115 7 10 1.43 1 1 1 26.2 MSA (LD). No Reversal Video
MAP MAP	34 MH-L070050 MH-L070044 D/S 5332 SPL070044 8 VCP 10 3.1 56 MH-P110039 MH-P110039 U/S 4625 SPP110027 6 VCP 115 44.8		3100 1 3 3.00 1 3 3.00 1 1 1 3.1 MSA (JOM), No Reversal Video 1 3.1 MSA (JOM), No Reversal
5 3_Moderate 373 PPT 3-85 27 EUCLID STREET 9/5/2012 11757 117 June Map 2 5 3_Moderate 374 PPT B1 47 GILBERT STREET 6/11/2012 9728 146			3100 1 3 3.00 1 1 3 3.00 1 1 1 Video
MAP MAP	09 MHN140028 MHN140027 U/S 2908 SPN140016 6 VCP 415 86.9		3:00 1 3 3:00 1 3 3:00 1 3 3:00 1 2 2 Couldn't Completed
MAP MORNINGSIDE	54 MHN170032 MHN170033 D/S 136 SPN170006 8 VCP 243 238.1		3100 1 3 3,00
5 3_Moderate 377 PPT 3-83-5 23 PALM ST 8/29/2012 14063 140		1 31	3100 1 3 3.00
MAP	98 MHN140033 MHN140006 U/S 2897 SPN140005 8 VCP 320 316	1 310	3100 1 3 3.00
	90 MHS170017 MHS170018 D/S 468 SPS170014 8 VCP 340 343.1	1 310	3100 1 3 3.00
MAD NEWHODE	01 MH0140024 MH0140025 D/S 3947 SP0140011 8 VCP 375 362.6 85 MH0130036 MH0130037 D/S 5695 SP0130041 6 VCP 400 400	 	3100 1 3 3.00 1 0 0000 0 0 0.00 1 1 1 1 1 1 1 1 1
5 3, Moderate 381 PPT 3485 8 STREET 9/19/2012 13186 131 MAGNOLIA STREET/EASEME 131, Moderate 382 PPT 4-82-2 16 NT NT 9/13/2012 13319 133			3100 1 3 3.00 0 0 0.00 0 0 0.00 0 0 0.00 0 0 0.00 0 0 0 0.00 0 0 0 0.00 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
June	09 MHF080003 MHE080003 D/S 1259 SPE080008 8 VCP 351 351.7		2300 34 3200
MAP 2.luly-	77 MHM110012 MHM110013 D/S 3260 SPM110031 10 VCP 310 312.4		2214 6 8 1.33 1 1 3 1 1 1 2 4 232 8 22 2.75
5 3,Moderate 385 PPT 383-5 24 PALM ST 8/29/2012 14/62 14/0			2200 2 4 2.00
5 3_Moderate 386 PPT	27 U/S 7786 New 6 VCP 24 71.3	1 1 220	2200 2 4 2.00 U/S MH is CO. Pipe ID wasn't exist
5 3,Moderate 387 PPT B1 1 GREENWICHLN 6/4/2012 9171 917	72 MHM990012 MHM990013 D/S 4387 SPM990015 8 VCP 87 87.1	1 210	2100 1 2 2.00 16 2800
5 3_Moderate 388 PPT 3-B3-5 22 PALM ST 8/29/2012 14064 140	65 D/S 7710 new 8 VCP 280 282.8	1 210	2100 1 2 2.00
5 3,Moderate 389 PPT 3-B3-5 25 PALM ST 8/29/2012 14061 140	62 D/S 7705 new 8 VCP 280 278.5	1 210	2100 1 2 2.00
MINE	50 MHP140004 MHP140018 U/S 4823 SPP140018 8 VCP 235 305.1		2100 1 2 2.00 5100 0 4 0.00 1 1 Holes repaired in 2008. Priority
4 4_Minor 179 D 3 2488 Y BALL RD 1/25/2007 9319 928 4 4_Minor 180 10 2325 Y HARLE 9/25/2006 8344 923	37 MHM000018 MH-L010006 D/S 3467 SPL010001 8 VCP 290 286.0 38 MHM030022 MHM030021 U/S 3608 SPM030024 8 VCP 320 328.3		13 36 2.77 94 75
4 4_Minor 181 D3 2475 Y RUSTIC 1/17/2007 9639 963 4 4_Minor 182 13 2384 Y CANTON 10/26/2006 8973 897	88 MHL040026 MHL040025 U/S 5524 SPL040025 8 VCP 254 253.3 72 MHM040015 MHM040014 U/S 4412 SPM040038 8 VCP 280 279.8		0 0 0.00 1 1 1 1 1.00 0 0 0 0 0 42 1 1 1 1 1.00 78 1 16 1 3 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1
4 4_Minor 183 13 2382 Y BANTA 10/26/2006 8970 896	59 MHM040012 MHM040011 U/S 3679 SPM040035 8 VCP 285 286.0	1	1 1 1.00 78 0 16 3 11 8 18 185 1.89 0 0

					General				Strui	ctural Defect Coding			p 0			Operational	and Maintenand	се				Construction Featur	86	2 D D D
	9	. No.			era	Pi	pe				ned	sed ripe ge Failure Repair	Defects Defect So							int Rating	cts ct Score		9	vey Abaru
b .	Tape N	Inspec tched?	Location	Existing MH ID	Previous MH ID	Sewer II	iment (ft)	Crack	Fracture Broken I		Deform	Surfac Surfac Dama Lining Point I	uctural I uctural I		Deposits		Roots (R)	Infiltration	Obstacles Ve	min Sc Ma	3&M Defe	Tap (Lateral) Line	Intruding Seal Material	for Sur tified Al
Phase Priority Ranking Contract	DVD No. nspectic	Reversal OVD Wa	Street Name	CCTV Date Start End	Start End	Existing Previous Size (in)	Joint Ler Joint Ler Joint Ler Joint Ler Joint Ler	CMSH	F B	H J O S	AVH	P S IF RP S	PACP Q Potal Str Total Str	AGS B	E AE Other % L % Z %	B I I C B	ap (I) Mediu	um (M) Ball (B) I	OB Other	ACP Q	Total O&	ED EL BURD D. L. U.R.LD.RD	SRH SRB SRI 7 SA C	1
	MIXE		Order Hame	SOLV Bale State End	Ottal End E		, , , , ,				X V II			7,00									ONLY OND ONE E ON O	the commence of the commence o
4 4_Minor 184	D P COUN TY 2 3	Y	KENNELLY	11/3/2007 9337 9177	MHM010014 MHM010016 U/	S 5033 SPM010039 8 VCP	385 384.4	,					1 2 200		29	1 1			10		41 99 2.4	1		
4 4_Minor 185	4 2216		MYSTIC			S 4524 SPM000015 8 VCP							0 0 0.00	142 48					14		339 529 1.5			Multiple reaches were evaluated with one inspection.
4 4_Minor 186	4 2216	Υ	MYSTIC		MHM000013 MHM000021 U/								0 0 0.00	142 48					14	3	339 529 1.5	6		Multiple reaches were evaluated with one inspection. Multiple reaches were evaluated
4 4_Minor 187 4 4_Minor 188	3 2205		YARDLEY			S 3462 SPM000005 8 VCP S 3463 SPM000006 8 VCP							0 0 0.00	184 103					35		322 609 1.8 322 609 1.8			2 with one inspection. Multiple reaches were evaluated
4 4_Minor 189	8 2295		BOUVAIS			S 3490 SPM020036 8 VCP		1					1 1 1.00	184 103 133 64		2		1	35		322 609 1.8 200 399 2.0			2 with one inspection. 0 Multiple reaches were evaluated
4 4_Minor 190	5 2237		GUINIDA			S 3473 SPM010025 8 VCP		1					1 3 3.00	102	39					++-+-	141 321 2.2	8		0 with one inspection. Multiple reaches were evaluated
4 4_Minor 191 4 4 Minor 192	5 2237 6 2249		GUINIDA		MHM010003 MHM010001 U/ MHM010031 MHM010029 U/	S 5030 SPM010036 8 VCP		1					1 3 3.00	102	39				-		70 183 2.6			0 with one inspection. Multiple reaches were evaluated 0 with one inspection.
4 4_Minor 193	6 2249		GRAVIER			S 4497 SPM010014 8 VCP	 						0 0 0.00	17	48				5		70 183 2.6			Multiple reaches were evaluated with one inspection.
4 4_Minor 194	P COUN TY 7		BROOKHURST ALLEY	10/10/2007 9272 9275	MHM030004 MHM030032 LU	S 3611 SPM030027 8 VCP	300 313.5						0 0 000			1					1 1 10			
													0 0 0.00			11:11					1 1 1.0			Multiple reaches were evaluated with one inspection. MHM990029
4 4_Minor 195	2 2100	Y	HARVEST	5/2/2006 9298 9297	MHM990030 MHM990028 U/	S 3448 SPM990026 8 VCP	200 383.3	1		+++++	HH	+	1 2 2.00	126 56		19	1	 	4	2	206 391 1.9	0		0 is Cleanout. Multiple reaches were evaluated
4 4_Minor 196 4 4_Minor 197	2 2100 6 2248		HARVEST BIENVILLE		MHM990030 MHM990028 U/ MHM010029 MHM010033 U/	S 3449 SPM990027 8 VCP S 4500 SPM010017 8 VCP		1					1 2 2.00 0 0 0.00	126 56 23	10	19	1		4		206 391 1.9 43 87 2.0			with one inspection. MHM990029 is Cleanout.
4 4_Minor 198 4 4_Minor 199	7 2266 5 2232	Y	GUINIDA BURGUNDY	8/14/2006 9188 9190	MHM010026 MHM010027 U/	S 4494 SPM010011 8 VCP S 4390 SPM010002 8 VCP	112 123.0	1			Ш		1 1 1.00	39		1 8					39 78 2.0 76 143 1.8			0
4 4_Minor 200	MIXE D 1 2397		BALL RD	11/3/2006	MHM000015 MHM000025 U/						Ш		0 0 0.00	87		18		2	34		141 232 1.6			Multiple reaches were evaluated 0 with one inspection.
4 4_Minor 201	MIXE D 1 2397		BALL RD		MHM000015 MHM000025 U/								0 0 0.00	87		18		2	34	. 1	141 232 1.6	5		Multiple reaches were evaluated with one inspection.
4 4_Minor 202 4 4_Minor 203	6 2250 6 8 2303	Y	GRAVIER	9/11/2006 9352 9773	MHM020017 MHM020019 U/	S 4498 SPM010015 8 VCP S 3494 SPM020039 8 VCP	148 143.5				Ш		0 0 0.00	30	34	1			6	4	130 289 2.2 40 78 1.9			0 0
4 4_Minor 204	8 2292 P COUN	Y	PALAIS	8/30/2006 9209 9208	MHM020012 MHM020011 U/	S 4514 SPM020016 8 VCP	150 143.6						0 0 0.00	1 12	2					1	15 32 2.1	3		0
4 4_Minor 205	TY 15	Y	JEAN	10/8/2007 8351 8350	MHM040026 MHM040025 U/	S 4421 SPM040047 8 VCP	190 199.6						0 0 0.00								0 0			0
4 4_Minor 206	COUN TY 3		GILBERT	10/12/2007 0 0	MHL010003 MHL010006 U/	S 3956 SPL010002 8 VCP	160 575.6	1					1 1 100	20					26		65 95 1.4			Multiple reaches were evaluated with one inspection.
4 45111101 250	P		OLEDE!!!	10/12/2007	III IEO 10000 III IEO 10000 O	0 000 0.120.0002 0 007	130 0733						1 1 1.00	30					3.		00 80 1.4			Multiple reaches were evaluated
4 4_Minor 207	TY 3 A 7	Υ	GILBERT	10/12/2007 0 0	MHL010003 MHL010006 U/	S 3957 SPL010003 8 VCP	160 575.6	1					1 1 1.00	30					35		65 95 1.4	6 2		with one inspection.
	COUN TY 3																							Multiple reaches were evaluated with one inspection.
4 4_Minor 208 4 4_Minor 209	A 7 MIXE D 3 2487		GILBERT BALL RD			S 5170 SPL010008 8 VCP		1					1 1 1.00	30					35		65 95 1.4 36 36 1.0			6
	P COUN												0 0 0.00								30 30 1.0			
4 4_Minor 210 4 4_Minor 211	TY 14 4 2212		ANTIGUA HARVEST		MHM020043 MHM010026 U/	S 4493 SPM020007 8 VCP S 3459 SPM000002 8 VCP	290 298.1 335 671.9						0 0 0.00	78 67 70		1			2	1	81 159 1.9 161 298 1.8	6		Multiple reaches were evaluated
4 4_Minor 212	4 2212		HARVEST			S 3460 SPM000003 8 VCP							0 0 0.00	67 70					24	+	161 298 1.8			0 with one inspection. Multiple reaches were evaluated with one inspection.
4 4_Minor 213	8 2305	Υ	HARRIET LN	9/11/2006 9352 9353	MHM020017 MHL020004 D/	S 3492 SPM020038 8 VCP	280 583.0						0 0 0.00	121 49	17				33	2	220 424 1.9	3		0 Multiple reaches were evaluated with one inspection. Multiple reaches were evaluated
4 4_Minor 214	8 2305	Y	HARRIET LN	9/11/2006 9353 9341	MHM020017 MHL020004 D/	S 3493 SPL020008 8 VCP	291 583.0						0 0 0.00	121 49	17				33	2	220 424 1.9	3		0 with one inspection.
	D P COUN																							
4 4_Minor 215	TY 1 8	Y	GILBERT	11/6/2007 8944 9119	MHL030039 COL030001 D/	S 4427 SPL030013 10 VCP	150 177.4						0 0 0.00		55						55 165 3.0	0 2		6 Multiple reaches were evaluated
4 4_Minor 216	P COUN TY 3C 2	Y	GILBERT	10/14/2007 8981 8982	MHL030004 COL030001 D/	S 4425 SPL030011 8 VCP	350 520.5						0 0 0.00	26					5		31 57 1.8			with one inspection. 520.5' MSA High Water Level); Upstream of siphon.
	Р																							Multiple reaches were evaluated with one inspection. 520.5' MSA
4 4_Minor 217	COUN TY 3C 2	Y	GILBERT	10/14/2007 8982 9119	MHL030004 COL030001 D/	S 4426 SPL030012 8 VCP	200 520.5						0 0 0.00	26					5	3	31 57 1.8	4		High Water Level); Upstream of siphon.
4 4 Merci 201	P COUN		DALL	40/44/005= 004=	MUMOOOAS	2460 CDM00045															40 :-			Multiple reaches were evaluated with one inspection.
4 4_Minor 218	TY 3C 5	Y	BALL	10/14/2007 9316 9317	IVIHINUUUU15 MHM010040 D/	S 3468 SPM000010 8 VCP	45 61.6	1			HH		1 3 3.00	7					3		10 17 1.7			Multiple reaches were evaluated
4 4_Minor 219	COUN TY 3C 5		BALL			S 3471 SPM010024 8 VCP		1					1 3 3.00	7					3		10 17 1.7			with one inspection.
4 4_Minor 220	8 2307 P COUN	Y	PATRICIA	9/11/2006 9353 9774	MHM020018 MHM020020 U/	S 3495 SPM020040 8 VCP	150 143.1			+++++	HH	+	0 0 0.00	15 46		++++			16		77 138 1.7	9		0 Multiple reaches were evaluated
4 4_Minor 221	TY 9	Y	CERRITOS	10/10/2007 9212 9269	MHM030036 MHM030033 U/	S 3641 SPM030028 8 VCP	205 361.4				HH		0 0 0.00	86		++++			3	8	89 175 1.9	7		0 with one inspection.
4 4_Minor 222	COUN TY 9	Y	CERRITOS	10/10/2007 9145 9144	MHM030036 MHM030033 U/	S 4271 SPM030001 8 VCP	50 361.4				Ш		0 0 0.00	86					3	8	89 175 1.9	7		Multiple reaches were evaluated with one inspection.
4 4_Minor 223	COUN TY 9	Y	CERRITOS	10/10/2007 9269 9145	MHM030036 MHM030033 U/	S 4272 SPM030002 8 VCP	115 361.4						0 0 0.00	86					3		89 175 1.9	7		Multiple reaches were evaluated with one inspection.
	MIXE DP																							
4 4_Minor 224	COUN TY 1 7	Y	ENDRY	11/7/2007 8966 8967	MHM040009 MHM040010 D/	S 3677 SPM040033 10 VCP	293 292.7						0 0 0.00	3 72							75 150 2.0	0 2 1		6
	P COUN										Ш													Survey Abandoned @ 137.2'; High
4 4_Minor 225	TY 4A 8		ENDRY		MHM050045 MHM040010 D/						\square		0 0 0.00	1 43		++++			+++		44 88 2.0		1 1	Water Level. GIS Length is 85'. No Reversal Set-up Insp. Report MHM010029 to
4 4_Minor 226	6 2247	Y	GRAVIER	7/31/2006 9192 9191	MHM010029 MHM010028 U/	S 4495 SPM010012 8 VCP	310 310.1	1		+++++	HH		1 2 2.00	25 36		11	1	1 1 1	++	1	74 140 1.8	9		Insp. Report MHM010029 to 0 MHM010030
4 4_Minor 227	COUN TY 4A 1	Y	GILBERT	11/15/2007 9341 9340	MHL020003 MHL020004 U/	S 4056 SPL020003 8 VCP	135 80.8	1					1 2	26					4		30 56 1.8	7		GIS Length is 135'.
4 4_Minor 228	18 9		GILBERT	2/5/2007 9339 9339	MHL020001 MHL020002 U/	S 3961 SPL020001 8 VCP	375 189.4	1					1 1 100								0 0			This inspection does not have on DVD. We used Inspection Report.
	P			2/3/2007 5555 5550		S. ESESSI O VCP	373 189.4				Ш		1 1 1.00								J 0			
4 4_Minor 229	COUN TY 3C 1		CERRITOS	10/17/2007 8936 8937	MHM030042 MHM030043 D/	S 3650 SPM030031 8 VCP		1					1 1 1.00	115			1				116 233 2.0			0
4 4_Minor 230	12 2364	Υ	KATELLA	10/17/2006 9014 8959	MHL050050 U/	S 5026 SPL050022 12 VCP	400 384.0				шШ		0 0 0.00	71						11 1	71 142 2.0	0 2		6 Atlas indicates 15-inch pipe.

				General	p _i	ine				Structural De	efect Coding	1 8 9		Soor		Operation	onal and Maintenar	nce			gu e		Construction Features	a a	tures and.	
	0 8 D O	rd? (Y)			Camera ver ID.	£ #	h (ft)					rformed illapsed Pi irrace image	int Repair	Struct Ra iral Defect	ect Index						Maint Rat befects befect Sco		Intruding Seal	scellaneou	Survey Ab	- Land
ase ority king	D No. pection N rersal Tag	Matche Location Location	Exis	sting MH ID Previous MH ID	sting Sew vious Ser	Length Comme	TV Lengtl	Crack C	Fracture F	Broken Hole B H	Joint J O S	X D X	WL WL	CP Quick al Structu	Deposits D	Fine (F)	Roots (R) Tap (T) Medi	ium (M) Ball (Infiltration (B)	Obstacles Vermin OB V Other	CP Quick al O&M D AD Defect	(Lateral)	Line Material L IS	M	al Constru asons for	1
4 4_Minor 231	5 2229	∑ Street Name Y D'ESTE	7/14/2006 933	rt End Start End 4 9333 MHM010005 MHM010008	18 U/S 3480 SPM010031 8 VCP	999	340 346.8	C M S H L	C M S H	SV VV SV VV S	S M L S M L A	V H P S LF	RP S	0 0 4 0 10	AGS B % L % Z % 0.00 67 16	B L J C	B L J C B L	L J C B L .	J C G D R W	C Z % C R	84 183 2.18	FL BI BD [D L U R LD RD SRH SRB SRL	Z SA CU MC	0 Te a	Comments Recommendations
4 4_Minor 232	COUN TY 3 A 5	Y GILBERT	10/14/2007 898	0 8979 MHL030004 MHL030002	2 U/S 4423 SPL030009 8 VCP		256 472.6								0.00					3	4 4 100				0	Multiple reaches were evaluated with one inspection.
	P COUN TY 3																									Multiple reaches were evaluated with one inspection.
4 4_Minor 233 3 4_Minor 269 GGSD		Y GILBERT SANTA BARBARA	1/19/2005 861:	1 8980 MHL030004 MHL030002 2 8611 MHD080010 MHD080009	9 U/S 1597 SPD080011 8 VCP		250 472.6 289 288 1							0 0	2.00	3				3	4 4 1.00 3 3 1.00				0	
3 4_Minor 270 GGSD 3 4_Minor 271 GGSD		Y SANTA MONICA Y SANTA RITA	1/31/2005 784	5 8618 MHD080017 MHD080018	4 U/S 1945 SPD080027 9 VCP 8 U/S 1946 SPD080028 8 VCP	:	377 377 373 371	1						1 1	1.00 15 1.00 16	2			2 1		18 55 3.06 19 53 2.79					
3 4_Minor 272 GGSD 2 4_Minor 273 3 4_Minor 273 GGSD	R001 3	Y SANTA RITA ARDIS DR Y MANLEY	7/25/2005 1079	92 10793 MHL080020 MHL080021	9 U/S 1603 SPD080019 8 VCP 1 D/S 4335 SPL080020 8 VCP 0 U/S 1604 SPD080020 8 VCP		372 369 356 354.5 4 258 256	5					7	1 1 1 1 1 1 1 1 1 1	1.00	1	1				3 3 1.00 2 5 11 25 2.27					SAG
2 4_Minor 274	R009 6				5 D/S 5179 SPL050044 8 VCP		318 316.7 3	3 1	1				6	13 30		1	1	1			2 4					SAG
3 4_Minor 274 GGSD 2 4_Minor 275	31 1056 G023 4	Y VANGUARD MARGIE LN		1 7850 MHD090006 MHE090028 30 12231 MHQ070018 MHQ070018	9 D/S 1455 SPE090037 8 VCP 9 D/S 6443 SPQ070013 8 VCP		290 184 285 286.4	5	1 3				3	3 6 9 29	2.00 6 15	1			2 1		25 68 2.72 2 4			1		MSA = Heavy DAE. Repeat inspection, DVD 32 - Section 1063
3 4_Minor 275 PPT				0 8809 MHE080004 MHE080003			487 306	1						1 3	3.00 3						3 6 2.00	1				Pipe SPE0800010 corrected to SPE080010 MHR 080012 BURIED MANHOLE,
2 4_Minor 276 3 4_Minor 276 PPT		CANDY LN VALLEY VIEW ST	12/20/2007 881	30 13081 MHR080011 MHR080012 0 8811 MHE080004 MHE080005	5 D/S 1614 SPE080011 8 VCP		150 149.2 350 351	1 1	1 3 2				5	12 28	1.00 1						5 10 1 1 2 2.00		2			SMALL SAG Pipe SPE0800011 corrected to SPE080011
2 4_Minor 277 3 4_Minor 277 GGSD	G046 7 34 1126			26 12702 MHS100040 MHS100005 4 8893 MHE080018 MHE080017	5 D/S 6504 SPS100022 8 VCP 7 U/S 1399 SPE080031 8 VCP		390 371.8 340 346	1 2	2 4					9 27	2 3.00 165 24	1					2 4 190 403 2.12					
1 4_Minor 278 2 4_Minor 278	9 16 G025 6	x 10212 Stanford Ave. 9TH ST SANTA BARBARA		22 11324 MHN120018 MHN120020 98 12999 MHP080028 MHP080020	0 DS 2930 SPN120021 8 VCP 9 D/S 6321 SPP080003 8 VCP	3	338 336 1 200 204.8 2	1 4	1 2				110	9 26	1.96 7					1	48 1.85 0 0					Replace pipe 79' & 175' possible infiltration at
	33 1	Y ALLEY x 13292 Yockey St.	3/31/2004 1420		3 DS 2753 SPK140005 8 VCP	3 :	297 298 356 361	3					6 76	7 13 136		19		2 1			81 162 2.00 ₁ 2 2.00					79 % 1.75 possible infiltration at joints Replace pipe
2 4_Minor 279 3 4_Minor 279 GGSD 2 4_Minor 280	R016 9 P6 3 R011 9	CHAPMAN	12/1/2007 889	9 8896 MHE080021 MHE080020	2 D/S 6551 SPT080001 8 VCP 0 U/S 1736 SPE080022 8 VCP 3 D/S 6181 SPP080010 8 VCP		370 379.7 1 60 24 3 310 293.4 1	8						9 26 3 6 9 26	2.00 4	1 12		+HH			13 13 4 8 2.00 0 0	\prod				
3 4_Minor 280 GGSD	34 1111	Y ST MARK	4/6/2005 786	0 8650 MHE080039 MHE080038	8 U/S 1958 SPE080050 8 VCP		316 314	1						1 3	3.00 55 34				1		90 181 2.01					2' to 313.6' possible infiltration at joints
2 4_Minor 281 3 4_Minor 281 GGSD 1 4 Minor 282	R025 14 34 1117 38 21	Y ST MARK	4/7/2005 786	5 7860 MHE080044 MHE080039	0 D/S 6160 SPR120029 8 VCP 9 U/S 1613 SPE080039 8 VCP 0 DS 812 SPJ140021 8 VCP	:	320 345.9 1 350 145 210 222	1	1				5	10 25 1 3 128	3.00 42 17					1	12 24 60 119 1.98 15 1.36			1		SMALL SAG MSA = Heavy deposits Replace pipe
2 4_Minor 282 3 4_Minor 282 GGSD	G038 3	Y KATHY LN	9/12/2005 1171	19 11720 MHQ110010 MHQ110011	1 D/S 6290 SPQ110044 8 VCP 4 U/S 1739 SPE090011 8 VCP		300 300.7 1	1 4	1 2				03	9 25	1 24 5.00 1 5.00 2.00 1	1					26 52 2 3 1.50					
1 4_Minor 283	6 7 6	8 x 12632 Walnut Ave. TOWN AND	2/11/2004	MHP110009-A MHP110010			172 172	1		:	3		62	100	2.00		1	1		6	0 0.00	2		2	ТВІ	Replace pipe
2 4_Minor 283 3 4_Minor 283 PPT	M004 7 50 35	Y COUNTRY DR LAURELTON AVE 13401 Magnolia	12/21/2007 735		1 U/S 1790 SPF090030 12 VCP		220 219.0 3 190 198 1	1 4	1					9 25	2.00	3					0 0 0.00					
1 4_Minor 284 2 4_Minor 284 3 4 Minor 284 GGSD	44 18 G049 2 52 1654	Ave. PARTRIDGE ST	10/26/2005 669		4 DS 2963 SPL140041 8 VCP 9 D/S 519 SPS130004 8 VCP 0 D/S 1224 SPF110012 8 VCP	1 :	320 322 313 316.3 303 347	2 1	2 3				1	98 99 25	2.00	2 22	1	1			0 0.00 26 30 0 0 0.00	1				Replace pipe
	28 10 10 G031 4	13110 Galway St.	3/24/2004 1205	50 12051 MHM130018 MHM13002	1 DS 2843 SPM130038 12 VCP 16 D/S 5577 SPQ090003 8 VCP		275 289 290 287.9	2	2				49	94	2.00						115 2.09 3 6					Replace pipe
3 4_Minor 285 GGSD	P3-1 6	CERULEAN		7 7423 MHF110024 MHF110026			258 258	1						1 1	1.00 50						50 100 2.00					MHE110024 corrected to MHF110024
1 4_Minor 286 2 4_Minor 286	31 22 R012 7	x 13208 Yockey St. Y WAVERLY DR		MHK130020-A MHK140001 45 12947 MHP070021 MHP080018	8 D/S 6196 SPP070020 8 VCP		214 214 198 198.0 1	1 1	1				8	12 24	2.00 23 40 5.00 1 5.00 1 10.00	29 2	1	1 2			44 87					Replace pipe DSZ = DEPOSITS SETTLED OTHER, SAG
3 4_Minor 286 GGSD 2 4_Minor 287 3 4 Minor 287 GGSD	G037 10	WILD GOOSE Y CHESTER AV VANGUARD	9/9/2005 1260	02 12515 MHQ110025 MHQ110030	9 U/S 1332 SPG090027 8 VCP 0 D/S 4130 SPQ110006 8 VCP 6 D/S 1474 SPG090035 8 VCP	;	139 141 1 335 330.6 208 200 1	1 2 1	1 3 2					9 24	2.00	2 9	1	1			0 0 0.00 15 20 1					
	33 8 G047 11	Yockey St.	3/31/2004 1161	10 11611 MHK140008 MHK150001	11 DS 2787 SPK140008 8 VCP 16 D/S 6501 SPS100019 8 VCP	:	208 200 1 235 229 255 259.0 1	2 4	2				42	9 24		1				3	0 0 0.00 2 0.03 74 173					Replace pipe
3 4_Minor 288 GGSD 1 4_Minor 289	48 1573	VANGUARD Lampson Ave/Gilbert St.			77 D/S 1478 SPG090039 8 VCP 6 DS 3339 SPL110035 12 VCP								41		2.00		1				0 0 0.00					Replace pipe
2 4_Minor 289 3 4_Minor 289 GGSD	R037 1 49 1587	FALCON LN WUTZKE	9/28/2005 1214 11/7/2005 734	42 12143 MHS090014 MHS090015 1 7338 MHG090029 MHG090027	5 D/S 5905 SPS090029 8 VCP 77 U/S 1479 SPG090040 8 VCP		300 295.5 4 130 149	4 1	1					9 24							0 0 0.00					
1 4_Minor 290 2 4_Minor 290 3 4 Minor 290 GGSD	6 23 R029 5 48 1575	x 12667 Nelson St. Y 9TH ST AMY	9/20/2005 1247	79 12480 MHQ120004 MHQ120005	M DS 6845 SPO110012 8 VCP 5 D/S 6544 SPQ120008 8 VCP 5 D/S 1166 SPG090046 8 VCP		330 329 348 318.1 3 189 180 1						39	9 24 2 5	58 13 5.00	1	1	1			71 142			8		Replace pipe HIGH FLOW
1 4_Minor 291	3 18	12381 Nutwood St.	2/6/2004 1122	28 11229 MNW13041 MNW13042	2 DS 2563 SPN100007 8 VCP		195 194						39	76	2.00						0 0 0.00					Replace pipe
2 4_Minor 291 3 4_Minor 291 GGSD	G048 3 48 1576	Y CANTER 13391 Magnolia	11/2/2005 734	6 7345 MHG090036 MHG090038			178 178 1	1 1	1 4					8 24 1 2	2.00 52 1						2 4 53 107 2.02					
1 4_Minor 292 2 4_Minor 292 3 4_Minor 292 GGSD	44 17 G035 10 48 1576	Ave. Y FREDRICK DR Y CANTER	9/6/2005 1256		5 DS 2962 SPL140040 8 VCP 17 D/S 6076 SPQ090010 8 VCP 16 U/S 1168 SPG090048 8 VCP		300 302 275 276.0 178 180	4	3				37	76 7 24 1 3	2.00 89 4 5.00 1 5.00 15 5.00 3.00 50		1	2		2	4 0.95 113 241					Replace pipe
	1 10 G051 9	10542 Allen Dr.	2/4/2004 1121 10/31/2005 1198	13 11214 MNW13026 MNW13027 33 11984 MHR130017 MHR140028	7 DS 2390 SPO090025 8 VCP 8 D/S 3864 SPR140030 8 VCP		295 295 265 263.6	2 1	1 3 2				38	1 3 72 8 23	2.00	2 1 5			1		60 121 2.02 2 0.22 8 10					Replace pipe
	48 1576 8 4	Y CANTER 12671 Flower St.	2/17/2004 0	0 MHN110014 MHN120016	7 U/S 1169 SPG090049 8 VCP 6 DS 2551 SPN110019 8 VCP	:	210 209 1 370 373 1						35	1 ² 72	2.00 65 2.00	1					65 130 2.00 4 4.00					Replace pipe
3 4_Minor 294 PPT		DOIG	10/5/2007 811	7 8115 MHH070009 MHH070007	7 U/S 897 SPH070007 8 VCP	;	350 355	1 1	1 1 1					8 23 1 1	1.00	1					7 13 0 0.00	1				
1 4_Minor 295 2 4_Minor 295	9 21 R005 8	12800 Nutwood St. Y CHAPMAN AV	8/1/2005 1031		2 D/S 5928 SPK090002 8 VCP		456 259 150 150.8 2	1	4				36	72 7 23	2.00	5	1	1 1			0 0.00 8 14			1		Replace pipe
3 4_Minor 295 PPT 2 4_Minor 296 3 4_Minor 296 PPT	R006 7	Y MELBA DR	8/4/2005 974	2 9743 MHL050011 MHL050012	0 D/S 933 SPG090001 8 VCP 2 D/S 5069 SPL050014 8 VCP 0 D/S 1720 SPH110018 12 VCP		265 264.8 2	1 2 4 1	1					1 1 9 22 1 1		3 19	1	1 1		1	0 0 0.00 52 84 0 0 0.00	1				
1 4_Minor 297	44 27	8971 Garden Grove Blvd.	4/27/2004 936	0 9381 MHK130001 MHK130002	2 DS 3218 SPK130018 8 VCP		240 245	1	1				34	70	2.00	1 2					0 0.00			1		Replace pipe
3 4_Minor 297 PPT		WESTERN 13111 Gilbert St.	9/17/2007 718	0 7183 MHI120022 MHI120025	5 D/S 1029 SPI120026 8 VCP 5 DS 2523 SPL130006 8 VCP		275 372 230 224	2 3 1	2 1				2 35	2 4 69	2.00	1 2					0 0 0.00 2 2.00					Replace pipe
2 4_Minor 298	R042 8	GARDEN GROVE Y BLVD		38 12439 MHS120057 MHS120051			190 181.8 5	4						9 22		2					2 2					Repeat inspection, DVD 41 -
3 4_Minor 298 PPT 1 4_Minor 299	53 21 8 6	WESTERN 12422 Groveview St.	2/17/2004 1070	01 10684 MHN100044 MHN11002	11 DS 2634 SPN100047 8 VCP		334 336 120 275	1					6 34	6 12	2.00	1					0 0 0.00					Section 13. Replace pipe
2 4_Minor 299 3 4_Minor 299 PPT	G027 9 53 3	Y REVA DR Y LAMPSON			8 D/S 5644 SPR080019 8 VCP 7 D/S 1817 SPJ110012 8 VCP		315 318.9 299 308	2 2	2 3 1				5	8 22 5 10	2.00						76 152 0 0 0.00	3				Repeat inspection, DVD 21 - Section 1. High water level.
1 4_Mnor 294 2 4_Mnor 294 3 4_Mnor 294 PPT 1 4_Mnor 295 2 4_Mnor 295 3 4_Mnor 296 PPT 2 4_Mnor 296 3 4_Mnor 296 PPT 1 4_Mnor 297 2 4_Mnor 297 1 4_Mnor 297 2 4_Mnor 297 3 4_Mnor 298 2 4_Mnor 298 2 4_Mnor 298 2 4_Mnor 298 3 4_Mnor 298 4_Mnor 298 2 4_Mnor 298 2 4_Mnor 298 3 4_Mnor 298 2 4_Mnor 298 3 4_Mnor 298 9 PPT	8 4 4 8 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9	12671 Flower St. Y MONTLAKE DOIG 12800 Nutwood St. Y CHAPMAN AV BELGRAVE Y MELBA DR LAMPSON BS71 Garden Grove Blvd. Y MAG ST WESTENN 13111 Gilbert St. GARDEN GROVE Y BLVD WESTERN 12422 Groveriew St. Y REVA DR	2/17/2004 0 0 8/8/2006 1014 8/8/2006 1014 10/5/2007 811 8/17/2005 1031 8/17/2005 1031 8/17/2007 816 8/17/2007 816 8/17/2007 816 8/17/2007 816 10/24/2005 799 11/2007 718 11/2007 718 11/2007 718 11/2007 718 11/2007 718 11/2007 718 11/2007 718 11/2007 718 11/2007 718 11/2007 718 11/2007 718 11/2007 718 11/2007 718 11/2007 718 11/2007 718 11/2007 718 11/2007 718 11/2007 718 11/2007 718 11/2007 107 11/20	0	6 DS 2551 SPN110019 8 VCP 1 DIS 5199 SPL070014 8 VCP 1 DIS 5199 SPL070014 8 VCP 16 DS 2809 SPN120006 10 VCP 2 DIS 5928 SPK090002 8 VCP 0 DIS 933 SPC900001 8 VCP 0 DIS 933 SPC900001 8 VCP 0 DIS 1720 SPN110018 12 VCP 12 DS 3218 SPK130018 8 VCP 12 DS 3218 SPK130018 8 VCP 15 DS 1853 SPK70020 8 VCP 15 DS 1853 SPK70020 8 VCP 15 DS 2523 SPL130006 8 VCP 16 DS 4692 SPS120022 10 VCP 17 DS 4692 SPS120022 10 VCP 18 DS 2634 SPN100047 8 VCP 18 DS 2634 SPN00047 8 VCP		370 373 1 267 265.1 1 350 355 4 456 259 1 150 150.8 2 300 300 300 300 300 300 300 300 300 300	4 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	1 2 1				36 36 34 2 35 6 34	8 23 1 1 1 72 7 23 1 1 1 9 22 1 1 1 70 9 22 2 4 69 9 22 6 12	1 5 5.00	1 1 2 2	1	1 1		1	4 4.00 7 13 13 10 10 10 10 10 10	1		1		Replace pipe Replace pipe Replace pipe Replace pipe Replace pipe Repeat inspection, DVD 41 - Section 13. Replace pipe Repeat inspection, DVD 21 -

				General	Pipe				Structural De	fect Coding	lir tating	ct Scor	×	Operation	al and Maintenance		ating		Construction Features	sno	Aband.	Diec
	ž	(y) No.			in D in Pera	. 2				pesdi	age Failu g Failu	I Defe	ed Ind				laint R lects	5		ellane	tion Fe	Aber
₅	Tape .	DAG Location	Ex	isting MH ID Previous MH ID	Se wei	nment (f)	Crack	Fracture	Broken Hole	Joint Defc	Linir Poin Linir Sags Suick S	uctura	Deposits	Fine (F)	Roots (R) Tap (T) Medium (M) B	Infiltratio	Obstacles Vermin	Tap (Latera	Intruding S al) Line Material	Seal S	for S	IIII
iority anking	VD No	oversal VD Wa			rection disting evious ze (in)	S Con				0 8	WE 6	otal Str	AE AE Other		Tap (1) Medium (M) B	III (B)	Other G R R		L IS	I I I	sasons	2 2
F F S	R O S	x x ⊆ Street Name	CCTV Date St	art End Start End	Ma Sign P	9 5	L C M S	H L C M S	H SV VV SV VV S	S M L S M L A V H P S	LF RP S &	PP	AGS B % L % Z % B	L J C B	3 L J C B L J C B	JCGDR	W C Z % C R & D D 8	5 FD FL BI E	BD D L U R LD RD SRH SRB S	SRL Z SA CU MC	ř ž č	Comments Recommendations
1 4_Minor 300 2 4_Minor 300	11 1 1 G033 5	12820 Nutwood St. MORGAN LN		22 11129 MHN120003 MHN120007 114 12815 MHQ090005 MHQ090006	7 DS 2810 SPN120007 10 VCP 6 D/S 6411 SPQ090041 8 VCP	210 19 220 221	0 1 4	2 1			32	8 22	2.00				2 4	00				Replace pipe
3 4_Minor 300 PP	Г 23 1	LAMPSON	7/6/2007 87	02 8703 MHJ110019 MHJ110020	D/S 1822 SPJ110019 8 VCP	361 26	1					1 1 1	1.00				0 0 0.	00		1		MSA = Siphon
	33 7 R010 8	13390 Yockey St.			B DS 2755 SPK140007 8 VCP 7 D/S 3735 SPL060022 8 VCP	231 23 335 339	5 2 6				31	8 22		1			2 5	19			+	Replace pipe
	P											-										
3 4_Minor 301 GGS	COUN TY 3C 12	SYRACUSE	10/12/2007 103	157 10366 MHK040009 MHK040010	0 U/S 4769 SPK040002 8 VCP	348 34						2 4 3	200					00				
1 4_Minor 302	6 10	x 12912 7th St.	2/11/2004 110	113 11012 MHP120011 MHP120010	US 5130 SPP120009 6 VCP				3	3	29	54	2.00 1				1 3 0.	23 1 2		1	ТВІ	Replace pipe
2 4_Minor 302	R006 6	MELBA DR	8/4/2005 97	41 9742 MHL050010 MHL050011	D/S 5068 SPL050013 8 VCP	265 264	3 1 7					8 22		2			2 2					
	P																					
3 4_Minor 302 GGS	D TY 3B 1	KATELLA 9651 Garden Grove		70 10371 MHK050049 MHK050050		375 38	2		+			2 4 2	2.00 78				78 156 2.	00				
1 4_Minor 303 2 4_Minor 303	27 4 G051 1	Blvd. PERCHERON RD		36 14483 MHM130008 MHM130011 98 11999 MHR130023 MHR130024		316 21: 345 341			+		27	53 · 6 22	1.96				9 2.	25 1		1	TBI	Replace pipe
	T 23 2	DALE		29 8534 MHK090023 MHK090031		315 31						2 4 2	2.00	1 4			0 0 0	00				+
1 4_Minor 304 2 4 Minor 304	22 18 G039 9	9721 Russell Ave. ORA DR			3 DS 2682 SPM140006 8 VCP 7 D/S 4756 SPP090020 8 VCP	280 28 320 329	1				26	52 2	2.00 1	1 2	2		0 0.	00				Replace pipe
3 4_Minor 304 PP		AMY			1 D/S 1803 SPK090038 8 VCP	300 30		1			9	2 2 1	1.00				0 0 0	00				SAG
1 4_Minor 305 2 4 Minor 305	29 29	10240 Trask Ave. Y WASCO RD			3 DS 2855 SPN150002 15 VCP 2 D/S 1828 SPK050015 8 VCP	420 42					26	46	1.92				2 2.	00				Replace pipe
3 4_Minor 305 PP	G016 11 F 20 12	PENTAGON			7 U/S 3546 SPK100007 8 VCP	295 295 370 37				<u> </u>		9 21	3.00				0 0 0	00 2				<u>+</u>
1 4_Minor 306	8 10	12501 Groveview St.	2/17/2004 106	85 10686 MHN110022 MHN110023	3 DS 2620 SPN110029 8 VCP	322 32	2				22	44	2.00				0 0.	00				Replace pipe
2 4_Minor 306	G010 6	FILLMORE ST YOCKEY	7/25/2005 85	66 8597 MHJ080033 MHJ080034	D/S 2427 SPJ080036 8 VCP	280 280		1 2 3				8 21	3				3 6	20				
3 4_Minor 306 PP	51 22 3 16				4 U/S 267 SPK160004 8 VCP	560 359 150 14	111	++++		+++++++++	++++++	2 3 1	1.30	+++	 	++++	0 0 0.	4		++++	+	
1 4_Minor 307 2 4_Minor 307	3 16 M004 1	12330 Nutwood St. Y MARCHAND AV	8/9/2005 108		2 D/S 5223 SPL070041 8 VCP	150 14 291 301	5 3 2	1 1 1		++++++++++	22	8 21	2.00 46 5.00	+++	 	++++	3 49 95	UU				Replace pipe
3 4_Minor 307 PP		RIATA			3 D/S 340 SPK160037 8 VCP	280 28	1					1 1 1	1.00				0 0 0.	00				
1 4_Minor 308	48 11	9797 Lampson Ave.		85 9486 MHM110009 MHM110010		235 26		\Box			22	42	2.00	\Box			0 0.	00		\bot	$\perp \! \! \perp \! \! \! \perp$	Replace pipe
2 4_Minor 308 3 4_Minor 308 PP	R026 2 F 37 12	WEST ST GILBERT			1 D/S 6164 SPQ100023 8 VCP B D/S 5001 SPL050063 8 VCP	298 262 463 461	1 3 5	++++		+++++++++	++++	8 21 2 2 1	1.00	+++	 	++++	0 0 0	00	 	++++	++	+
1 4_Minor 309	33 11	9301 Trask Ave.	4/1/2004 120	85 11525 MHL150015 MHL150006	DS 2862 SPL150001 18 VCP	120 14					21	41	1.95				18 2.	00				Replace pipe
2 4_Minor 309 3 4_Minor 309 PP	R016 11 F 37 14	SIRIUS AV GILBERT			4 D/S 6553 SPT080003 8 VCP 1 D/S 4685 SPL060001 8 VCP	381 380 290 29						8 21	3.00	11			11 11 0 0 0.	00			+	+ + + + + + + + + + + + + + + + + + + +
1 4_Minor 310	2 1	x 11362 Ora Dr.	2/4/2004 118	67 11868 MNE27008 MNE27009	DS 3804 SPP090013 8 VCP	3 415 41	. 1	1			19	40	2.00 8		1		0 0.	00				Replace pipe
2 4_Minor 310 3 4_Minor 310 PP	G037 5 F 39 13	Y GEORGE ST SHANNON			2 D/S 6063 SPQ100006 8 VCP	197 198 330 33:				1 1		8 21	3.00	1			3 5 0 0 0.	00			+	+
	36 26	13301 Gilbert St.	4/8/2004	MHL140019 MHL140020		371 37					20	39	1.95				0 0.	00				Replace pipe
2 4_Minor 311 3 4_Minor 311 PP	G001 4 F 21 23	POES ST MAGNOLIA			D/S 2012 SPJ070004 8 VCP D/S 3536 SPL090036 8 VCP	325 326 290 29						7 21	3.00				2 8	00 1	2			+
1 4_Minor 312	3 17	12360 Nutwood St.		26 11228 MNW13039 MNW13041		119 11	. 1				19	38 1	200				2 0	22				Replace pipe
2 4_Minor 312	R012 5	ORD WY	8/15/2005 129	144 12945 MHP070020 MHP070021	1 D/S 6195 SPP070019 8 VCP	150 153		1				7 21	1.00				0 0					
	51 57 22 7	LAMPSON 9791 Acacia Ave.			U/S 3308 SPL110023 8 VCP 2 DS 2654 SPM120011 8 VCP	160 169 185 19		1			1 18	1 4 4	2.00 1 20.00				0 0 0.	00				Replace pipe
2 4_Minor 313	R024 2	WOODLAND LN	9/9/2005 117	23 11724 MHQ110014 MHQ110015	5 D/S 6294 SPQ110048 8 VCP	366 366						7 21					0 0					
	T 1 17 29 5	INGRAM Trask Ave.			3 D/S 2614 SPL160013 8 VCP 4 DS 2863 SPM150001 18 VCP	256 259 654 64			++++	 	18	1 3 3	2.00		+++++++++++++++++++++++++++++++++++++++		0 0 0.	00		1		Replace pipe
2 4_Minor 314	R045 5	Y HARBOR BLVD	10/27/2005 121	39 12140 MHS090033 MHS090034	4 D/S 5833 SPS090022 8 VCP	320 318	9 7					7 21	2				4 6 8					
3 4_Minor 314 PP 1 4_Minor 315	28 7	WESTMINSTER Galway St.		137 11038 MHL170016 MHL170017 149 10756 MHM130014 MHM130017	7 D/S 2617 SPL170011 8 VCP 7 DS 3075 SPM130051 12 VCP	309 300 160 17	1				18	1 3 3	2.00				0 0 0.	00				Replace pipe
2 4_Minor 315	G051 6	ROAN RD	10/31/2005 119	79 11980 MHR140026 MHR140027	7 D/S 3860 SPR140028 8 VCP	305 302		3 2				9 20	5				5 10					
3 4_Minor 315 PP 2 4_Minor 316	G002 7	WESTMINSTER YORKSHIRE AV			3 D/S 2618 SPL170012 8 VCP D/S 2077 SPJ070017 8 VCP	309 31: 295 297	2 2	5 2				9 20	3 5.00 1	7	1 1 1		0 0 0.	00				+
3 4_Minor 316 PP		ALDGATE			2 U/S 4159 SPM050020 8 VCP	239 24						2 4 2					0 0 0.	00 1				
2 4_Minor 317 3 4_Minor 317 PP	G002 11 F 34 17	NEARING DR BROOKHURST			D/S 2400 SPJ070021 8 VCP 4 D/S 5015 SPM050018 10 VCP	300 303 51 51		7 1				9 20	1.00	1 16			18 20 0 0 0.	00				
1 4_Minor 318	22 16				1 DS 2734 SPM140024 8 VCP	170 16					16	30	2.00				0 0.	00				Replace pipe
3 4_Minor 318 PP	F 36 29	BISCAYNE 12600 Nutwood St.		43 11144 MHN110037 MHN110038	6 D/S 3689 SPM060021 8 VCP	237 239 95 83	1					1 1 1	1.00				0 0 0.	50				- Parlamenta
1 4_Minor 319 2 4_Minor 319	6 15 M006 6				B DS 2380 SPN110004 8 VCP 2 D/S 5984 SPQ060016 8 VCP	95 83 350 343	2 1 2 4	1			15	8 20	2.00 57 74 5.00				131 262	00				Replace pipe
3 4_Minor 319 PP	Г 36 40	VONS	8/28/2007 101	05 10106 MHM060040 MHM060041	1 D/S 4701 SPM060041 8 VCP	335 33	1					1 1 1	1.00		1		1 2 2.	00				
1 4_Minor 320	33 5 R009 12	13292 Yockey St. ORANGEWOOD		112 11613 MHK140029 MHK140030 58 10333 MHL070029 MHL070030		250 22 310 299		++++			15	29 2		+++	 	++++	0 0.	UU				Replace pipe
2 4_Minor 320 3 4_Minor 320 PP		CAPRI			0 D/S 5944 SPL070045 8 VCP 9 D/S 4203 SPM070046 8 VCP	310 299 300 300		1 1	++++	++++++++++	++++	8 20 1 3 3	73 5.00 3.00	+++	++++++	++++	73 146 0 0 0.	00			+	+
1 4_Minor 321	28 19	12810 Brookhurst Wy.	3/24/2004 113	30 11331 MHM120002 MHM120003	3 DS 2815 SPM120002 10 VCP	95 84	1				13	28	2.00				3 3	00				Replace pipe
2 4_Minor 321	G039 5		9/13/2005 116	67 11637 MHR120020 MHR120002	2 D/S 6161 SPR120030 8 VCP	350 340		2				7 20					4 129 254					
1 4_Minor 322 2 4_Minor 322	40 10 R005 7	Yockey St. Y MARYLEE DR	8/1/2005 103	114 10315 MHK080019 MHK080020	1 DS 2791 SPK140022 8 PVC 0 D/S 5926 SPK080023 8 VCP	241 24 110 104		2 1	++++	++++++++++	14	7 20	2.00 1 1 10.00	+++	++++++	++++	2 4	00			+	Replace pipe
3 4_Minor 322 PP					7 D/S 3842 SPM070064 8 VCP	330 33						2 6 3					0 0 0.	00				The second pipe ID represents two
1 4_Minor 323 2 4 Minor 323	31 16	9540 Trask Ave. YANA DR			1 DS 8283 SPM150016 18 VCP	665 58	+++	++++	++++		14	28 2	2.00	\bot		+++++	0 0.	00		++++	\perp	current pipe IDs. Replace pipe
2 4_Minor 323 3 4_Minor 323 PP	G006 5 F 46 1	CHAPMAN	7/19/2005 85 10/9/2007 100	03 8504 MHK070039 MHK070040 147 10050 MHM090019 MHM090022	0 D/S 2088 SPK070043 8 VCP 2 D/S 4187 SPM090020 15 VCP	342 346 320 32						7 20 2 6 3	3.00	3 18	2		23 27 0 0 0 0.	00				+
1 4_Minor 324	31 16	9540 Trask Ave.			1 DS 8284 SPM150016 18 VCP	665 58					14	28 2	2.00				0 0	00				The second pipe ID represents two current pipe IDs. Replace pipe
2 4_Minor 324	S003 7	DUNKLEE AV	10/12/2005 124	10 12411 MHT120015 MHT120016	5 D/S 3990 SPT120015 8 VCP	292 294	1 6					7 20		3	1		4 6					
3 4_Minor 324 GGS	D 25 841	ERIN	10/26/2004 105	46 10549 MHM150021 MHM160008	B D/S 2193 SPM160001 8 VC	280 28	1 1					2 3 1	1.50				0 0 0.	00		2		
1 4_Minor 325	48 3	9732 Blanche Ave.	5/12/2004 90	29 9560 MHM090031 MHM090032	2 DS 3499 SPM090037 8 VCP	350 34					14	26	1.44				17 0.	25				Replace pipe
2 4_Minor 325 3 4_Minor 325 GGS	G028 5 D 24 815	CHAPMAN AV BLAKE	8/25/2005 129 10/19/2004 105	90 12991 MHQ090051 MHQ090052 49 10548 MHM160008 MHM160006	2 D/S 6145 SPQ090026 12 VCP 6 U/S 2195 SPM160003 8 VCP	330 327 285 29		1 3				6 20		2 4	1 1		9 16 1.					
			10/10/2004																		ТВІ	
								$ \ \ \ \ \ $													OB C	
1 4_Minor 326	14 15 14	16 x 10232 Imperial Ave.	3/2/2004 113	106 11308 MHN140023 MHN140025	5 DS 2904 SPN140012 6 VCP	2 305 22		$ \ \ \ \ \ $		。		26	2.00				2 15	34			pip	Replace pipe
2 4_Minor 326	G038 7	Y DORADA AV	9/12/2005 117	21 11725 MHQ110012 MHQ110016	6 D/S 6292 SPQ110046 8 VCP	165 163						9 19					37 74					SAG & DEPOSITS
3 4_Minor 326 GGS 1 4_Minor 327	43 18	ERIN x 13422 Gilbert St.	10/26/2004 105 4/22/2004	52 10557 MHM160012 MHM160018 MHL140021 MHL150006		285 28 3 372 37.				+++++++++	13	1 3 3	3.00	1	++++++	++++	0 0 0.	63	1	10		Replace pipe
2 4_Minor 327	R017 1	Y WEST ST	8/26/2005 131	10 13111 MHQ060015 MHQ060016	5 D/S 5766 SPQ060002 10 VCP	330 329	4 1	1			6	8 19					58 116					SAG
3 4_Minor 327 PP 1 4_Minor 328	T 2 7	SUTHERLAND 13172 Yockey St.			1 D/S 2223 SPM170022 8 VCP 3 DS 2971 SPK130015 8 VCP	328 333 275 27		++++	+++		12	2 4 2	2.00 1 1 1	+++		++++	0 0 0.			+++	+	Replace pipe
						1 1 21					1 1 1 2 1	1-01										

	General	Pipe		Structural Delect Coding	Rating ects	Operational × 0	I and Maintenance	Rating Score	Construction Features snow	qoueq
D No.		wer ID.	(£)	sformec ollapsec mrage mrage image	ags Struct Iral Def	ect in		Maint Defects Defect Def	Intruding Seal cost and cost a	d Aban
1	Existing MH ID Previous MH ID	fron of front ing Sev (in) (in) (in) Comme	C F	Broken Hole Joint 🚨 🞖 🕉 🖺	Mr Struct	Deposits D Fine (F) T	Roots (R) Tap (T) Medium (M) Ball (B)	Infiltration Obstacles Vermin 1 OB V 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0) Line Material	dentife
Phase confidence of the confid	CTV Date Start End Start End	Directivity Previx Mater Joint Joint Learn	5 L C M S H L C M S	H SV VV SV VV S M L S M L A V H P S LF	RP S B AS Total	S AGS B % L % Z % B L J C B	LJCBLJCBLJC	G D R W C Z % C R L P P S FD FL BIE	D D L U R LD RD SRH SRB SRL Z SA CU MC	g g g g g g g g g g g g g g g g g g g
	15/2005 12936 12938 MHP070011 MHP070 23/2007 10579 10578 MHM170037 MHM170		286.7 1 1 4 2 216 1	+++++++++++++++++++++++++++++++++++++++	8 19 1 1	1.00		5 5 0 0 0.00	+++++++++++++++++++++++++++++++++++++++	
	20/2004 11252 11322 MHN120026 MHN120				13 24	2.00		0 0.00		Replace pipe
	/5/2005 10277 10278 MHK060037 MHK060 30/2007 9835 9836 MHN050012 MHN050		243.8 5 2 1 323 1		8 19	1.00		46 92	+++++++++++++++++++++++++++++++++++++++	
	14/2004 9534 9526 MHM100032 MHM100		275		12 22	2.00		0 0.00		Replace pipe
2 4_Minor 330 G045 10 CITRUSWOOD AV 10/ 3 4_Minor 330 PPT 29 13 DEWEY 7/3	0/7/2005 12134 12135 MHS100047 MHS100 30/2007 9836 9837 MHN050016 MHN050	048 D/S 5828 SPS100050 8 VCP 35 019 D/S 3762 SPN050037 8 VCP 29			7 19	1.00	1	1 4 7		
	10/2004 11229 11231 MHN100008 MHN100				11 21	2.10		10 2.00		Replace pipe
2 4_Minor 331 G010 13 MAC MURRAY ST 7/2 3 4_Minor 331 PPT 31 4 DADE 8/3	25/2005 10320 10321 MHK070001 MHK070 /3/2007 9711 9648 MHN050025 COM050	002 D/S 4726 SPK070001 8 VCP 29 002 U/S 4571 SPN050026 8 VCP 11	292.8 5 2		7 19	2		1 3 5		
1 4_Minor 332 47 14 9541 Lambert Cir. 5/1	11/2004 9516 9517 MHM110024 MHM110 25/2005 12921 12922 MHP090021 MHP090	025 DS 3222 SPM110043 8 VCP 22	1 220		9 20	2.00	2	0 0.00		Replace pipe
1 4_Minor 333 2 2 1 12082 Ora Dr. 2/4	/4/2004 11869 11868 MNE27010 MNE270	09 US 3805 SPP090014 8 VCP 15	139		10 6 19	2.00		9 18 0 0.00		Replace pipe
	22/2005 13049 13101 MHR070027 MHR070		297.5 5 1	+++++++++++++++++++++++++++++++++++++++	6 19	41 5.00		41 82	+++++++++++++++++++++++++++++++++++++++	Pipe SPN0600014 corrected to SPN060014
1 4_Minor 334 28 21 Stanford Ave. 3/2	24/2004 0 0 MHN120022 MHN120	023 DS 2932 SPN120025 8 VCP 70	76		10 20	2.00		0 0.00		Replace pipe
	14/2005 12541 12542 MHP100036 MHP100 14/2007 9891 10228 MHN060012 MHN060		335.9 282 1 1		9 9 18	4 80 5.00 1 15.00 1.00		1 104 243 0 0 0.00	18	HIGH FLOW, SAGS & DEPOSITS
	/1/2004 12084 12085 MHM150002 MHL150	-	192		10 20	2.00		0 0.00		Replace pipe 42.8' MMC TO PVC, 50.8' MMC
	0/3/2005 12680 12681 MHT090041 MHT090 14/2007 10228 10231 MHN060014 MHN060		384.1 280 1		9 9 18	3.00	2	9 20 0 0 0.00	2	TO VCP, SAG
1 4_Minor 336 49 12 12272 Gilbert St. 5/1	17/2004 9537 9538 MHL100002 MHL100 (27/2005 12403 12404 MHT100033 MHT100	003 DS 3263 SPL100002 10 VCP 32	321 99.1		10 19			0 0.00		Replace pipe
	11/2007 9892 9662 MHN060019 CON060		135 1		1 3	3.00		0 0 0.00		
	24/2004 11325 11326 MHN120021 MHN120 26/2005 13089 13090 MHQ070043 MHQ070		82 1 321.2 1		9 18	2.00 53 5.00		3 3.00		Replace pipe
	26/2005 13089 13080 MHQ0/0043 MHQ0/0 /4/2007 9895 9887 MHN060022 MHN060				1 3	3.00		1 2 2.00		Repeat inspection, DVD 46 - section 26
1 4_Minor 338 49 13 12301 Gilbert St. 5/1	17/2004 9538 9540 MHL100003 MHL100 14/2005 10806 9645 MHL080035 MHL090		306 245.7 3 2		9 18			0 0.00 1		Replace pipe SMALL SAG
	/5/2004 11219 11220 MNW13032 MNW13		 		9 18	2.00		0 0.00		Replace pipe
	/8/2005 10781 10782 MHL050036 MHL050 31/2007 9903 9904 MHN060031 MHN060		249.4 1 2		5 8 18	000		0 0 0 0 0 1		SMALL SAG
1 4_Minor 340 33 6 13342 Yockey St. 3/3	31/2004 11613 11614 MHK140030 MHK140	031 DS 2789 SPK140020 8 PVC 29	324		9 18	2.00		0 0.00		Replace pipe
3 4_Minor 340 PPT 30 16 STEPHANIE 8/1	/9/2005 10119 10120 MHL050023 MHL050 /1/2007 9918 9917 MHN070011 MHN070	009 U/S 6112 SPN070010 8 VCP 29	316.2 1 3 3 1 1 298 2		8 18 2 6	3.00 2		17 32 0 0 0.00		
2 4_Minor 341 M015 3 DARNELL ST 9/6	/7/2004 12087 12088 MHL130015 MHL130 /6/2005 12191 12192 MHR100040 MHR100	041 D/S 5959 SPR100031 8 VCP 28	338 278.1 1 2 4 1		9 16	2.00		0 0.00	+++++++++++++++++++++++++++++++++++++++	Replace pipe
	/1/2007 9918 9872 MHN070011 MHN070 12/2004 12273 12274 MHO110012 MHO110		271 1		1 3 8 16	2.00		0 0 0.00		Replace pipe
2 4_Minor 342 M002 7 BOWLES AV 8/5	/5/2005 10279 10195 MHK060039 MHK060 10/2008 9859 9862 MHN080017 MHN080	040 D/S 5932 SPK060025 8 VCP 12	117.2 4 1 3 370 1		8 18	100		1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1		
2 4_Minor 343 M003 5 DESMOND ST 8/8	/8/2005 10334 10333 MHL060016 MHL070 /15/2007 9952 9951 MHN090012 MHN090	030 D/S 5226 SPL060031 8 VCP 28	288.7 4 1 3		8 18	1.00		0 0		
	/15/2007 9952 9951 MHN090012 MHN090 /5/2004 11133 11120 MHO120026 MHN120		314 1		8 15	214		0 0 0.00		Replace pipe
2 4_Minor 344 M012 7 Y CHAPMAN AV 8/2	26/2005 12251 12252 MHT090035 MHT090 26/2007 10488 10489 MHN150024 MHN150	036 D/S 6142 SPT090044 10 VCP 40	400.2 4 1 3		8 18	98 74 5.00		173 348	1	HIGH FLOW
1 4_Minor 345 2 4 12132 Ora Dr. 2/4	/4/2004 11870 11871 MNE27011 MNE270	112 DS 3807 SPP090016 8 VCP 36	362 1		6 14	2.00		0 0.00		Replace pipe
	25/2005 10812 10813 MHL070005 MHL070 23/2007 9790 9791 MHO070040 MHO070		268.4 1 1 5 257 1	+++++++++++++++++++++++++++++++++++++++	7 18	1.00		5 5	+++++++++++++++++++++++++++++++++++++++	+
GARDEN GROVE	/4/2004 11866 11871 MNE27007 MNE270		280		7 12	2.00		0 0.00		Replace pipe
3 4_Minor 346 PPT 46 24 STEELE 10/1	/24/2005 12437 12438 MHS120050 MHS120 /16/2007 10654 10656 MHO080022 MHO080	024 D/S 4212 SPO080022 8 VCP 33	167.4 3 4 3 3 4 3 4 3 4 5 5 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6	+++++++++++++++++++++++++++++++++++++++	7 18	1.00		0 0 0 0.00	+++++++++++++++++++++++++++++++++++++++	+
	12/2004 7685 7686 MHK150009 MHK150 /9/2005 11649 12841 MHR110013 MHR110	3.0 30 1 1 1 1 1 1 1 1 1	330 1 1 1 92.3 3 4		4 12	2.00	1	2 0.20		Replace pipe
3 4_Minor 347 PPT 26 24 HARRIS 7/1	18/2007 10659 10621 MHO080028 MHO090 10/2004 9510 9513 MHM110018 MHM110	014 D/S 4218 SPO080028 8 VCP 31	308 1		1 1 4	4.00		0 0 0.00		Replace pipe
2 4_Minor 348 R011 10 LOARA ST 8/1	12/2005 12928 12929 MHP080011 MHP080	012 D/S 6179 SPP080008 8 VCP 20	191.1 3 4		5 12 7 18		1	6 3.00		Керіасе ріре
	16/2007 10622 9924 MHO090015 MHO090 (11/2004 11144 11145 MHN110038 MHN110		335 3		3 9	3.00	 	0 0 0.00	+++++++++++++++++++++++++++++++++++++++	Replace pipe
2 4_Minor 349 G051 2 PERCHERON RD 10/3	/31/2005 11999 12000 MHR130024 MHQ130	030 D/S 3970 SPR130024 8 VCP 32	343.3 3 3		6 12	3 2 4		9 12		гернаси ріре
1 4_Minor 350 28 3 13000 Galway St. 3/2	16/2007 10668 10669 MHO090017 MHO090 23/2004 12047 12048 MHM130012 MHM130	013 DS 2841 SPM130036 12 VCP 22	267 1 226 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1		6 12	2.00		0 0 0.00		Replace pipe
	25/2005 10813 10792 MHL070006 MHL080		270.0 6		6 18	6	1	7 10		Repeat inspection on DVD 45, Section 47
1 4_Minor 351 31 21 13202 Yockey St. 3/3	16/2007 10669 10670 MHO090018 MHO090 31/2004 11605 11606 MHK130020 MHK1300	20-A DS 2751 SPK140003 8 VCP 26	279 1 52 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1		6 10	2.00		0 0 0.00 1		Section 47 Replace pipe
	/4/2005 9737 9738 MHL050006 MHL050 31/2004 11604 11605 MHK130019 MHK130		270.0 6 56 56		6 18 5 10	2.00	1	6 6		Replace pipe
2 4_Minor 352 G009 12 FILLMORE ST 7/2	22/2005 8564 8566 MHJ080031 MHJ080 30/2007 10404 10425 MHO150026 MHO150	033 D/S 2062 SPJ080023 8 VCP 28	282.1 1 1 354 1		6 8 17	2 4		6 6		
13211 Magnolia	30/2007 10404 10425 MHO150026 MHO150 26/2004 11586 11587 MHL130045 MHL140		345		5 8	2.00	 	0 0 0.00 1		Replace pipe
2 4_Minor 353 R022 2 ZETA ST 9/6	/6/2005 12606 12607 MHQ100028 MHQ100 /7/2007 10987 10989 MHO160029 MHO160	030 D/S 5583 SPQ100003 8 VCP 35	349.9 2 1		5 8 17	100		0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0		SMALL SAG
1 4_Minor 354 7 1 x St. 2/1	77/2007 10987 10989 MHO160029 MHO160 12/2004 11885 11886 MHP130029 MHP130		284 1 499		1 4 7	2.33	 	1 100		Replace pipe
2 4_Minor 354 G002 9 NEARING DR 7/1	13/2005 8580 8581 MHJ070018 MHJ070 /4/2007 10411 10412 MHO160038 MHO160	019 D/S 2079 SPJ070019 8 VCP 30	304.1 2 1 2 3		8 17	5 5.00 2 9	3	19 38 0 0 0 0.00		
1 4_Minor 355 38 1/ 13392 Coast St. 4/1	13/2004 7113 7114 MHJ140025 MHJ140	026 DS 753 SPJ140033 8 VCP 22	230 1		2 6			0 0.00		Replace pipe
3 4_Minor 355 PPT 9 31 Y WARD 5/4	25/2005 10292 10293 MHK070009 MHK070 /4/2007 10465 10464 MHO160041 MHO160		208.3 2 3 3 272 3		8 17 0 0			1 3 5 0 0 0.00 5		
	16/2004 12039 12040 MHM130009 MHM130	010 DS 2747 SPM130034 8 VCP 40	402 1		2 6	2.00		0 0.00		Replace pipe
	/8/2005 10824 10825 MHL070031 MHL070 25/2007 7255 7256 MHO180011 MHO180		266.3 1 3 3 1 1 216 1		8 17 1 3	5 5.00 1 5.00 1 1 10 3.00 1 5.00 1 1 10	1 2	20 34 0 0 0.00		
	10/2004 9484 9485 MHM110008 MHM110		291		3 6	2.00		0 0.00		Check flow capacity
3 4_Minor 357 PPT 5 5 HAZARD 4/1	10/2005 10175 10176 MHL060024 MHL060 11/2007 7246 7260 MHO190008 MHO190	001 D/S 33 SPO190021 10 VCP 17	271.8 1 3 4 172 1		8 17 1 1	1.00	1	1 3 0 0 0.00		
1 4_Minor 358 49 11 12242 Gilbert St. 5/1	17/2004 9536 9537 MHL100001 MHL100 1/26/2005 12978 12989 MHQ090049 MHQ090		206		3 4 8 17	2.00		30 0.84		Check flow capacity

		General	Pipe		Structural Defect	Coding ad a la	Rating rcts	×	Operational and Maintenance		Sating Core	Construction Features	eatures Aband.	band
Po. No.			er ID.	(£)		ormed apsed face nage ng Faili	Struct F al Defe	act Ind			Maint R rects rect Sc	Intruding Seal	ction Fe	Aband
ON O	Exist	ing MH ID Previous MH ID	Sewe Sewe	£ Crack	F Broken Hole	Joint D X C Deft	Sag Suick S	Deposits		Infiltration Obstacle	Vermin V Z W W Z Z Tap (Lateral)	Line Material E	onstruc s for S	ntified
riority AVD No. VD No. VVD No. VVD No. VVD VV. VVD VV. VVD VV.	007/19-1-	5.4 0.4 5.4	xisting xisting ize (in) ize (in)	cTV L		D S S S S S S S S S S S S S S S S S S S	ACP C	AE AE Other		Other			otal Co	S S
3 4_Minor 358 PPT 4 5 RHONDA	4/4/2007 6829	6830 MHO190014 MHO190013	D/S 91 SPO190009 8 VCP	232 233 1	; M S H SV VV SV VV 3 h	WILSIMILAVHP S LF RP	1 3	.,	BEJCBEJCB	1 5	6 4 4.00	D D L U R ED RD SRH SRB SRL Z SA CU	MC ⊢ ∝	Comments Recommendations
1 4_Minor 359 34 24 12691 Dale Ave. ORANGEWOOD			DS 3417 SPK110040 8 VCP	200 208 1 1			4	2.00	1 1		20 0.70			Spot Repair, Cut roots
2 4_Minor 359 M005 1 AV 3 4_Minor 359 PPT 12 12 DOROTHY		5 10827 MHL070033 MHL070034 2 11820 MHP140044 MHP140045	D/S 4842 SPL070036 8 VCP D/S 5291 SPP140038 8 VCP	327 266.6 3 2 3 285 272 1			8 17	3.00			0 0 0 0.00			
1 4_Minor 360 20 11 9781 Imperial Ave.	3/11/2004 1202	12021 MHM140037 MHM140038	DS 2729 SPM140020 8 VCP	370 369 1			4	1.33 1 10.00 3	3 1 2	1	20 0.75			Spot Repair, Clear D&R
2 4_Minor 360 G034 6 ROBERT LN 3 4_Minor 360 PPT 12 45 LIBBY		1 12822 MHQ090012 MHQ090013 7 11952 MHP150015 MHP160008	D/S 6418 SPQ090048 8 VCP D/S 4831 SPP160001 8 VCP	220 224.2 2 1 300 313 1	! 2		7 17	1.00			0 0 0.00			
1 4_Minor 361 48 9 x 9672 Bixby Ave.			DS 3229 SPM100025 8 VCP 3	300 341 2			4	2.00	2 1 1 1 1	2	19 0.76			Spot Repair, Cut roots
2 4_Minor 361 R034 3 Y OERTLY DR 3 4_Minor 361 PPT 13 25 HAVENWOOD			D/S 6495 SPS100013 8 VCP U/S 5305 SPP150019 8 VCP	363 362.9 1 2 3 215 213 1	1		7 17	3.00	1 1		2 43 83 4 1 1 1.00 2			
1 4_Minor 362 19 3 12681 Kona Ln. 2 4 Minor 362 R002 6 FAUN LN			DS 2496 SPM110048 8 VCP D/S 4737 SPL080037 8 VCP	135 140 1 1 300 298.4 3 1 2			4	1.33	6 1	1	16 0.85			Spot Repair, Cut roots
2 4_Minor 362 R002 6 FAUN LN 3 4_Minor 362 PPT 10 26 EUCLID		3 10969 MHP160035 MHP160036		300 298.4 3 1 2	1		7 17	100	2		2 2			
1 4_Minor 363 5 14 10532 Molama St.			DS 2562 SP0100027 8 VCP	212 212 2			1 1	2.00	8		10 0.73			Spot Repair, Cut roots
2 4_Minor 363 G029 5 CHAPMAN AV 3 4_Minor 363 PPT 15 19 WESTMINSTER			D/S 6300 SPP090032 15 VCP D/S 5317 SPP170004 10 VCP	340 333.3 1 2 288 282 1	1		7 17	2			1 3 5			
1 4_Minor 364 32 24 8872 Acacia Ave.	4/1/2004 8395	8397 MHK120011 MHK120014	DS 3369 SPK120013 8 VCP	325 325 1 1			4	2.00	5		8 0.69			Spot Repair, Cut roots
2 4_Minor 364 G032 5 Y NORMA LN 3 4_Minor 364 PPT 53 7 LANNING			D/S 4745 SPQ090018 8 VCP	290 296.5 2 2 1 415 419 1	1		7 17	1 39 5.00			40 80 1 4 4.00 2 2			
	1149.		5. 4100017 V VOI		 	 				 	7 7.00 2 2		DS 7	
1 4_Minor 365 36 3 36 11 8431 Killamey Rd.		7701 MHJ110001 MHJ110002		381 362 1			4	2.00 1 20.00 1	1		6 0.56 1	2	TBI	Spot Repair, Clear D, Fix Lat
2 4_Minor 365 M020 4 STH ST 3 4_Minor 365 PPT 27 10 HARBOR			D/S 5276 SPP120005 8 VCP D/S 851 SPR160019 12 VCP	330 332.6 1 1 4 259 254 1		+++++++++++++++++++++++++++++++++++++++	7 17	1.00	8	1	9 12 0 0 0.00			
1 4_Minor 366 4 5 12241 Elmwood 2 4_Minor 366 R018 5 CHAPMAN AV		5 12316 MNE14010 MNE14011 2 13013 MHS090005 MHS090006		135 138 1 1 340 340.3 4 3			4	1.33	2 2		6 0.68			Spot Repair, Cut roots HIGH FLOW
3 4_Minor 366 PPT 18 15 LILLY	6/19/2007 6703	6704 MHS140005 MHS140006	D/S 684 SPS140005 8 VCP	356 355		3	7 17 3 12	4.00			0 0 0.00			INGIT LOW
1 4_Minor 367 13 14 x 13422 Jessica Dr. 2 4_Minor 367 R020 7 Y BUARO ST		1 11115 MHO140042 MHO150010 2 12203 MHR090025 MHR090026	DS 2363 SPO140029 8 VCP 3 D/S 5678 SPR090020 10 VCP	330 328 2 250 225.8			8 8 16	2.00 20 5.00		1 2	6 0.77	1		Spot Repair, Clear obstacles
3 4_Minor 367 PPT 17 34 GLORIA		6723 MHS140024 MHS140025		192 214 1			1 1	1.00			0 0 0.00			
1 4_Minor 368 46 17 9862 Catherine Ave		9495 MHM100012 MHM100013		355 350 1 1			4	1.33	1	1	5 0.76			Spot Repair, Cut roots
2 4_Minor 368 G046 4 HASTER ST 3 4_Minor 368 PPT 24 12 TRASK		5 12644 MHT100047 MHT100004 6755 MHS140050 MHS140051		45 40.1 124 124 1			8 8 16 1 3	3.00			1 2 0 0 0.00		$H\Pi$	SAG
1 4_Minor 369 36 14 8432 Trinette Dr.	4/7/2004 7090	7703 MHJ110005 MHJ110006	DS 824 SPJ110015 8 VCP	381 381 2			4	2.00	1 1 1		4 0.61			Spot Repair, Cut roots
3 4_Minor 369 PPT 16 16 DIEPPE 1 4_Minor 370 12 20 13362 Benton St.		7485 MHS160019 MHS160020 2 11183 MHO140045 MHO140046	D/S 463 SPS160017 8 VCP DS 2276 SPO140036 8 VCP	394 395 1 330 331 1 1			1 3	3.00	2		0 0 0.00			Spot Repair, Cut roots
2 4_Minor 370 R001 9 FLORENCE LN	7/25/2005 1013	5 10136 MHL080014 MHL080015	D/S 5187 SPL080013 8 VCP	261 270.0 2			5 7 16				0 0			SMALL SAG
11531 Blackthorn			U/S 581 SPS170011 12 VCP	331 207			0 0	0.00			0 0 0.00 1 1	2		MSA = Intruding connection
1 4_Minor 371 7A 8 St. 3 4_Minor 371 PPT 15 40 WESTMINSTER		9 10680 MHN110016 MHN110017 7495 MHS170006 MHS170007	DS 2940 SPN110023 8 VCP D/S 482 SPS170020 12 VCP	370 372 2 406 416 1			1 1	2.00 2	2		0 0 0.00 2			Spot Repair, Cut roots
1 4_Minor 372 7A 11 12661 Blackthorn St.		1 11322 MHN110018 MHN120018		370 377 1 1			4	1.33	1 2		2 0.56			Spot Repair, Cut roots
2 4_Minor 372 G003 2 DAVMOR AV	7/14/2005 7990	8039 MHK060009 MHK060011	D/S 2408 SPK060039 8 VCP	320 326.9 6 2	1		9 16	2 1	1 2		5 8			
3 4_Minor 372 PPT 19 9 FONDREN 1 4_Minor 373 1 9 10611 Allen Dr.			D/S 365 SPU130013 8 VCP DS 2389 SPO090024 8 VCP	262 254 1 370 352 1 2			1 1	2.00	1		0 0 0.00			Spot Repair, Cut roots
2 4_Minor 373 R016 2 Y WILKEN WY 1 4 Minor 374 22 15 3830 Russell Ave.			D/S 5731 SPR070023 8 VCP DS 2647 SPN140035 8 VCP	300 299.5 6 150 158 2	1		7 16	78 5.00	1	1 5	80 161			OBZ= OBJ Spot Repair, Cut roots
2 4_Minor 374 G017 7 ELMER LN	8/3/2005 7969	7971 MHK050027 MHK050028	D/S 1842 SPK050028 8 VCP	290 290.1 1 1 2 1			7 16	2.00			1 3 1			
1 4_Minor 375 31 18 8872 Dakota Ave. 2 4_Minor 375 R008 15 Y MURLINE DR		1 11575 MHL140007 MHL140011 4 10115 MHL050018 MHL050019	DS 2947 SPL140032 8 VCP D/S 4703 SPL050038 8 VCP	265 260 1 1 1 294 292.5 2 1 3			7 16	2.00 9 5.00	1 10 1		2 2.00			Spot Repair, Cut roots
1 4_Minor 376 48 5 9612 Blanche Ave.		9562 MHM090033 MHM090034		298 296			7 10	1 23	1		0,000			Spot Repair, Cut roots
2 4_Minor 376 M003 6 Y PORTIA CR	8/8/2005 10829	9 10830 MHL070039 MHL070040	D/S 4845 SPL070039 8 VCP	226 227.4 1 2 4			7 16	18 5.00	1		8 27 45			
1 4_Minor 377 3 20 10592 Mahalo Wy. 2 4_Minor 377 G025 3 Y ROBERT LN			DS 2399 SPO100024 8 VCP D/S 5837 SPQ070031 8 VCP	270 265 1 2 261 263.4 1 3	1 5		11 16	1.00			1 2 1			Spot Repair SMALL JOINTS
1 4_Minor 378 6 2 10552 Claussen St.		0 11141 MHO110022 MHN110035		282 282 4			4	1.33			0 0.00			Spot Repair
2 4_Minor 378 M006 11 Y JACALENE LN	8/11/2005 1319	3 13199 MHQ060006 MHQ060007	D/S 5975 SPQ060008 8 VCP	305 312.7 1 1 4	1		7 16	81 61 5.00	2	1	145 294			
1 4_Minor 379 6 20 10691 Vienna St. 2 4_Minor 379 R019 12 Y CHAPMAN AV	2/12/2004 12313 8/30/2005 1310	2 12272 MHO110009 MHO110010 3 13061 MHR090013 MHR090028	DS 4433 SPO110029 8 VCP D/S 6271 SPR090030 12 VCP	290 298 1 2 240 252.1 3 2	1		6 16	2 2 5.00			4 8		1	Spot Repair MMC= CAST IRON
1 4_Minor 380 13 6 13122 Benton St. 2 4_Minor 380 R014 2 Y BLUEBELL AV			DS 2581 SPO130038 8 VCP D/S 6568 SPR070005 8 VCP	160 179 1 2 360 360.2 1 1 3			4	2.00			0 0.00			Spot Repair
2 4_Minor 380 R014 2 Y BLUEBELL AV 1100 Graden 1 4_Minor 381 21 19 Grove Blvd.	8/19/2005 1304: 3/15/2004	MHP130010 MHP130011			+'+++++		6 16	26 5.00		++++++	1 27 53			Spot Repair
2 4_Minor 381 R012 9 Y CRISSEY WY			D/S 6197 SPP080013 8 VCP	329 329 1 1 1 300 298.0 1 1 3	1		6 16	2.00	1 8		23 37			Брот кераіг
1 4_Minor 382 21 25 10792 Garden Grove Blvd.		7 12266 MHO130005 MHO130008		90 96 1 1			4	2.00			0 0.00			Spot Repair
2 4_Minor 382 M015 2 BECK AV 1 4_Minor 383 48 7 12221 Peacock Ct.	9/6/2005 1218 5/13/2004 9501	9502 MHM100033 MHR100034	D/S 5923 SPR100025 8 VCP	315 317.1 2 4 375 336 1 1 1	++++++	++++++++=	6 16	2.00	++++++++	++++++	0 0 0		++1	Spot Repair
2 4_Minor 383 R002 1 CELLINI AV	7/26/2005 1013	3 10134 MHL080012 MHL080013	D/S 5185 SPL080011 8 VCP	340 337.0 2 4			6 16				0 0			урог горан
1 4_Minor 384 51 6 12041 Loraleen St.			DS 3328 SPL090011 8 VCP	500 275			4	2.00			58 0.95			Spot Repair
2 4_Minor 384 R003 6 MARYLEE DR			D/S 4723 SPL080033 8 VCP	334 334.4 2 4	+++++++		6 16			++++++	0 0			
1 4_Minor 385 14 12 x 10172 Central Ave. 2 4_Minor 385 R008 3 Y LA GRAND AV			US 2327 SPN140003 8 VCP 3 D/S 4233 SPL050049 8 VCP	410 416 1 275 274.1 2 4	1		6 16	2.00 4	4 1 1	++++++	41 2.28 2 1 2 71 140	10		Replace pipe
1 4_Minor 386 41 5 x 12932 Civic Center		7 11018 MHP120014 MHP130002		332 332 1	1		4	2.00	3 1 3	1	0 0.00			Spot Repair, Cut roots
2 4_Minor 386 G024 4 MARGIE LN 8922 Ernest Fulson	8/18/2005 1222	2 12223 MHQ080026 MHQ080027	D/S 6435 SPQ080020 8 VCP	350 350.1	2 3		5 16	1			1 2			
1 4_Minor 387 25 18 Dr.	3/18/2004 8404	8382 MHK110009 MHK110010	DS 3354 SPK110008 8 VCP D/S 5836 SPQ070030 8 VCP	240 239 330 329.9 1			2 4	2.00			0 0.00			
1 4_Minor 388 49 25 12421 Gilbert St.		9521 MHL100005 MHL110061		235 233	3		5 16 2 3		2 2		8 13 85 0.75			Check flow capacity
2 4_Minor 388 M004 10 ROYAL PALM Y BLVD	8/8/2005 1015	I 10155 MHL070022 MHL070026	D/S 5201 SPL070016 8 VCP	269 275.7 1 1 1	2		5 16	48 36 5.00	1		85 169			
1 4_Minor 389 14 3 x 10221 Crosby 2 4_Minor 389 R009 7 Y ALLEY		3 11289 MHN130023 MHN130024		365 365 1			3	1.00	86 1 1		72 0.88 3			Spot Repair, Cut roots
		9 10342 MHL050015 MHL050016 0 11214 MNW24035 MNW13027			+ + + + + + + + + + + + + + + + + + + +	+++++++++++++++++++++++++++++++++++++++	5 16	4 11 5.00 1 5.00		++++++	1 18 34	++++++		Sui Bur 1 S
2 4_Minor 390 M007 5 KATHY LN	8/12/2005 1320	3 14343 MHQ060011 ANAHEIM 3	D/S 5980 SPQ060013 8 VCP	299 303 3 2 285 249.5 2 5 2	+++++++++	+++++++++++++++++++++++++++++++++++++++	9 15	1.50 1 2	3 1 2 1	++++++	0 0			Spot Repair, Cut roots
1 4_Minor 391 38 12 x 13382 Wynant Dr. 2 4_Minor 391 G019 13 KATELLA AV	4/13/2004 7065	7066 MHJ140013 MHJ140014	DS 805 SPJ140014 8 VCP 3 D/S 1838 SPK050025 8 VCP	295 293 1 225 220.1 2 1			3	3.00	6 9 2	1	39 0.70			Spot Repair, Cut roots
2 4_Minor 391 G019 13 KATELLA AV	8/5/2005 /982	MHKUSUU46 MHKUSUU46	5/5 1000 OF KU00U20 8 VCP	220 220.1 2 1	' 		8 15	3 1 5.00	 	++++++	4 9	+++++++++++++++++++++++++++++++++++++++		
5 4_Minor 391 PPT 3-B2-6 9 Y CHAPMAN AVE			D/S 6025 SPT090018 10 VCP	285 288.5 6 5 32 4			443E 47 141				0000 0 0 0.00			
1 4_Minor 392 22 3 9921 Russell Ave. 2 4_Minor 392 G001 12 MOEN ST			DS 2645 SPN140033 8 VCP D/S 2070 SPJ070010 8 VCP	330 331 1 325 329.3 3	2 2		7 15	3.00	1 2	++++++	36 0.98			Spot Repair, Cut roots
1 4_Minor 393 18 12 x 13441 Cypress	3/8/2004 1120	11201 MHO140012 MHO150005	DS 2294 SPO140050 8 VCP 3	285 187 1			3				27 0.65	9		Spot Repair
2 4_Minor 393 G025 5 Y 9TH ST CHAPMAN			D/S 6320 SPP080002 8 VCP	320 321.7 2 1	2		6 15	44 49 5.00		+++++++	93 186			HIGH FLOW, DEPOSITS
5 4_Minor 393 PPT 1 23 AVENUE	5/7/2012 8781	8782 MHF080050 MHF080051	D/S 1742 SPF080050 10 VCP	350 287.9 1			4100 1 7	7.00 57			2L00 57 114 2.00		шШ	

		General	Pipe			Structural Defect Co	oding e ja	Rating cts	×	Operational and Maintenance		ating	Construction Features	ous satures Aband.	peu
No. No. (Y)			amera r ID	(E)			ormed apsed lace nage ng Faill	Struct F	Bct Ind			Maint R lects rect Sc	Intruding Seal	cellane ction Fe	Aband
D TO	Exis	sting MH ID Previous MH ID	J Sewe J Sewe Is Sew	(f)	Crack Fracture	Broken Hole B H	Joint D X	Tructur tructur	Deposits D Fin		Infiltration Obstacles (B) I OB	Vermin V O W W Tap (Late	eral) Line Material	Mis onstru	antified
Priority Contract Contra	CCTV Date Star	et End Start End	izisting ize (in ize (in oint Le	ength -	CMSHICMS	0	L S M L A V H P S IF RP	ACP of all Si	AGS B % L % Z % B L		Other	W B B C	BD D I II P I D PD SPH SPR SPI 7	otal C	© Comments Recommendations
10732 Lampson	2/9/2004 1108	88 11134 MHO110015 MHO110016	5 DS 2925 SPO110031 8 VCP 3	440 441 1	1	64 44 64 44		3	3.00	5 1		26 0.65 5 1		GAT GO MIO P L	Spot Repair, Cut R, Fix Lat
		99 10300 MHK080004 MHK080005	5 D/S 3884 SPK080008 8 VCP	180 179.2 3	3			6 15				0 0			
5 4_Minor 394 PPT 3-82-4 3 SIMMONS AVE	8/24/2012 1301	11 13005 MHT080009 MHS080003	B D/S 6559 SPT080010 8 VCP	240 232.1	37			3F00 37 111	300			0000 0 0 0 0 0			
1 4_Minor 395 39 1 8112 Imperial .	4/13/2004 708	1 7082 MHJ140028 MHJ140029	DS 818 SPJ140027 8 VCP	310 300	1			3				26 0.75			Spot Repair, Cut roots
2 4_Minor 395 R018 11 Y CHAPMAN AV	8/29/2005 1302	26 13027 MHS090011 MHS090012	2 D/S 6220 SPS090026 12 VCP	300 315.2 1	1 4			6 15	1 29 5.00			38 92		8	HIGH FLOW
		12 11413 MHP120007 MHP120008			4 27			3D24 35 93				8 3121 59 122 2.07 3			
			9 DS 800 SPJ140009 8 VCP 1 D/S 4136 SPQ110012 8 VCP		1 2 2			5 15		6 1		21 0.76 111 220			Spot Repair, Cut roots
MAP FALLINGLEAF															
			7 D/S 6549 SPS100027 8 VCP 1 D/S 5070 SPL050015 8 VCP	390 389 ₁ 265 262.6	2 25 5			3D21 28 79 5 15	2.82	1 1		4111 2 5 2.50			
1 4_Minor 398 30 10 9181 Imperial :	3/30/2004 1154	41 11544 MHL140032 MHL140035	DS 2709 SPL140017 8 VCP	188 189	1			3	3.00 5 1	1 2		15 0.85			Spot Repair, Cut roots AT 191.4' NEW MH FOUND
2 4_Minor 398 R010 12 R010 13 JOYZELLE DR	8/10/2005 1033	36 10385 MHL060029 MHL060036	5 D/S 5229 SPL060034 8 VCP	236 385.0	5			5 15				3 9 3			(MHL060029A)
5 4_Minor 398 PPT 3-B2-5 9 FIREBRAND STREET ;	8/27/2012 1273	31 12732 MHS090020 MHS090021	D/S 6510 SPS090006 8 VCP	269 271.2 6	6 22			3C26 34 84	2.47			0000 0 0 0.00			
GARDEN GROVE			US 3317 SPL100009 8 VCP	320 321	1			3	1.50	3 1		11 0.66			Spot Repair, Cut roots
2 4_Minor 399 R042 10 Y BLVD 1	10/24/2005 1244	40 12441 MHS120052 MHS120053	3 D/S 4594 SPS120024 10 VCP	258 260.4	5		+++++++++++++++++++++++++++++++++++++++	5 15	1 1 1 1 1 1 1 1 1 1	2	++++++	3 4		++++	
5 4_Minor 399 PPT B1 29 PACIFIC AVE	6/8/2012 899	1 9640 MHL030011 MHL030012	P. D/S 5526 SPL030042 8 VCP	309 311 4	4 21			3C24 29 75	2.59			0000 0 0 0.00			
			3 DS 2941 SPN110024 8 VCP	370 372 1	1			3	3.00 5 1	1		10 0.68			Spot Repair, Cut roots
June	10/31/2005 1199	94 10907 MHQ130025 MHQ130026	3 D/S 4861 SPQ130033 8 VCP	310 305.4	5	++++	++++++-	5 15		1 1	++++++	1 2 4	++++++	+	
5 4_Minor 400 PPT B1 31 PACIFIC AVE	6/8/2012 835	2 8353 MHL030013 MHL030014	D/S 5421 SPL030037 8 VCP	320 323.3 1	3 21 1			3C22 26 70	2.69			0000 0 0 0.00			
		2 7627 MHJ140009 COJ140002		150 148	1			3	3.00 4	1		9 0.71			Spot Repair, Cut roots
MAP		32 12800 MHQ100006 MHQ100007		380 380.0	5	\Box	++++++-	5 15		 	+++++	0 0	++++++++	+++-	
0 4_mma 401 111 212 1		3 8474 MHL130002 MHL130003 4 9595 MHL100028 MHL100029	D/S 3133 SPL130001 8 VCP DS 3318 SPL100010 8 VCP	360 362.5 ₂ 330 331	2 21			3C22 25 69 3		1		0000 0 0 0.00			Spot Repair, Cut roots
			B D/S 5668 SPS110017 8 VCP B DS 2906 SPN140014 8 VCP	370 368.4 300 301	5			5 15	200 2	1		1 1 8 0.69			Spot Repair, Clean grease
GARDEN GROVE		42 12460 MHS120054 MHS120055		295 288.9	5			5 15	3.00 3	4		4 4			oper repair, ordar greate
MAP								0 10							
		10 13011 MHT080008 MHT080009 2 7116 MH 140029 MH 140030	D/S 6558 SPT080009 8 VCP DS 760 SPJ140039 8 VCP	375 374.8 280 284	1 21			3C11 22 64 3	2.91			0000 0 0 0.00			Spot Repair, Cut roots
			2 D/S 5588 SPP120002 8 VCP	320 316.7				7 7 14				7 16		1	
Map 2	6/14/2012 1028	84 10285 MHK050020 MHK050021	D/S 3776 SPK050034 8 VCP	295 303.2 8	6 15			3B28 29 67	2.31			1100 1 1 1 1 00			
1 4_Minor 405 29 21 13371 Hale Ave.	3/29/2004 1157	77 11578 MHK140005 MHK140006	B DS 2954 SPK140002 8 VCP D/S 5647 SPS090015 8 VCP	190 189	1			3	0.00	1		7 0.66			Spot Repair, Cut roots
2 4_Minor 405 R034 6 SUNGROVE ST 1	9/26/2005 12/4	40 12741 MHS090028 MHS090029	9 D/S 5647 SPS090015 8 VCP	365 365.3				7 7 14	3			3 6			SAG
5 4_Minor 405 PPT 3 6 PLEASANT PLACE	6/26/2012 949	9 9500 MHM100018 MHM100019	9 D/S 3425 SPM100021 8 VCP	215 222.1 5	6 19			3B25 30 73	2.43	1		4100 1 4 4.00			
			4 DS 3221 SPM110041 8 VCP 2 D/S 5358 SPP140007 12 VCP	284 282 370 381.2	1			7 7 14	3.00 2 1	1 1		6 0.61			Spot Repair, Cut roots
MAP		08 11609 MHK140003 MHK140007		344 347.6 2	7 17			3B22 26 62		***************************************		0000 0 0 0 0 0			
			4 DS 2356 SPO140020 6 VCP	297 296	1			3	3.00			6 0.77			Spot Repair, Cut roots
			D/S 6521 SPR140010 8 VCP	380 384.3				7 7 14	73 5.00	3 2		1 80 156	1		SAG
Map 2 BROOKHURST	6/7/2012 927	4 9275 MHM030031 MHM030032	2 D/S 3643 SPM030030 8 VCP	300 301.7 1	10 19			3B21 30 69	2.30			0000 0 0 1.00			
1 4_Minor 408 46 20 Eneo PI/Catherine Ave.	5/7/2004 949	5 9498 MHM100013 MHM100017	7 DS 3583 SPM100017 8 VCP	375 374	1			3	3.00 1 10.00			5 0.76 1			Spot Repair, Clear deposit
2 4_Minor 408 R061 1 ALLEY 1	11/29/2005 1145	59 11461 MHQ130013 MHQ130015	5 D/S 3818 SPQ130015 6 VCP	165 169.9				7 7 14		2		2 2			
5 4_Minor 408 PPT 4 3 LAMPSON AVENUE	6/28/2012 868	8 8689 MHK110040 MHK110041	D/S 1995 SPK110042 8 Tile	350 366.8 ₁	18			3B21 19 56	2.95 54			2111 55 110 2.00	1	2	Pipe fixed January 2008
1 4_Minor 409 23 4 9742 Belfast Dr.	3/15/2004 1075	55 10756 MHM130016 MHM130017	7 DS 2673 SPM130006 8 VCP	168 166	1			3	1.00 1	1		4 0.60			Spot Repair, Cut roots 408.7' MSA=ALIGNMENT DOWN,
2 4_Minor 409 R044 5 R042 11 Y EASEMENT 1	10/26/2005 1243	36 12438 MHS120044 MHS120057	7 D/S 4487 SPS120020 8 VCP	413 412.7			<u> </u>	7 7 14	86 5.00	<u> </u>		87 174	1	1	APPROX. 4' TO DS MH MHS120057, 2 SAGS
5 4.Minor 409 PPT 3-82-6 15 STREET		24 12694 MHS100038 MHS100002	2 D/S 6502 SPS100020 8 VCP	390 375.5 1				2024				0000			
		24 12694 MHS100038 MHS100002 38 11139 MHO110020 MHO110021		390 375.5 1	4 18			3B21 23 60	2.01	 	++++++	0000 0 0 0.00			Spot Repair, Cut roots
2 4_Minor 410 R059 3 Y EUCLID ST 1	11/21/2005 1182	28 11827 MHP140026 MHP140025	5 U/S 5392 SPP140042 8 VCP	400 385.6 4				3 7 14	3.00	2		10 18			SMALL SAG
	3/24/2004 8/12/2005 1314	MHN120023 MHN120024 46 13147 MHQ070027 MHQ070028	4 DS SPN120026 8 VCP 3 D/S 5895 SPQ070033 8 VCP	127 127 385 387.0 1	6 2			9 14	3.00	1	++++++	4 0.73		1	Replace and upsize pipe
MAP 2 July-															
			D/S 4736 SPL070027 8 VCP	300 303.7 1	8 16		+++++++++++++++++++++++++++++++++++++++	3B21 25 58	2.32	+	++++++	0000 0 0 0.00			
		21 11022 MHP120017 MHP130003 51 12953 MHP080023 MHP080026	3 DS 5138 SPP120016 6 VCP 5 D/S 6202 SPP080018 8 VCP	332 332 286 288.0	5 1 1 1			8 14	3.00 1 1 77 49 5.00 1	1		1 127 253 1			Spot Repair, Repair lateral
MAP															
1 4_Minor 413 15 2 10000 Dakota	3/3/2004 1071		7 DS 3087 SPN140040 6 VCP	289 290.3 355 133	4 18			3B14 22 58	2.64 1.50	 		0000 0 0 0.00		1 TBI	Spot Repair, Repair lateral
MAP PAI MA VISTA			D/S 1893 SPK060033 8 VCP		3 1 2 1			7 14				84 168			
5 4_Minor 413 PPT 3-2 20 STREET 1 4_Minor 414 20 17 9742 Dakota Ave.		62 13160 MHP050006 MHP050008 09 12010 MHM140027 MHM140028	B D/S 5612 SPP050006 8 VCP B DS 2720 SPM140011 8 VCP	277 282.2 295 292 1	2 16		+++++++++++++++++++++++++++++++++++++++	3B12 18 50		1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	++++++	0000 0 0 0.00		++++	Spot Repair, Cut roots
			2 D/S 5779 SPS100034 8 VCP	320 319.2 4				6 14				23 46			
Man 2	6/8/2012 899	0 8991 MHL030010 MHL030011	D/S 4529 SPL030017 8 VCP	281 283	1 15			3B11 16 46	2.88			0000 0 0 7.00			
1 4_Minor 415 5 13 10536 Leilani St.	2/9/2004 1123	30 11231 MHO100027 MHN100009	B DS 2565 SPO100028 8 VCP B D/S 4764 SPQ100021 8 VCP	212 212	3			3	3.00 1			2 0.56			Spot Repair, Cut roots
MAP 2 luks				290 294.5 4	2			6 14		 	++++++	0 0			
		3 9024 MHL090021 MHL090022	P. D/S 3336 SPL090019 8 VCP B US 2661 SPM110017 8 VCP	220 279.2 ₆				3A26 24 58		 		0000 0 0 0.00			Spot Repair, Cut roots
			3 US 2661 SPM110017 8 VCP	330 322 262 262.1 4	2			6 14				0 0			opur repair, cut roots
5 4_Minor 416 PPT 3-82-3 15 CANDY LANE	0/40/004 - 4000	B4 13086 MHR080015 MHR080017	7 D/S 5712 SPR080024 8 VCP	273 276.4 6				24.26				0000			
9 4_MINOT 410 PPT 3-82-3 15 CANDY LANE 1	8/16/2012 1308	13086 MHR080015 MHR080017	D/3 5/12 SPR080024 8 VCP	2/3 276.4 6	13 13			3A26 32 64	2.00			0000 0 0.00	+++++++++++++++++++++++++++++++++++++++		

		General	Pipe		Structural Defect Coding	Pipe air air scool ct Scool	Operational and Maintenance	Some Astring	Sonstruction Features sn occurrence sn occur	
6 No.			er ID er ID wer ID.	(£)		formed llapsed llapsed mage mage ing Fail ing Fail struct I struct I al Deferal Defera	leat Inc	Maint F efects efect S	Intruding Seal Intruding Seal A Abanc	
Sel Institute No. 1		Existing MH ID Previous MH ID	ion of G		ture Broken Hole Joint B H J	Structu	Deposits Roots (R) D Fine (F) Tap (T) Medium (M) Bit	Infiltration Obstacles Vermin	Line Material W Line Line Line Material W Line	
Phisse Confree Rever	CCTV Date	Start End Start End	Directi Existir Previo Size (i	CCTV C CTV C C C C C C C C C C C C C C C	0 S M S H SV VV SV VV S M L S M I	L A V H P S LF RP S A LOTE	AE AE Other Of AGS B % L % Z % B L J C B L J <t< td=""><td></td><td>L U R LD RD SRH SRB SRL Z SA CU MC D W U</td><td>Comments Recommendations</td></t<>		L U R LD RD SRH SRB SRL Z SA CU MC D W U	Comments Recommendations
1 4_Minor 417 20 4 9192 Leroy St. TOWN AND			DS 2974 SPL120039 8 VCP	70 78 1		3	3.00	2 0.56		Spot Repair, Cut roots
2 4_Minor 417 M004 6 COUNTRY DR 5 4_Minor 417 PPT MAP 5 4_Minor 417 PPT 12-2-1 12 MONROE STRE		10147 10148 MHL070018 MHL070019 7722 7723 MHJ130013 MHJ130014	D/S 5197 SPL070012 8 VCP	110 107.7 2 1 3 3 332 331.5 5 1 12		2025		0 0		
1 4_Minor 418 35 12 13081 Newland	4/12/2004	7655 7656 MHK130027 MHK130028	B DS 693 SPK130029 8 VCP	245 236 1		3A25 18 47	3.00 1	2 0.56		Spot Repair, Clean grease
2 4_Minor 418 G034 14 Y FREDRICK DR 5 4_Minor 418 PPT MAP STREET 3-1 7 STREET		12826 12608 MHQ090017 MHQ090018 11159 11160 MHN090054 MHN090055	3 D/S 5483 SPQ090002 8 VCP 5 D/S 2578 SPN090004 8 VCP	290 280.1 1 2 315 309.4 3 7 14	2	5 14	1 48 5.00 3 10.00	1 53 105		
1 4_Minor 419 35 23 8122 Central Av	9. 4/12/2004	7047 7048 MHJ140003 MHJ140004	DS 674 SPJ140002 8 VCP	330 330 1		3A23 24 55 3	3.00 1 1	2 0.57		Spot Repair, Cut roots
2 4_Minor 419 G024 3 Y CANDY LN MAP	8/18/2005 1	12221 12223 MHQ080025 MHQ080027	7 D/S 6434 SPQ080019 8 VCP	262 264.7 1 1 1	2	5 14	1 60 5.00	61 122		
5 4_Minor 419 PPT 4 7 LORNA STREE		8411 8412 MHK120020 MHK120021		332 330.2 3 13		3A23 16 45		2100 1 2 2.00 1		
1 4_Minor 420 38 4 13332 Wilson Si 2 4_Minor 420 G025 9 KATHY LN			7 US 718 SPK140034 8 VCP 3 D/S 5840 SPQ080040 8 VCP	370 368 1 1 345 347.2 4 1		3 5 14		5 5		Spot Repair, Cut roots
5 4_Minor 420 PPT 2-1-2 15 VILLAGE RD		12033 12034 MHM120023 MHM120024		329 329.8 3 2 10		3A23 15 38	2.53	0000 0 0 0.00		
1 4_Minor 421 38 13 13411 Wynant E 2 4_Minor 421 R025 1 MORGAN LN			B DS 806 SPJ140015 8 VCP 2 D/S 6457 SPQ110057 8 VCP	300 317 1 220 218.1 1 4		5 14		2 0.80		Spot Repair, Cut roots
5 4_Minor 421 PPT 3-B2-3 7 PURYEAR LAN	= 8/20/2012 1	13073 13071 MHR080003 MHR070001	U/S 6573 SPR080011 8 VCP	338 343.4 2 1 10 1		3423 44 27	264	0000 0 0 0 0		
1 4_Minor 422 48 19 9661 Adeline Av	e. 5/14/2004	9531 9533 MHM100029 MHM100031	1 DS 3236 SPM100032 8 VCP	295 294 1 1		3	5.55	1 0.50		Spot Repair, Cut roots
June	R 10/18/2005 1	12752 12753 MHS120027 MHS120028	3 D/S 5656 SPS120036 8 VCP	225 228.4 1 4		5 14	1 1 1	2 4		
5 4_Minor 422 PPT B1 19 DESSER LN	6/7/2012	8996 8989 MHL030021 MHL030009	D/S 4534 SPL030022 8 VCP	270 271.8 4 14 2		3A22 20 50	2.50	0000 0 0 3.00		
1 4_Minor 423 47 3 9781 Lenore Dr.	5/10/2004	9488 9407 MHM110015 COM110005	5 US 3572 SPM110014 8 VCP	95 97 1			1.50		deb fris	Spot Repair, Clear D&R
			9 D/S 5667 SPS110016 8 VCP	280 280.0 1	3	4 14	1 1 5.00 4	6 9		
5 4_Minor 423 PPT 2 July- 2 July- 2 7 BIXBY AVE	6/25/2012	9023 9022 MHL090021 MHL090020	U/S 3335 SPL090018 8 VCP	330 279.2 2 1 10		3A22 ₁₃ 35	2.69	0000 0 0 0.00		
1 4_Minor 424 2 3 12082 Ora Dr. 2 4_Minor 424 G051 4 ROAN RD	2/4/2004 1	11869 11870 MNE27010 MNE27011	DS 3806 SPP090015 8 VCP 3 U/S 3858 SPR130016 8 VCP	340 363 1 1 330 304.8 1	3	3 4 14	3.00	0 0.00		Spot Repair
5 4_Minor 424 PPT 3-3 7 GAIL LANE		12236 12237 MHQ070024 MHQ070025		285 289.7 2 5 14	-	3A22 21 51	2.43	0000 0 0 0.00		
1 4_Minor 425 4 3 12422 Oakwood 2 4_Minor 425 G045 3 WILLIWOOD A			DS 3794 SPP100021 8 VCP	350 349 1 1 362 359.5 2		3 4 14	1.50	0 0.00		Spot Repair
5 4_Minor 425 PPT 3-3 11 DANIEL AVE		12233 12237 MHQ070021 MHQ070025		290 295.6 2 4 10	2	3A22 16 38		0000 0 0 0 0 0		
1 4_Minor 426 8 22 12740 Main St.	2/18/2004	MHO110005-A MHO120001		74 74 1 1		3	3.00	0 0.00		Spot Repair
2 4_Minor 426 R063 5 TRASK AV	12/1/2005 1	11915 11917 MHP150004 MHP150005	5 D/S 4819 SPP150005 8 VCP	245 235.3 1		6 7 13		0 0		
5 4_Minor 426 PPT 2 July- 2 9 MEADE STREE			D/S 3331 SPL090014 8 VCP	75 352.6 2 5 10		3A22 17 39	2.29	0000 0 0 0.00		
1 4_Minor 427 22 5 9900 Acacia Ave 2 4_Minor 427 G005 1 WASCO RD			DS 2652 SPM120009 8 VCP D/S 2081 SPK070038 8 VCP	145 147 1 1 337 340.6 7 2		3 9 13	3.00	0 0.00		Spot Repair
June Map 2										
5 4_Minor 427 PPT B1 10 PERDIDO STRE 1 4_Minor 428 24 9 13041 Lincoln		9220 9215 MHM020030 MHM030039 11823 11738 MHP130047 MHP130013	3 D/S 3589 SPM020022 8 VCP 3 DS 5294 SPP130043 8 VCP	265 263.7 1 2 14 265 261 1		3A21 17 46	2.71 1 1 3.00	1100 1 1 1.00		Spot Repair
2 4_Minor 428 M014 4 TWINTREE AV	9/2/2005	12171 12174 MHR100022 MHR100024	D/S 5912 SPR100011 8 VCP	250 252.0 4 5		9 13		0 0		
5 4_Minor 428 PPT 3-B2-5 4 FALLINGLEAF STREET	8/28/2012	12710 12711 MHS100017 MHS100018	B D/S 6490 SPS100008 8 VCP	333 333.2 1 1 14		3A21 16 45	2.81	1100 1 1 1.00		
1 4_Minor 429 26 3 13371 Ontario D 2 4_Minor 429 G018 15 BOWLES AV			B DS 2519 SPM140042 8 VCP S D/S 1904 SPK050039 8 VCP	320 321 1 1 250 247.0 1 3 4		3 8 13		0 0.00		Spot Repair
MAP 2 July-										
5 4_Minor 429 PPT 1 7 MAC STREET 1 4_Minor 430 29 24 13311 Kelly St.		10303 10304 MHK080008 MHK080009 11573 11574 MHL140009 MHL140010	0 D/S 3888 SPK080012 8 VCP 0 DS 2950 SPL140035 8 VCP	190 427.7 8 14 244 244 1		3A18 22 50 3	2.27	0000 0 0 0.00		Spot Repair
2 4_Minor 430 G019 6 ELMER LN			D/S 1833 SPK050020 8 VCP	365 364.8 2 3 3		8 13	2	2 4		
			D/S 6497 SPS100015 8 VCP	285 286.4 1 2 13		3A21 16 43	2.69	0000 0 0 0.00		
1 4_Minor 431 30 16 8601 Trask 2 4_Minor 431 M015 5 STIMSON ST			5 DS 998 SPK150003 8 VCP 5 D/S 5924 SPR100026 8 VCP	55 330 1 1 254 254.4 5 2 1		3 8 13	3.00	0 0.00		Spot Repair
June Map 2										
5 4_Minor 431 PPT B1 24 PACIFIC AVE 1 4_Minor 432 32 5 12672 Magnolia	3/31/2004		US 3213 SPL110055 8 VCP	290 296.7 1 1 12 381 382 1		3A21 14 39 3		0000 0 0 5.00		Spot Repair
2 4_Minor 432 R037 5 Y ALLARDA AV	9/28/2005	11635 12123 MHS090002 MHS090003	B D/S 5785 SPS090018 8 VCP	300 295.1 1 5 2		8 13	2 12 5.00 4 10.00 1	19 39 58 1		
5 4_Minor 432 PPT 3-B2-1 11 DONNA LN	8/2/2012	12216 12217 MHQ080015 MHQ080016	6 D/S 6429 SPQ080014 8 VCP	357 359.3 1 6 11		3A21 18 41	2.28	0000 0 0 0.00		
1 4_Minor 433 32 15 12640 Aristocat Ave.	4/1/2004	8384 8385 MHK110013 MHK110014	1 DS 3358 SPK110012 8 VCP 1 D/S 5914 SPR100013 8 VCP	342 342 1		3	3.00	0 0.00		Spot Repair
2 4_Minor 433 M013 12 Y TAMERLANE D 1 4_Minor 434 32 23 8911 Acacia Ave	4/1/2004	8394 8395 MHK120010 MHK120011	DS 3368 SPK120012 8 VCP	305 310.0 2 3 1 1 1 261 258 1 1	1	8 13		69 137 0 0.00		Spot Repair
2 4_Minor 434 M015 7 HOGGAN AV	9/6/2005	12188 12189 MHR100035 MHR100036	5 D/S 5957 SPR100028 8 VCP	300 301.4 1 3 2 1		7 13	8 5	13 21		
5 4_Minor 434 PPT B1 37 MURLINE DRIV	E 6/11/2012 1	10116 10117 MHL050020 MHL050021	D/S 4705 SPL050040 8 VCP 2 US 727 SPJ120007 8 VCP	292 293.4 1 4 10 100 101 1		3A21 15 36	2.40	0000 0 0 0.00		
1 4_Minor 435 37 13 12812 Wynant I 2 4_Minor 435 M005 8 JOYZELLE DR			US 727 SPJ120007 8 VCP D/S 3737 SPL060024 8 VCP	100 101 1 1 271 273.8 4 2 1		3 7 13	3.00	1 17 31		Spot Repair
5 4_Minor 435 PPT 3-1 8 ARTCRAFT AVI			D/S 2573 SPO090036 8 VCP	335 335.6 1 3 10		3A21 14 35	2.50	0000 0 0 0.00		
1 4_Minor 436 37 16 12811 Jackson 3 2 4_Minor 436 M004 11 BLVD			DS 731 SPJ120011 8 VCP	300 296 1		3	3.00	0 0.00		Spot Repair
2 4_Minor 436 M004 11 BLVD 5 4_Minor 436 PPT 3-1 12 PATRICIA DR		10152 10153 MHL070023 MHL070024	D/S 5202 SPL070017 8 VCP D/S 5563 SP0050023 8 VCP	155 154.4 2 3 2 350 352.9 1 1 10		7 13		0 0		
1 4 Minor 427 27 19 9292 Accein Aur			2 DS 732 SPJ120012 8 VCP 5 D/S 5916 SPR100015 8 VCP	350 352.9 1 1 10 259 270 1		3A21 12 33 3	2.75	0000 0 0 0.00		Spot Repair
2 4_Minor 437 M013 8 DOWNING ST	9/1/2005 1	12175 12176 MHR090003 MHR100025	5 D/S 5916 SPR100015 8 VCP	319 323.8 4 3		7 13				
5 4_Minor 437 PPT 3-B2-1 19 ATLANTA STRE	ET 8/1/2012 1	12941 12943	D/S 9192 8 VCP	94 243 3 10		3A13 13 33	2.54	0000 0 0 0.00		
1 4_Minor 438 39 9 13191 Newland 2 4_Minor 438 G034 7 Y ROBERT LN			DS 697 SPK130033 8 VCP 4 D/S 6419 SPQ090049 8 VCP	220 225 1 160 163.8 2 2 1	1	3	3.00	4 25 45	 	Spot Repair
5 4_Minor 438 PPT 3-3 1 FOSTORIA STREET	7/26/2012	13159 13158 MHP050009 MHP050010	D/S 5609 SPP050009 8 VCP	263 266.4 4 12		3A14 16 40		0000 0 0 0.00		
1 4_Minor 439 39 13 13360 Newland 2 4_Minor 439 G032 2 BROOKSHIRE	4/15/2004 AV 8/31/2005 1	7663 7664 MHK140012 MHK140013 12474 12571 MHQ090034 MHQ090038	B DS 701 SPK140027 8 VCP 5 D/S 4767 SPQ090031 8 VCP	330 331 1 365 362.8 3 2	1	3 6 13	3.00	0 0.00		Spot Repair
5 4_Minor 439 PPT 3-2 22 PALMA VISTA STREET	7/26/2012	13160 13158 MHP050008 MHP050010	D/S 5610 SPP050008 8 VCP	292 292 7		3A14 16 40	2.50	0000 0 0 0.00		
1 4_Minor 440 39 14 Newland St.	4/15/2004	7664 7665 MHK140013 MHK140020	DS 702 SPK140028 8 VCP B D/S 556 SPS130012 8 VCP	25 12 1				0 0.00		Spot Repair
2 *WILLUI #40 KUD4 3 Y BLACKBIRD ST	12/5/2005	0730 NHS130003	D/2 320 3F3130012 8 VCP	130 139.3 1 2 3		6 13	2 1 15.00 6 5.00	9 24		

		General			Structural Defect Coding		Operational and Maintenance		Construction Features	
9 6 2 8			Pipe		sed Pipe e B B B	Defects Solders Index		Int Rating	laneous nn Featur nardonec	
ON O O O O O O O O O O O O O O O O O O	Exis	sting MH ID Previous MH ID	Sewer III	(i) 450 Crack Fracture C F		Sags Luctural I Luctural I	Deposits Roots (R) D Fine (F) Tap (T) Medium (M) B	Infiltration Obstacles Vermin Obstacles	Intruding Seal Seal Seal Line Material W Line Material W Line W Line M L	
Priority Reversa Reversa No	CCTV Date Star	rt End Start End	Direction Existing Previous Size (in) Joint Lea	CCTVL C W W P I C W W S	B H J D X O S H SV VV SV VV S M L S M L A V H P S LF F	P S A D A D A A D A C D A A D A C D A D A C D A D A	AE Other 6 L % Z % B L J C B L J C B L J C B	all (B)	D D L U R LD RD SRH SRB SRL Z SA CU MC FD 20 Com	nments Recommendations
June Map 2 DAVMOR AVE	6/15/2012 8042	2 8045 MHK060014 MHJ060003	D/S 1895 SPK060035 8 VCP	275 273.8 2 14		3A12 16 44 2.75		0000		
1 4_Minor 441 39 23 8732 Garden Gro. Blvd.	/e 4/15/2004 7632	2 7652 MHK130007 MHK130021	DS 829 SPK130047 8 VCP	337 329 1		3 3.00		0 0.00		Spot Repair
2 4_Minor 441 R007 3 MAGNOLIA ST			D/S 4996 SPL050062 8 VCP	255 253.6 5 1		6 13		0 0		
5 4_Minor 441 PPT 3-B2-5 15 FREDRICK DRI\\ 1 4_Minor 442 42 14 Blvd.	/e	08 12564 MHQ090018 MHQ090019 00 7631 MHK130005 MHK130006	D/S 4765 SPQ090029 8 VCP DS 678 SPK130008 8 VCP	275 278.8 2 11 430 402 1		3A12 13 35 2.69		0000 0 0 0.00		Spot Repair
2 4_Minor 442 G035 3 COMSTOCK RD	9/6/2005 1280	08 12809 MHQ100016 MHQ100017	D/S 6342 SPQ100032 8 VCP	330 332.4 2 1 2		5 13 2	1	3 5		
5 4_Minor 442 PPT 3-3 2 STREET 1 4_Minor 443 42 23 8082 Trask Ave.	4/20/2004 7076	58 13155 MHP050010 MHP060005 66 7079 MHJ150004 MHJ150005	D/S 5608 SPP060003 8 VCP DS 770 SPJ150004 10 VCP D/S 4956 SPQ130035 8 VCP	260 261 1 11 1 265 265 1 1		3A11 12 34 2.83 3 3.00		0000 0 0 0.00		Spot Repair
MAP 2 July-				230 220.4 1 1 2 1		5 13 2	1 5.00 2 2 1	8 13		
5 4_Minor 443 PPT 3 9 MEADE STREET 1 4_Minor 444 44 5 Blvd.	/e	9 9360 MHL130012 MHK130001	U/S 3323 SPL100015 8 VCP DS 3165 SPL130025 8 VCP	369 370.4 5 9 248 251 1		3925 14 37 2.64		0000 0 0 0.00		Spot Repair
2 4_Minor 444 G033 4 Y MORGAN LN LOARA STREET	9/1/2005 1281	14 12813 MHQ090005 MHQ090004	U/S 6410 SPQ090040 8 VCP	190 199.9 1 2 1 1		5 13 1 57 5.	00 2 5.00 2	9 71 131		
5 4_Minor 444 PPT 3-2 15 EASEMENT 1 4_Minor 445 47 28 12052 Cole St.	5/12/2004 9552		DS 3285 SPM090027 8 VCP	150 152.9 2 9 150 145 1		3922 11 31 2.82 3 3.00		0000 0 0 0.00		Spot Repair
2 4_Minor 445 M010 3 MORGAN LN June Map 2			D/S 5848 SPQ080048 8 VCP	253 253.4 1 4		5 13	7 1 1	8 10		
5 4_Minor 445 PPT B1 18 DESSER LN 1 4_Minor 446 48 1 9602 Alwood Ave		5 8996 MHL030020 MHL030021 5 9556 MHM090029 MHM090030	D/S 4533 SPL030021 8 VCP	270 272.7 1 3 9 275 276 1		3921 13 32 2.46		0000 0 0 2.00		Spot Repair
2 4_Minor 446 R006 11 MAUREEN DR	8/4/2005 9739	9 9740 MHL050008 MHL050009	D/S 5066 SPL050011 8 VCP	270 268.5 1 4		5 13		0 0		
5 4_Minor 446 PPT 3-4 8 9th STREET 1 4_Minor 447 48 21 9601 Adeline Ave	5/14/2004 9533	3 9534 MHM100031 MHM100032	D/S 6317 SPP070003 8 VCP DS 3270 SPM100034 8 VCP D/S 4994 SPL050060 8 VCP	285 287.2 1 2 9 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1		3921 12 31 2.58 3 3.00		0000 0 0 0.00		Spot Repair
2 4_Minor 447 R007 7 Y RUSH ST 5 4_Minor 447 PPT MAP 5 4_Minor 447 PPT 3-4 1 NORMA LANE	7/30/2012 1222	26 12227 MHQ070014 MHQ070015	D/S 6439 SPQ070009 8 VCP	210 209.2 2 3		5 13 6 5. 3914 13 31 2.38	00 4 1	0000 0 0 0.00		
1 4_Minor 448 49 6 12062 Gilbert St. 2 4_Minor 448 R018 4 CHAPMAN AV			US 3267 SPL090001 10 VCP D/S 6151 SPS090016 12 VCP	427 427 1 1 340 332.2 2 3		3 3.00 5 13		0 0.00		Spot Repair
June Map 2 Y KATELLA AVE S 4_Minor 448 PPT B1 69 Y KATELLA AVE	6/14/2012 7981	1 7982 MHK050044 MHK050045	D/S 1837 SPK050024 8 VCP	270 280.4 5 24 8		3825 37 58 1.57		0000 0 0 0.00		
1 4_Minor 449 50 18 Essement/9301 Lenore 2 4_Minor 449 G033 7 KATHY N		0 9581 MHL110020 MHL110021	DS 3307 SPL110022 8 VCP D/S 6414 SPQ090044 8 VCP	130 132 1 220 219.5 1 3		3 3.00		0 0.00		Spot Repair
2 4_Minor 449 G033 7 KATHY LN MAP MAP 5 4_Minor 449 PPT 2-1-4 16 2-1-5 1 FAYE AVE ALLE		72 11271 MHN090017 MHN090016		90 179.2 5 4 8		3825 17 38 2.24	1	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	2 88.1' MSA . Inst	pection Completed
MAP		9 9020 MHL090017 MHL090018	Clay	90 320 1		3 1.50		333 0.91		Spot Repair
5 4_Minor 450 PPT 2-2-1 18 DALE STREEET 1 4_Minor 451 14 7 x 10151 Crosby	3/1/2004 1128	66 8437 MHK110028 MHK110029 89 11071 MHN130024 CON130002		350 345.4 4 4 8 410 417 1	1	3824 16 36 2.25 2 2.00 69	2 30 1	1100 3 6 2.00 2 218 0.94 2		Replace pipe
2 4_Minor 451 R042 14 GARDEN GROV MAP GARDEN GROV	10/24/2005 1246	61 12455 MHS120056 MHS120045		37 35.1		6 6 12 6		6 12	SAG	
5 4_Minor 451 PPT 3-1 11 PATRICIA DR 1 4_Minor 452 50 3 x 12591 Gilbert St.	5/18/2004 9519	9 9520 MHL110059 MHL110060	D/S 5562 SPO050022 8 VCP DS 3226 SPL110003 8 VCP 3	285 285.8 2 1 8 245 258 1 1		3822 11 29 2.64 2 2.00 5	79 2 12 3 2	0000 0 0 0.00		Replace pipe
2 4_Minor 452 R012 15 Y TRUE WY MAP ASPENWOOD			D/S 6201 SPP080017 8 VCP	300 298.6 1 4 2		7 12 1 19 5.	00 2	22 42		
5 4_Minor 452 PPT 3-82-6 7 LANE 1 4_Minor 453 42 3 x 8031 Larson Ave	4/16/2004 7058		DS 759 SPJ130031 8 VCP 3	295 302.1 2 3 8 270 269 1 1		3822 13 31 2.38 2 2.00 58	2 4	0000 0 0 0.00		Spot Repair, Clear D&R
2 4_Minor 453 M003 10 MARCHAND AV	8/8/2005 1082	28 10830 MHL070038 A MHL070038	D/S 4844 SPL070038 8 VCP	380 191.7 3 3 1		7 12		0 0		
5 4_Minor 453 PPT 3-B4-1 3 CHAPMAN AVE	9/5/2012 1295	57 12958 MHP090026 MHP090027	D/S 6265 SPP090030 15 VCP	350 341 1 5 8		3821 14 31 2.21		0000 0 0 0.00		
									CU hea	
									Vy Bo W	
8232 Garden Gro	ve .								in nex t	
1 4_Minor 454 43 8 x Bivd. 2 4_Minor 454 G010 8 ABERDEEN LN	4/21/2004 7719 7/25/2005 1080	9 7103 MHJ130004 MHJ130005 07 10290 MHK070006 MHK070007	DS 758 SPJ130030 8 VCP 3 D/S 5934 SPK070027 8 VCP	330 293 1 4 4 249 252.0 1 1 1 4		6 12 2 1.00 14 2 2 1 2 2 1 2 1 2 1 2 1 2 1 2 1 2 1		14 0.71 2 4 6	1 4 MH	Spot Repair, Clear D&R
5 4 Minor 454 PPT 1 6 MACNAB STREI	T 6/19/2012 1030	09 10310 MHK080014 MHK080015	D/S 5890 SPK080018 8 VCP	293 299.1 1 3 8		3821 12 29 2.42	58	2100 58 116 2.00 12 0.64		
1 4_Minor 455 6 19 10621 Vienna St. 2 4_Minor 455 G037 2 BETA AV	2/12/2004 1231 9/9/2005 1255	11 12312 MHO110008 MHO110009 54 12557 MHQ100036 MHQ100039	DS 4431 SPO110021 8 VCP D/S 6069 SPQ100012 8 VCP	310 306 2		2 1.00 6 12 5	7 2 2	7 12 0.64		Spot Repair, Cut roots
5 4_Minor 455 PPT 3-B2-2 5 DELLA LANE	8/16/2012 1296	67 12969 MHP070003 MHP080004	D/S 6250 SPP080027 8 VCP	280 283.2 1 3 8		3821 12 29 2.42		0000 0 0 0.00		
1 4_Minor 456 30 2 Aliay by Central Ave. 2 4_Minor 456 R018 6 Y CHAPMAN AV		17 11518 MHL130026 MHL130027 13 13014 MHS090006 MHS090007		333 333 2 3 300 300.2 2 2 2 2		2 2.00 2 6 12 1 8 5.	2.00 4	12 0.76	HIGH FLOW	Spot Repair, Clear D&R
5 4_Minor 456 PPT 3-3 10 DANIEL AVE		29 12233 MHQ070017 MHQ070021		285 286.6 1 3 8		3821 12 29 2.42		0000 0 0 0.00		
1 4_Minor 457 44 11 X 13112 Magnolia X Ave. 2 4_Minor 457 G034 2 Y ROXBURY RD			US 3088 SPL130026 8 VCP 5 D/S 6339 SPQ100029 8 VCP	180 176 1 1 325 331.6 1 2 1 1		2 2.00 6 12 8 12 5.	1 2 1	11 0.80 23 47		Spot Repair, Cut roots
5 4_Minor 457 PPT 3-82-3 13 CANDY LANE		34 13081 MHR080015 MHR080012					1 9.00			
1 4_Minor 458 48 15 12262 Lambert C	r. 5/13/2004 9527	7 9529 MHM100025 MHM100027	DS 3232 SPM100028 8 VCP	150 292.9 1 3 8 1 185 190 1		3821 12 29 2.42 2 2.00	3 1	9 0.71		Spot Repair, Cut roots
2 4_Minor 458 G034 5 Y ROBERT LN 5 4_Minor 458 PPT MAP 5 1_Minor 458 PPT 2.1-5 2 LUCILLE STREE		20 12821 MHQ090011 MHQ090012 54 11565 MHL140002 MHL140003	D/S 6417 SPQ090047 8 VCP D/S 3099 SPL140025 8 VCP	200 202.2 2 1 2 313 317.4 3 8		5 12 41 5. 3813 11 27 2.45	00 1 10.00	4 46 88		
1 4_Minor 459 22 17 9770 Russell Ave	3/12/2004 1200	04 12005 MHM140021 MHM140022	DS 2681 SPM140005 8 VCP D/S 5933 SPK070026 8 VCP	233 231 1 267 265.9 2 3		2 2.00 5 12 1	1 2 1	1 4100 1 4 4.00 8 0.69 1 2		Spot Repair, Cut roots
5 4_Minor 459 PPT 4-B1-5 13 INGRAM AVE			D/S 2457 SPM160021 8 VCP	287 287.8 1 8		3811 9 25 2.78		0000 0 0 0.00		
1 4_Minor 460 40 14 13111 Jefferson 3	t. 4/15/2004 7682	2 7683 MHJ130010 MHK130044	DS 716 SPK130045 8 VCP	331 335 1		2 1.00	4	7 0.60		Spot Repair, Cut roots
2 4_Minor 460 G010 14 MAC MURRAY S 5 4_Minor 460 PPT MAP 5 1_UCILLE STREE		21 10322 MHK070002 MHK070003 51 11562 MHL130037 MHL130038	D/S 4727 SPK070002 8 VCP D/S 3096 SPL130034 8 VCP	289 290.0 1 3 1 313 314.5 1 8		5 12 1 3811 9 25 2.78		2 3 4	+++++++++++++++++++++++++++++++++++++++	
1 4_Minor 461 16 1 16 2 10701 Dorothy A		03 11104 MHO140032 MHO140033		297 301 2		2 1.00		7 0.64 1	2 1 TBI	Replace pipe
2 4_Minor 461 M003 11 M003 12 Y MARCHAND AV	8/8/2005	MHL070038 A MHL070040	D/S SPL070038A 8 VCP	198 198.2 1 1 1 2 1		5 12 1 24 5.	00	5 30 55	1 189.1' MSA=?	

	<u> </u>			General		1		Strui	ctural Defect Coding					Ope	erational and Mainte	enance		ı		1 1	Construction Feat	ures	W	ชี _	
			\$		Pipe G					ed ed Pipe	ailure epair	efects efect Sc Index							t Score	2000 X			aneous n Featur	ey Aban andoned	
	No.	Tape Nc DVD No Inspec.	Existing Exi	ng MH ID Previous MH ID	of Came Sewer ID Sewer III	nent	Crack	Fracture Broken I	Hole Joint	Deform	Surface Damag Lining F Point R Sags	ctural D ctural D Defect	Deposits		Roots (R)	,	nfiltration Obs		ick Mair A Defect	Tap	(Lateral) Line	Intruding Seal Material	Miscella	for Surv	
nase iority anking	ontracto ape No. VD No.	eversal	VD Wat		rection risting S cisting S evious are rial	IS Comi	С	F B	0 S	D X	ACP Qu	otal Stru	AE AE	Other Fine (F)	Tap (T) N	Medium (M) Ball (B)	0	B V	ACP Qu	&M Def	T L	IS	otal Co.	Seasons SIS Ident	
1 4_Minor 462					DS 2730 SPM140021 8 VCP	350 359	2 M S H	L C M S H SV VV S	VVVSMLSML	AVHP	S LF RP S a	2 2.00	GS B % L %	2 % B L J	C B L J C E	1 CBLJCG	D R W C Z	% C R		0.89 FD FL	L BI BD D L U R LD R	D SRH SRB SRL	Z SA CU MC F	© Commen	nts Recommendations Spot Repair, Cut roots
2 4_Minor 462	9 G008 3 MAP		FORTNEY DR 7/21/2005 8543	8548 MHJ080009 MHJ080014	D/S 2043 SPJ080010 8 VCP	388 390.3 1	1 3					5 12	2	2 3	1				8 13	3					
5 4_Minor 462 1 4_Minor 463	PPT 3-B2-2 12 29 25		13382 Kelly St. 3/29/2004 11575	11574 MHL140011 MHL140010	D/S 6175 SPP070006 8 VCP US 2951 SPL140036 8 VCP	305 238.3 244 245	8	1			3800	8 24 3.00 2 2.00		2	1	2			3200 2 6	6 3.00 4 0.88					Spot Repair, Cut roots
2 4_Minor 463	R010 5		Y LAURIANNE LN 8/10/2005 9744 ASPENWOOD	10117 MHL050013 MHL050021	D/S 4990 SPL050056 8 VCP	260 266.4 1	1 3					5 12	76 5.00	5		1			83 16	62 1					
5 4_Minor 463	3-B2-6 6		LANE 8/30/2012 12415 12850 Brookhurst	12417 MHT120022 MHT120024		272 275	8				3800	8 24 3.00							0000 0 0	0.00					
1 4_Minor 464 2 4_Minor 464	28 25 R064 4				DS 2817 SPM120004 10 VCP D/S 557 SPS130013 8 VCP	330 329 92 105.1 1	1 3	1				2 2.00 5 12	7	2		1			9 16	6 0.54					Spot Repair, Cut roots
5 4_Minor 464 1 4_Minor 465	PPT 2-1-2 8			12043 MHM110040 MHM110041	D/S 2749 SPM110045 8 VCP DS 4435 SPP110043 8 VCP	170 279.5 9 330 332 1	9 7				3729	25 48 1.92		1 1					0000 0 0	0.00					Spot Repair, Cut roots
2 4_Minor 465	R019 8		CHAPMAN AV 8/30/2005 13053	13052 MHR090010 MHR090009	U/S 6228 SPR090009 12 VCP	320 362.1 3						5 12							0 0	0					
5 4_Minor 465	PPT 3-4 7		9th STREET 7/31/2012 12993	12994 MHP070023 MHP070024	D/S 6316 SPP070002 8 VCP	285 289.2 3	4 7				3723	14 31 2.21							0000 0 0	0.00					
																								me nt	
1 4_Minor 466	10 3		11300 Stanford Ave. 2/20/2004 11026	11027 MHP120026 MHP120027	DS 5141 SPP120019 8 VCP	329 96 1						2 2.00							3	3 0.65	1		1	on bott om	Spot Repair, Clear obstacles
2 4_Minor 466	MAP				D/S 5706 SPS110024 8 VCP	280 278.2 1						5 12		3					3 3	3					
5 4_Minor 466 1 4_Minor 467			Walnut Ave. 3/2/2004 11761		DS 4635 SPP110037 6 VCP	115 34 1	3 7					13 30 2.31							0000 0 0	0 0.00	1				Spot Repair
2 4_Minor 467 5 4_Minor 467	G051 10 MAP 2-2-3 1			11985 MHR140028 MHR140029 7690 MHK150010 MHK150011	D/S 3865 SPR140031 8 VCP Clay D/S 765 SPK150017 8 Tile	275 259.6 165 169 3	7	2 2	+++++		3723	4 12 10 27 2.70	1	2 5.00					3 8	1 1.00			++++		
1 4_Minor 468 2 4_Minor 468			12901 Lucille Ave. 3/16/2004 8492	8493 MHL120027 MHL130010	DS 3152 SPL120026 8 VCP D/S 6072 SPQ100015 8 VCP	303 303 315 297.7	1 1	1 2		\mathbb{H}		2 2.00	6			1			7 15	3 0.62	1				Spot Repair
5 4_Minor 468	June Map 2 PPT B1 33				D/S 5516 SPL030039 8 VCP	160 190	3 7					10 24 2.40							0000 0 0						
1 4_Minor 469					DS 767 SPJ150001 8 VCP	360 377 1	3 7				3713	2 2.00				1			3	3 0.84				CONTINUOUS OBZ	Spot Repair, Cut roots
2 4_Minor 469	R013 8		Y JENNIFER LN 8/17/2005 12982	12983 MHQ080020 MHQ080021	D/S 6310 SPQ080006 8 VCP	350 349.6 1	2	1				4 12	16 5.00				5	5	21 52	i2				EXTERNAL PIPE OF (OBP)	R CABLE
5 4_Minor 469	MAP 3-B2-6 13		WILLOWOOD AVE 8/29/2012 12721	12722 MHS100035 MHS100036	D/S 6499 SPS100017 8 VCP	285 286 1	8 7				1 3722	17 33 1.94							0000 0 0	0.00					
1 4_Minor 470 2 4_Minor 470	48 14 G016 12				DS 3498 SPM100047 8 VCP U/S 1824 SPK050010 8 VCP	140 157 325 320.5	1	1 3				2 2.00 4 12			1				0 0	2 0.56					Spot Repair, Cut roots
5 4_Minor 470	June Map 2 PPT B1 32		PACIFIC AVE 6/8/2012 8353	8354 MHI 030014 MHI 030015	D/S 5515 SPL030038 8 VCP	150 124.1 1	4 7				3721	12 27 226							0000 0 0	0.00					
1 4_Minor 471 2 4_Minor 471	30 13 G045 11		9032 Imperial 3/30/2004 11546	11587 MHL140037 MHL140012	DS 2803 SPL140044 8 VCP D/S 5829 SPS100051 8 VCP	268 274 1	4					2 2.00	1	1 18				2	21 21	2 0.56					Spot Repair, Cut roots
	June Map 2 PPT B1 39																								
5 4_Minor 471 1 4_Minor 472	9 37 15		12811 Jackson St. 4/9/2004 7697	7625 MHJ120009 COJ120001	D/S 3734 SPL060021 8 VCP US 730 SPJ120010 8 VCP	270 272.2 1 110 100 1						13 28 2.15		1					0000 0 0	2 0.56					Spot Repair, Cut roots
2 4_Minor 472	June Map 2				D/S 6255 SPP080032 8 VCP		4					4 12		2					2 2	2					
5 4_Minor 472 1 4_Minor 473	PPT B1 25 42 2		8051 Larson Ave. 4/16/2004 7057	7058 MHJ130023 MHJ130024	D/S 4528 SPL030016 8 VCP DS 797 SPJ130018 8 VCP	287 290 1 140 143	3 7	1			3721	11 26 2.36 2 2.00			1				0000 0 0	0 6.00					Spot Repair, Cut roots
2 4_Minor 473	R011 8		LOARA ST 8/12/2005 12929	12930 MHP080012 MHP080013	D/S 6180 SPP080009 8 VCP	95 103.7	4					4 12							0 0	0					
5 4_Minor 473	3-B2-3 3				D/S 6412 SPQ090042 8 VCP	290 290.3 ₁	2 7				3721	10 25 2.50							0000 0 0	0.00					
1 4_Minor 474 2 4_Minor 474	46 16 R050 1			9494 MHM100011 MHM100012 11441 MHQ140022 MHQ140023	DS 3581 SPM100015 8 VCP D/S 3707 SPQ140003 8 VCP		4	1				2 1.00 4 12		1 12	1	1			14 16	6 0.55				CONTINUOUS CRAC	Spot Repair, Cut roots CK MULTIPLE
	PPT 3-4 11				D/S 6185 SPP070009 8 VCP	291 292.1 1	3 7				3721	11 26 2.36							0000 0 0	0.00					
1 4_Minor 475 2 4_Minor 475	47 26 R026 1				DS 3287 SPM090029 8 VCP D/S 6163 SPQ100022 8 VCP	70 275 298 296.9	4					2 2.00 4 12		1		1			1 4	2 0.67					Spot Repair, Cut roots
5 4_Minor 475	MAP 3-B2-3 5		DEBBIE LANE 8/20/2012 13075	13076 MHR080004 MHR080005	D/S 5640 SPR080015 8 VCP	241 243	4 7				3714	11 25 2.27							0000 0 0	0.00					
1 4_Minor 476 2 4_Minor 476	50 19 6 R015 2				US 3320 SPL100012 8 VCP D/S 6569 SPR070006 8 VCP	320 300 1 366 364.8	4		+ + + + + + + + + + + + + + + + + + +	+ + + +		2 2.00	1 91 5.00	1 4				1	94 18	1 1.00					Spot Repair, Cut roots
	MAP		CHAPARRAL						 		0740		. 5. 5.00						o4 18						
1 4_Minor 477			10631 Pearl 2/19/2004 12310		DS 5126 SPO120027 6 VCP		3 7	1		-		2 1.00		1	1	1				3 1.50 0 0.00					Spot Repair, Cut roots
2 4_Minor 477 5 4_Minor 477	S003 5 MAP 3-4 6		MORGAN LANE 7/30/2012 13204	13205 MHQ060012 MHQ060013	D/S 4091 SPT120023 8 VCP D/S 5981 SPQ060014 8 VCP	222 220.5 355 347.2 4	2 6					12 28 2.33		1					0000 0 0				++++		
1 4_Minor 478 2 4_Minor 478	5 2 S002 15		12361 Frieda St. 2/9/2004 11207 ASPENWOOD AV 10/11/2005 12417	11208 MHO100016 MHO100017	DS 2384 SPO100017 8 VCP D/S 4090 SPT120022 8 VCP	267 268	2 4			+		2 2.00								0.00					Spot Repair
1 4_Minor 479	5 5		10642 Lampson Ave. 2/9/2004 11134	11135 MHO110016 MHO110017	DS 2370 SPO110022 8 VCP	201 202 1						2 2.00							0	0.00					Spot Repair
2 4_Minor 479 5 4_Minor 479	R024 8 MAP 2-2-2 30				D/S 6458 SPQ100040 8 VCP Clay D/S 814 SPJ140023 8 Tile	180 179.0 210 203.1 3	6					9 24 2.67		1					0000 0 0				++++		
1 4_Minor 480	6 26		10070 Lampson Ave 2/12/2004 0	0 MHP110016 MHP110017	DS 4786 SPP110041 8 VCP	275 281		1				2 1.00							0	0.00					Spot Repair
2 4_Minor 480	MAP				D/S 5669 SPS110018 8 VCP	370 367.6	4					4 12		2					2 2	2					
1 4_Minor 481			12591 Shelley Dr. 2/16/2004 11262	11263 MHN110010 MHN110011	U/S 6248 SPP070024 8 VCP DS 2547 SPN110015 8 VCP	295 298.1 ₁ 275 301	3 6				3621	10 23 2.30 2 1.00							0000 0 0	0.00					Spot Repair
2 4_Minor 481	G056 2 MAP				D/S 5093 SPP110025 8 VCP					$\Pi\Pi$		3 12	42 4 5.00	1				7	54 10				1	MMC= LINING CHAN	NGE (MLC)
5 4_Minor 481 1 4_Minor 482	PPT 2 July- 3 13		STREET 6/27/2012 8575		D/S 2074 SPJ070014 8 VCP DS 2549 SPN110017 8 VCP	325 327.6 1 252 251	3 6			+++		10 23 2.30				1			4100 1 4	4 4.00					Spot Repair
2 4_Minor 482					D/S 6068 SPQ100011 8 VCP		3	2 1				6 11							0 0						1. 1. 1. 1.
5 4_Minor 482	MAP 3-B3-3 4		13122 Sherman		D/S 4360 SPQ140037 8 VCP		6			+ + +	3621	7 20 2.86							0000 0 0	0.00					
1 4_Minor 483 2 4_Minor 483	11 18 G018 14		Ave. 2/23/2004 12318		US 4437 SPP130046 8 VCP D/S 1903 SPK050038 8 VCP	140 130 1 198 197.8 1	2	1 2		+++		2 1.00 6 11	1	1	++++	++++++			2 3	0.00			++++		Spot Repair
			, ,																					* *	

		General	Pipe		Structural Defect Coding	Rating rets	Operational and Maintenance	Kating	Construction Features su pour la	
. ο. O.			er ID er ID.	£	lapsed lapsed mage mage	gs Struct F Struct F ral Defe	lect Ind	Maint F efects efects	Intruding Seal Intruding Seal	
Particle Seal DVI As Talpro A Pocation Pocation	E	Existing MH ID Previous MH ID	in)	(£) Tack Fracture C F	Broken Hole Joint A S A A A	Structu Structu	O E Deposits Roots (R) D Fine (F) Tap (T) Medium (M) Ball) Line Material M SI O SI	
Phase Priorit Tape Confirs Rever VD by Priorit Ramkii DVD Rever Prever Priorit Phase	CCTV Date S	Start End Start End	Direct Existii Previc Size () Joint ()	C L C M S H L C M	O S S H SV VV SV VV S M L S M L A V H P S LF	PACP Total S da	AGS B % L % Z % B L J C B L J C B L J C B L J C B L	J C G D R W C Z % C R G D FD FL BI BI	D D L U R LD RD SRH SRB SRL Z SA CU MC F S S S S S S S S S S S S S S S S S S	Comments Recommendations
5 4 Minor 483 PPT 1 9 YORKSHIRE AVE	. e/40/2042 10	0289 10297 MHK070005 MHK07001	14 D/S 3874 SPK070006 8 VCP	212 271.2 5 6		2615 44 22 2	200	0000 0 0 0 0 0		
			04 DS 2285 SPO140040 8 VCP	250 251 2		3615 11 23 2.	2.00	0 0.00		Spot Repair
			99 D/S 5637 SPR100008 10 VCP	325 333.6 3 2 1		6 11	82 1 25.00 2 2	87 174		
5 4_Minor 484 PPT B1 21 HARLE AVE	6/7/2012 9	9003 9000 MHL030028 MHL03002	95 D/S 4917 SPL030029 8 VCP	292 292.7 3 6		3613 9 21 2.	2.33	0000 0 0 4.00		
1 4_Minor 485 14 14 10151 Imperial 2 4_Minor 485 M009 5 EUDORA LN	3/2/2004 11	1308 11307 MHN140025 MHN14002	24 US 2905 SPN140013 6 VCP 12 D/S 6452 SPQ080024 8 VCP	415 416 1 310 313.3 1 3 2		6 11	2.00	0 0.00		Spot Repair
June Map 2										
5 4_Minor 485 PPT B1 12 HEDLUND DR 1 4_Minor 486 20 15 9611 Imperial Ave.			11 D/S 3586 SPM020019 8 VCP 11 DS 3077 SPM140046 8 VCP	307 308.4 3 6 1 275 262 1		3613 9 21 2. 2 2.	2.33	0000 0 0 0.00		Spot Repair
2 4_Minor 486 M002 12 OMA PL			1 D/S 3726 SPL060013 8 VCP	281 282.4 3 2 1		6 11	1 5.00 6	7 8		
5 4_Minor 486 PPT 2-1-5 17 TRASK AVE 1 4_Minor 487 21 1 1 13442 Bowen St.		0477 10478 MHN150009 MHN15001 1304 11305 MHN140022 MHN15000	0 D/S 2191 SPN150006 8 VCP 02 DS 2903 SPN140011 8 VCP	325 328.4 3 6 200 211 1		3613 9 21 2	2.33	0000 0 0 0.00	+++++++++++++++++++++++++++++++++++++++	Spot Repair
2 4_Minor 487 M004 3 DESMOND ST			3 D/S 4841 SPL070035 8 VCP	300 305.3 3 2 1		6 11	1 1	2 5		
5 4_Minor 487 PPT 3-B2-1 17 ORD WAY	8/1/2012 12	2942 12943 MHP070018 MHP07001	9 D/S 6193 SPP070017 8 VCP	150 141.3 2 6		3612 8 20 2.	2.50	0000 0 0 0.00		
1 4_Minor 488 22 6 9861 Acacia Ave. 2 4_Minor 488 M022 1 Y CHAPMAN AV			11 DS 2653 SPM120010 8 VCP 17 D/S 6230 SPR090024 12 VCP	350 299 1 1 150 145.1 5 1		6 11		0 0.00	6	Spot Repair HIGH FLOW
MAP						0				
5 4_Minor 488 PPT 3-B4-1 4 HARBOR BLVD 1 4_Minor 489 22 25 13120 Donegal Dr.		3243 7015 MHR140039 MHR15000 0762 10766 MHM130027 MHM13003	12 D/S 6531 SPR140042 10 VCP 31 DS 2675 SPM130013 8 VCP	336 330 1 6 340 346 1	+++++++++++++++++++++++++++++++++++++++	3611 7 19 2. 2 2.	2.71	0000 0 0 0.00	+++++++++++++++++++++++++++++++++++++++	Spot Repair
2 4_Minor 489 M019 5 LEMONWOOD LN			66 D/S 6212 SPQ120044 8 VCP	350 353.5 1 3 2		6 11	6 1 2	2 3 12 31		
5 4_Minor 489 PPT 3-B2-4 18 JACALENE LANE			23 D/S 6456 SPQ090055 8 VCP	245 251.7 6	<u> </u>	3600 6 18 3.	3.00	4100 1 4 4.00	<u> </u>	
2 4_Minor 490 M005 9 Y JOYZELLE DR			14 US 3149 SPL120023 8 VCP 17 D/S 3738 SPL060025 8 VCP	334 335 1		2 2.	2.00 50 1 5.00 1 15.00	0 0.00 52 104	+++++	Spot Repair
5 4_Minor 490 PPT 3-1 9 SHADY ACRE STREET		1149 11151 MHO090034 MHO09003		245 232.8 6 7 5		3526 18 34 1.		0000 0 0 0.00		
1 4_Minor 491 24 8 10560 Garden Grove Blvd.	3/17/2004	MHO130038 MHO13004		227 227 1		2 2.	2.00	0 0.00		Spot Repair
2 4_Minor 491 G029 6 CHAPMAN AV	8/26/2005 12	2955 12956 MHP090024 MHP09002	25 D/S 6263 SPP090028 15 VCP	190 185.0 1 1 2 1	+++++++++++++++++++++++++++++++++++++++	5 11			+++++++++++++++++++++++++++++++++++++++	
5 4_Minor 491 PPT 4 22 MARCHAND AVENUE		0830 10831 MHL070040 MHL07004		289 287.7 5 5		3525 10 25 2.	2.50	0000 0 0 0.00		
1 4_Minor 492 24 16 13431 Erin Rd. 2 4_Minor 492 G053 1 ELMWOOD ST			05 DS 2727 SPM140018 8 VCP (5 D/S 4817 SPP140013 8 VCP	345 338 1 1 275 277.1 2 1 1 1		5 11	2.00	4 6		Spot Repair
5 4_Minor 492 PPT 3-B2-3 6 PURYEAR LANE	9/20/2042 13	3073 13072 MHR080003 MHR08000	12 U/S 6574 SPR080012 8 VCP	241 245.1 4 3 5		3524 42 26 2	247	0000 0 0 0 0		
1 4_Minor 493 24 24 9452 Dakota	3/18/2004 12	2074 12075 MHM140011 MHM14001	12 DS 2512 SPM140035 8 VCP	386 385 1		2 2.		0 0.00		Spot Repair
2 4_Minor 493 M016 9 MERRILL ST	9/8/2005 11	1646 11647 MHR110009 MHR11001	0 D/S 6080 SPR110027 8 VCP	242 244.3 4 1		5 11	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	1 1	+++++++++++++++++++++++++++++++++++++++	
5 4_Minor 493 PPT 3-B3-2 12 ADLAND STREET		1205 11206 MHO140016 MHO15000		279 275.6 4 5 370 364 1		3524 9 23 2		3111 2 4 2.00		Spot Repair
2 4_Minor 494 G021 7 DANIEL AV			02 DS 2339 SPM140001 6 VCP 10 D/S 5903 SPQ070042 8 VCP	285 285.9 2 3		5 11	3 5.00 1	0 0.00		Spot керап
5 4_Minor 494 PPT 3-83-2 8 TAFT STREET	8/20/2012 12	2280 12281 MHO130013 MHO13001	14 D/S 3932 SPO130013 8 VCP	600 118 2 5		3522 7 19 2	271	2600 5 10 2 00		
1 4_Minor 495 25 13 12711 Hazel Ave.	3/18/2004 93	9374 8486 MHL110052 MHL12002	12 DS 3211 SPL120037 8 VCP 18 D/S 5945 SPL070046 8 VCP	80 79 1		2 2				Spot Repair
MAP	8/8/2005	0161 10628 WINLUTOUST WINLUTOUS	10 D/S 5945 SPL0/0046 8 VCP	230 242.6 4 1		5 11		0 0		
5 4_Minor 495 PPT 3-B2-2 16 CANDY LANE 1 4_Minor 496 26 8 13142 Vener		2223 12224 MHQ080027 MHQ08002 2058 12059 MHM130046- MHM13004	28 D/S 6436 SPQ080021 8 VCP 47 DS 2501 SPM130043 8 VCP	235 239.5 1 5 5 330 342 1		3521 11 22 2	2.00 1 1 2.00	1 15 3121 2 6 3.00	+++++	Spot Repair
2 4_Minor 496 M023 1 CHAPMAN AV	10/26/2005 13	3118 12978 MHQ090048 MHQ09004	9 D/S 6143 SPQ090005 12 VCP	330 331.2 2 3		5 11		0 0		
5 4_Minor 496 PPT 3-2 16 LOARA STREET 1 4_Minor 497 29 19 13121 Yockey St.			01 U/S 5616 SPP050002 8 VCP 16 DS 2969 SPK130013 8 VCP	190 194.8 1 1 5 110 110 1		3521 7 18 2	2.57	0000 0 0 0.00	+++++++++++++++++++++++++++++++++++++++	Spot Repair
2 4_Minor 497 G037 11 GLEN ST	9/9/2005 12	2600 12602 MHQ110022 MHQ11002	25 D/S 4752 SPQ110030 8 VCP	370 315.5 1 2 1		4 11	1 5 1	7 9		
5 4_Minor 497 PPT 3-B2-3 10 TIMMY LANE	8/20/2012 13	3079 13077 MHR080007 MHR07000	13 U/S 5642 SPR080017 8 VCP	338 342.7 1 5		3521 6 17 2	2.83	0000 0 0 0.00		
1 4_Minor 498 30 12 9102 Imperial 2 4_Minor 498 G039 2 WOODLAND LN			77 DS 2713 SPL140021 8 VCP	273 324 1		2 2.		0 0.00		Spot Repair
MAP			0 13							
1 4_Minor 499 30 28 13401 Mickey St.	3/31/2004 11	1528 11529 MHL140024 MHL14002	24 D/S 5726 SPR070018 8 VCP 25 DS 2702 SPL140010 8 VCP	325 327.2 4 5 240 241 1		3514 9 19 2. 2 1.		0000 0 0 0.00		Spot Repair
			51 D/S 6216 SPQ120048 8 VCP	135 134.4 2 1 1	++	4 11		2 2 2	+++++++++++++++++++++++++++++++++++++++	
5 4_Minor 499 PPT 3-B4-1 5 HARBOR BLVD			99 D/S 6401 SPR140041 10 VCP	327 332 4 5		3514 9 19 2.	2.11	0000 0 0 0.00		
2 4_Minor 500 G005 7 MACDUFF ST			14 DS 3101 SPL140027 8 VCP 90 D/S 1917 SPK070032 8 VCP	117 116 2 1 273 279.2 3 1		4 11		5 7		Spot Repair
5 4.Minor 500 PPT 1 10 MACALPINE ROA	D anares	0204 40209 ANII/200200 ANII/	3 D/S 3886 SPK080010 8 VCP	275 286 3 5		3513 8 18 2		2000		
1 4_Minor 501 34 23 12691 Dale Ave.	4/6/2004 84	B438 8437 MHK110030 MHK11002	29 US 3416 SPK110039 8 VCP	148 142 1		3513 8 18 2.	2.00	2B00 17 34 2.00 0 0.00		Spot Repair
2 4_Minor 501 M020 11 BUARO ST	9/14/2005	MHR110016 MHR11001	7 D/S SPR110003 10 VCP	300 299.5 1 2 1 157 144.5 3 5		4 11	2 3	5 11	+++++++++++++++++++++++++++++++++++++++	
1 4_Minor 502 35 11 13040 Newland	4/12/2004 76	7654 7655 MHK130023 MHK13002	27 DS 691 SPK130027 8 VCP	73 141 1		3513 8 18 2. 2 2.		0000 0 0 0.00	 	Spot Repair
2 4_Minor 502 G006 8 YANA DR MAP NUTWOOD 5 4_Minor 502 PPT 3-1 6 STREET		8506 8507 MHK070042 MHK08004 1214 11215 MHN090001 MHN10000	10 D/S 2091 SPK080043 8 VCP	337 344.2 1 3 165 173 3 5	+++++++++++++++++++++++++++++++++++++++	4 11		1 9 18	+++++++++++++++++++++++++++++++++++++++	
5 4_Minor 502 PPT 3-1 6 STREET 1 4_Minor 503 36 18 8402 Stanford Ave			11 D/S 2391 SPN090001 8 VCP 13 DS 738 SPJ120014 8 VCP	165 173 3 5 255 256 1	+++++++++++++++++++++++++++++++++++++++	3513 8 18 2.	200	0000 0 0 0.00	+++++++++++++++++++++++++++++++++++++++	Spot Repair
2 4_Minor 503 R006 10 MAUREEN DR			8 D/S 5065 SPL050010 8 VCP	270 268.4 1 3		4 11		0 0		
5 4_Minor 503 PPT 1 17 STREET	6/21/2012 10	0324 10325 MHK080023 MHK09000	14 D/S 4732 SPK080005 8 VCP	307 292.1 2 5		3512 7 17 2	2.43	2200 2 4 2.00		
1 4_Minor 504 39 22 8800 Garden Grov Bivd.	e 4/15/2004 76	7631 7632 MHK130006 MHK13000	07 DS 679 SPK130009 8 PVC	330 331 1		2 2	2.00	0 0.00		Spot Repair
2 4_Minor 504 R009 9 Y VONS DR	8/9/2005 10	0180 10171 MHL060018 MHL06001	9 D/S 3742 SPL060026 8 VCP	270 269.0 1 3		4 11	7 5.00 1 1 1	1 10 17	+++++++++++++++++++++++++++++++++++++++	
			26 D/S 5783 SPS100038 8 VCP	325 303.9 5		3500 5 15 3.		0000 0 0 0.00		
2 4_Minor 505 G001 9 MOEN ST			9 D/S 2746 SPM120027 8 VCP 9 D/S 2069 SPJ070009 8 VCP	255 255 1 1 324 329.4 1 2		3 11		5 10	+++++++++++	Spot Repair
5 4_Minor 505 PPT 3-6 18 STANFORD AVENUE			07 D/S 5396 SPO120005 6 Tile	347 343.7 5 4		3425 9 22 2		311J 58 60 1.03		
1 4_Minor 506 44 12 13112 Magnolia Ave.	4/26/2004 11	1592 11585 MHL130049 MHL13004	14 DS 2958 SPL130040 8 VCP	109 110 1		2 2.	2.00	0 0.00		Spot Repair

		General			1	Structural Defect Coding		Operational and Maintenance		P	Construction Features	and.	Po De
No. No. (7)			Dibe bibe	(t)			med psed Pip ace age g Failure g Repair truct Rati	et Index		laint Ratir ects ect Score	ellaneous	tion Featu	Abandone
No. No.	Existing	MH ID Previous MH ID	ng Sewer nus Sewe	omment (ff)	Crack Fracture	Broken Hole Joint (X Colle Surf. Surf. Dam Point Linin TA Sags Quick S Quick S Structura Structura	Deposits Roots (R) D Fine (F) Tap (T) Medium (M	Infiltration Obstacles Ball (B) I OB	/ermin V S S W D D T Tap (Lateral)	Intruding Seal S S S S S S S S S	Constructors for St	entified
1	/ Date Start	End Start End	Disc Disc Disc	95 E 20 325 324.2	L C M S H L C M S	H SV VV SV VV S M L S M L A V	/ H P S LF RP S A D D D D D D D D D D D D D D D D D D	AGS B % L % Z % B L J C B L J C B L J	B L J C G D R W C Z %	C R PACF	D L U R LD RD SRH SRB SRL Z SA CU	Reas Total	□ Comments Recommendations SMALL SAG
MAP			D/S 2277 SPO140037 8 VCP	330 326.3			3423 8 15			2100 1 3 3 00 1			U/S MH was 11181 , D/S MH was 11182. We checked GIS & changed them
1 4_Minor 507 44 29 Easement/9652 Stanford Av. 4/27/2	/2004 12030	12031 MHM120020 MHM120021	DS 2738 SPM120020 8 VCP	135 102	3 1 4		3423 8 19	9 2.38		0 0.00			changed them Spot Repair
2 4_Minor 507 R025 5 HOMESTEAD PL 9/12/2	/2005 11662	11664 MHR120015 MHR120016	D/S 6156 SPR120025 8 VCP	280 278.6			5 5 10	0 1		2 4 1			SMALL SAG 243.6' MSA (MMC). No Reversal
			D/S 5960 SPR100032 8 VCP DS 3219 SPM110039 8 VCP	250 243.6 122 121	3 4 1		3423 7 18	8 2.57		1200 2 2 1.00	1	1	Video Spot Repair
2 4_Minor 508 R060 3 HAVENWOOD DR 11/28/	3/2005 11909	11910 MHP140011 MHP140012	D/S 4814 SPP140010 8 VCP	295 294.9			5 5 10	0		0 0			CONTINUOUS DEPOSITS ATTACHED ENCRUSTATION, SMALL SAG
5 4_Minor 508 PPT 3-4 4 ROBERT LANE 7/30/2	/2012 13151	13152 MHQ070032 MHQ070033	D/S 5900 SPQ070039 8 VCP	400 385.5	1 2 4 1		3422 8 18	8 225		0000 0 0 0.00		CII	
			DS 2657 SPM120014 8 VCP	312 174			1 2	2 2.00		0 0.00	1 1	90 %	Replace pipe
MAP			D/S 5978 SPQ060011 8 VCP	330 249.4	7 1		8 10	0		0 0			
		9559 MHM090030 MHL090038	D/S 4747 SPQ090020 8 VCP DS 3289 SPM090031 8 VCP	160 303 250 273	2 1 4		3422 7 17	7 2.43		0000 0 0 0.00			Replace pipe
2 4_Minor 510 M003 3 OMA PL 8/8/2	2005 10170	10334 MHL060015 MHL060016	D/S 5946 SPL060044 8 VCP	289 289.7	1 3 1 1		6 10	0 12 1	1	14 19			
1 4_Minor 511 7 11 11101 Poppy Dr. 2/13/2	/2004 11779	11780 MHP100028 MHP100029	U/S 3124 SPL120009 8 VCP DS 4642 SPP100035 6 VCP	390 392.6 220 227	2 4 1		3422 6 16	6 2.67 1 1.00 27		16 0.74			Spot Repair, Cut roots
MAP			D/S 6291 SPQ110045 8 VCP	130 127.9	1 2 1 1 1		5 10			0 0			
13401 Sunnyvale		7068 MHJ140015 MHJ140016	D/S 2323 SPO130040 6 VCP DS 807 SPJ140016 8 VCP	645 651.7 260 259	1 1 4 1		3421 6 15	5 2.50 1 1.00 5 2 1		3100 1 3 3.00 1			Spot Repair, Cut roots
			U/S 6315 SPP070001 8 VCP	285 256.9	1 1 1 2		5 10	0 1		1 1			
			D/S 6194 SPP070018 8 VCP DS 3801 SPP090010 8 VCP	125 134 260 270	5 4		3415 g 17	7 1.89 1 1.00 5 4		0000 0 0 0.00			Spot Repair, Cut roots
			D/S 6437 SPQ080022 8 VCP	150 162.6	1 2 2		5 10	0 44	1	45 92			
		10296 MHK070012 MHK070013		355 350.8	4 4		3414 8 16	6 2.00		0000 0 0 0.00			
1 4_Minor 514 48 6 9541 Blanche Ave. 5/12/2 2 4_Minor 514 R008 5 VINEVALE ST 8/8/2	/2004 9562 2005 9755	9563 MHM090034 MHL090039 10783 MHL050038 MHL050039	DS 3292 SPM090034 8 VCP D/S 4995 SPL050061 8 VCP	280 281 379 377.9	3 1 1		5 10	1 1.00	1 1 5	1 4			Spot Repair, Cut roots OBZ = OBJ
			D/S 6309 SPQ080005 8 VCP	275 282.1	3 4		3413 7 15	5 2.14		0000 0 0 0.00			
			DS 2336 SPM130015 6 VCP D/S 3885 SPK080009 8 VCP	360 347 300 298.1	5		5 10	1 1.00 1 2		8 0.75 5 5			Spot Repair, Clear D&R
			D/S 6428 SPQ080013 8 VCP	357 360.5	3 4		3413 7 15	5 2.14		0000 0 0 0.00			
TOWN AND		9492 MHM100008 MHM100009 10148 MHL070017 MHL070019	DS 3578 SPM100012 8 VCP D/S 5196 SPL070011 8 VCP	375 373 130 128.7	1 1 1 1		4 10	0 10 5.00 1 5.00		6 0.62			Spot Repair, Cut roots
MAP		12084 MHM140019 MHM150002		322 320.5	2 4		3412 6 14			0000 0 0 0.00			
1 4_Minor 517 39 26 Easement 4/16/2			DS 4291 SPP130018 10 VCP D/S 6254 SPP080031 8 VCP	270 269 305 302.3	2 2		1 4 10	1 1.00		6 0.62			Spot Repair, Cut roots
June GILBERT STREET	/2012 9728	9727 MHL050046 MHM050027	U/S 5054 SPL050001 8 VCP	180 182.5	1 4		3411 5 13	3 2.60		0000			
1 4_Minor 518 7A 15 7A 16 10162 Hope 2/19/2 2 4_Minor 518 R003 7 MARYLEE DR 7/27/2	/2004 11285 /2005 10805	11284 MHN130020 MHN130019 10806 MHL080034 MHL080035	US 2883 SPN130015 6 VCP D/S 4724 SPL080034 8 VCP	355 368 335 331.8	1 2 2		1 4 10	1 1.00		5 0.66 2	2	ТВІ	Spot Repair
			D/S 2072 SPJ070012 8 VCP	295 292.1	4		3400 4 12	2 3.00		0000 0 0 0.00			
1 4_Minor 519 4 4 1 12271 Elmwood 2/6/2 2 4_Minor 519 R015 3 CLIFFWOOD AV 8/22/2			DS 4637 SPP100027 6 VCP D/S 6570 SPR070007 8 VCP	513 513 358 360.1	1 2 2		1 4 10	1 1.00 2 1 1 9 1 1 9		4 0.61 10 10			Spot Repair, Cut roots
MAP 2 July- 5 4_Minor 519 PPT 3 11 NEARING DRIVE 6/27/2	/2012 8539	8540 MHJ080005 MHJ080006	D/S 2039 SPJ080006 8 VCP	140 298.8	4		3400 4 12	2 3.00		0000 0 0 0.00			
			DS 5115 SPP100039 6 VCP D/S 560 SPS130016 8 VCP	120 118 71 55.9	1 1 3		1	1 1.00		4 0.61			Spot Repair, Cut roots
MAP							4 10			2 2			
1 4_Minor 521 26 10 9331 Central Ave. 3/19/2	/2004 12061	12060 MHM130049 MHM130048	D/S 5839 SPQ080039 8 VCP US 2503 SPM130045 8 VCP D/S 5705 SPS110023 8 VCP	302 306.4 330 332 255 250.4	1 3		3400 4 12			0000 0 0 0.00 4 0.61			Spot Repair, Cut roots
5 4_Minor 521 PPT	/2012 7074	7075 MHJ140020 MHJ140021	D/S 813 SPJ140022 8 Tile	220 218.6	8 3		3328 11 25			0000 0 0 0.00			
1 4_Minor 522 26 11 9331 Central Ave. 3/19/2 2 4_Minor 522 R024 1 WOODLAND LN 9/9/2	/2004 12061 2005 11722	12088 MHM130049 MHL130016 11723 MHQ110013 MHQ110014	DS 2716 SPM130049 8 VCP D/S 6293 SPQ110047 8 VCP	330 332 367 364.6	1 3					0 0			Spot Repair, Cut roots
5 4_Minor 522 PPT 3-B2-3 11 DEBBIE LANE 8/16/2	/2012 13084	13083 MHR080015 MHR080014	U/S 5711 SPR080023 8 VCP	317 320	6 2 3		3326 11 23	3 2.09		0000 0 0 0.00			
												cap ped-	
1 4_Minor 523 9 8 12600 Main St. 2/19/2 2 4_Minor 523 S004 8 ASPENWOOD AV 10/13/	/2004 8/2005 12689	MHO110003-A MHO110003 12690 MHS120021 MHS120022	US	165 165 340 330.3	1 3		4 10	1 1.00		3 0.51	1	off	Spot Repair, Cut roots
5 4_Minor 523 PPT 2-1-3 6 STANFORD AVE 7/12/2		11325 MHN120020 MHN120021		345 349.6 120 123			3323 8 17	7 2.13		0000 0 0 0.00		DN	Cont Day to Characteria
2 4_Minor 524 R034 5 Y SUNGROVE ST 9/26/2	/2005 12739		D/S 5646 SPS090014 8 VCP Clay	235 230.6			4 10	1 1.00 1 50.00 27 27 27 27 27 27 27 27 27 27 27 27 27	2	3 0.88 47 71		F	Spot Repair, Clear deposit
1 4_Minor 525 20 19 9782 Luders Ave. 3/11/2	/2004 10727		DS 2735 SPM140025 8 VCP	195 185.4 290 290	2 1 3		3322 6 14	4 2.33 1 1.00		1200 0 0 0.00			Spot Repair, Cut roots
MAP TWINTREE			D/S 2076 SPJ070016 8 VCP	325 327.8			3 10		111	109 209			
5 4_Minor 525 PPT 3-B3-5 2 AVENUE 8/31/2 1 4_Minor 526 25 8 12686 Lucille Ave. 3/18/2	/2004 9369	9368 MHL110047 MHL110046	D/S 5915 SPR100014 8 VCP US 3205 SPL110048 8 VCP	257 255.2 143 143	2 3 1		3322 5 13 1	1 1.00		0000 0 0 0.00			Spot Repair, Cut roots
2 4_Minor 526 G036 2 EPSILON ST 9/7/2			D/S 6065 SPQ100008 8 VCP	265 266.0	2 1		3 10	0 4 4		8 12			
1 4_Minor 527 39 6 8051 Bestel 4/13/2	/2004 7085	7117 MHJ140033 MHJ140034	D/S 3732 SPL060019 8 VCP DS 761 SPJ140040 8 VCP	270 273.3 330 334	1		3222 7 13 1	3 1.86 1 1.00 1		0000 0 0 0.00			Spot Repair, Cut roots
2 4_Minor 527 M014 8 Y TWINTREE AV 9/2/2	2005 12177	12180 MHR100026 MHR100028	D/S 5918 SPR100017 8 VCP	259 259.4	1 4 1		6 9	9 53 5.00		4 57 110			

	General			Structural Defect Coding	B 000	Operational and Maintenance	8 0	Construction Features
No. No. No.		Pripe		apsed Pip apsed Pip ace age age	s Struct Rati Il Defects Il Defect Set Index		Aaint Ratir fects fect Score ndex	Intruding Seal
ity	Location Existing MH ID Previous MH ID	ing Sawa (in) (in) (in) (in) (in) (in) (in) (in)	Crack Fracture Broker		WIL One Structural One One	Roots (R) Fine (F) Tap (T) Medium (M) Ball (B)	Infiltration Obstacles Vermin OB V O O O O O O O O O	Line Material W 15 0 19 19 19 19 19 19 19 19 19 19 19 19 19
Priori Phase Cont Inspection Reverse Reverse Reverse Reverse Reverse DVD	Street Name CCTV Date Start End Start En	Prev Prev CCT CCT CCT CCT CCT CCT CCT CCT CCT CC	L C M S H L C M S H SV V	V SV VV S M L S M L A V H P S LF	RP S C D F O D S AGS B % L % Z		G D R W C Z % C R Q D D D D FD FL BI BD	D L U R LD RD SRH SRB SRL Z SA CU MC F a G G Comments Recommendations
	AYPOLE DRIVE 8/29/2012 12199 12178 MHR090020 MHR08 391 Midwick 2/6/2004 11855 11856 MNE14016 MNE1		2 3		3322 5 13 2.60	2	1200 2 2 1.00	Spot Repair
2 4_Minor 528 M009 7 Y EUI June Map 2	DORA LN 8/16/2005 12209 12210 MHQ080003 MHQ08	80004 D/S 6360 SPQ080008 8 VCP 330 332.5	1 3 1		5 9 22 5.00		22 44	
5 4_Minor 528 PPT B1 30 PAG	CIFIC AVE 6/8/2012 9640 8352 MHL030012 MHL03 031 Nutwood St. 2/5/2004 11157 11158 MNW24032 MNW2		1 3 3		3321 7 14 2.00		0000 0 0 0.00	Spot Repair
	TTONWOOD	24033 DS 2570 3710950022 8 VCP 250 270 40014 D/S 4816 SPP140012 8 VCP 245 236.4	1 4		5 9		0 0	Optic region
5 4_Minor 529 PPT 3-B3-3 23 STF	TWOOD REET 8/22/2012 11237 11141 MHN110034 MHN11		1 3	1	3321 5 12 2.40	1	2100 1 2 2.00	
2 4_Minor 530 G007 2 Y HO	295 Mahalo Cir. 2/6/2004 11223 11224 MNW13036 MNW1 3PI RD 7/20/2005 7995 8000 MHK070019 MHK07 612 Lampson 8000 MHK070019 MHK07	13037 DS 2558 SPO100025 8 VCP 140 138 770024 D/S 1851 SPK070018 8 VCP 430 422.5	1 2 1 1		1 1.00 5 9 6 81 5.00	1 5	93 180	Spot Repair
1 4_Minor 531 5 6 Ave	e. 2/9/2004 11135 11147 MHO110017 MHO11 RCHAND AV 8/8/2005 10160 10161 MHL070036 MHL07	110030 DS 2371 SPO110023 8 VCP 120 102 70037 D/S 3722 SPL070024 8 VCP 275 256.0	4 1		1 1.00 5 9	1	0 0.00	Spot Repair
	ELDON DR 7/9/2012 8472 8471 MHL120016 MHL12 591 Shelley Dr. 2/16/2004 11262 11261 MHN110010 MHN11		1 3		3321 4 11 2.75	1	1100 1 1 1.00	Spot Repair
MAP 2 July-	MONWOOD LN 9/13/2005 11708 11709 MHQ120017 MHQ12 MPSON AVE 6/25/2012 9505 9506 MHM110011 MHM11		3 2		3315 8 14 1 75	3	1300 3 3 1,00	
1 4_Minor 533 9 14 103	342 Park Ave. 2/19/2004 11241 11242 MHN120008 MHN12 0RMA LN 8/18/2005 12220 12221 MHQ080024 MHQ08	20009 DS 2531 SPN120010 8 VCP 360 361	1 1 1 1 1		1 1.00		0 0.00	Spot Repair
5 4_Minor 533 PPT 4-B1-3 9 STF	ARBOARD REET 9/11/2012 6848 6849 MHO200015 MHO20		3 3		3313 6 12 2.00	9	2G00 9 18 2.00	
1 4_Minor 534 11 13 Ave		30017 DS 3907 SPP130009 6 VCP 180 181 170031 D/S 2413 SPK070050 8 VCP 240 233.3	1 1 2		1 1.00	5.00 1	0 0.00	Spot Repair
	ARA STREET 8/13/2012 12927 12928 MHP080010 MHP08		3 3		3313 6 12 2.00		0000 0 0 0.00	
	211 Nelson St. 3/1/2004 11098 11162 MHO130027 MHO13 0NNA LN 8/25/2005 13132 13133 MHQ080034 MHQ08				1 1.00		46 92	Spot Repair
	NSOR AVE 9/19/2012 10584 10552 MHM160011 MHM16 262 Glen Wy. 3/1/2004 11191 11066 MHC/140003 CO014		3 3		3313 6 12 2.00		0000 0 0 0.00	2 Soot Recair
2 4_Minor 536 R006 13 MO	DTZ ST 8/4/2005 10331 10784 MHL050042 MHL05	60041 D/S 4235 SPL050051 8 VCP 164 164.5	3 1		1 1.00		0 0.00	Spot regular
1 4_Minor 537 15 5 989	90 Central Ave. 3/3/2004 10713 10714 MHN140009 MHN14				3312 5 11 2.20 1 1.00		0000 0 0 0.00	Spot Repair
MAP		160026 D/S 5566 SPO060003 8 VCP 145 145.7	2 3		3312 5 11 2.20		0000 0 0 0.00	
	72 Lenore Dr. 3/4/2004 10742 10743 MHM110027 MHM11 REY PL 10/21/2005 12430 12433 MHS120008 MHS12		1 1 2		1 1.00	3 1	0 0.00	Spot Repair
5 4_Minor 538 PPT Map 2 HAI	RLE AVE 6/7/2012 9002 9003 MHL030027 MHL03		1 3		3311 4 10 2.50		0000	
	11 Imperial Ave. 3/11/2004 12023 12022 MHM140040 MHM14. THY LN 8/25/2005 13141 13142 MHQ080043 MHQ08	140039 US 2731 SPM140022 8 VCP 350 360 80044 D/S 5853 SPQ080053 8 VCP 280 282.0	3		3 9	2 1	3 5	Spot Repair
110	IRDEN GROVE 8/3/2012 11844 12260 MHO130001 MHO13		3		3300 3 9 3.00		0000 0 0 0.00	
1 4_Minor 540 21 18 Gro	ove Blvd. 3/15/2004 11732 11735 MHP130009 MHP13 GRAND AV 8/8/2005 10330 10781 MHL050035 MHL05		3		1 1.00		0 0.00	Spot Repair
5 4_Minor 540 PPT 4 10 AVE	MPSON 6/26/2012 9093 9096 MHK110032 MHK11	10033 D/S 4253 SPK110015 12 Clay Tile 70 68.7	3		3300 3 9 3.00		0000 0 0 0.00	
	692 Luders Ave. 3/11/2004 12012 12013 MHM140031 MHM14 IRYEAR LN 8/22/2005 13100 13101 MHR070028 MHR07		1 3		1 1.00		0 0.00	Spot Repair
5 4_Minor 541 PPT 4-B1-6 18 16th		70036 U/S 247 SPO170038 8 VCP 51 284.2	2		10 322A 12 26 2.17		0000 0 0 0.00	U/S MH is CO
	31 Crosby Ave. 3/16/2004 10758 10757 MHM130020 MHM13 LKEN WY 8/24/2005 13105 13090 MHR070033 MHQ07		1 3		3 9		0 0.00	Spot Repair
	TA AVENUE 8/8/2012 12551 12554 MHQ100033 MHQ10		8 2		3228 10 22 2.20		0000 0 0 0.00	
1 4_Minor 543 24 7 Gro	ove Bivd. 3/17/2004 11130 11626 MHO130048 MHO13 UEBELL AV 8/19/2005 13041 13042 MHR070013 MHR07	33038 DS 2368 SPO130034 8 VCP 10 12 170014 DIS 6567 SPR070004 8 VCP 363 360.2	1 3		1 1.00		0 0.00	Spot Repair
5 4_Minor 543 PPT 4 14 BO	0YAL PALM 0/15/2012 10184 10068 MHM070026 MHM07	770033 D/S 3840 SPM070062 8 Tile 285 279.4	4 2 2		3224 8 16 2.00		0000 0 0 0.00	
		330048 DS 2502 SPM130044 8 VCP 329 332 770016 D/S 6018 SPR070027 8 VCP 338 337.3	1 3		3 9		0 0.00	Spot Repair
5 4_Minor 544 PPT 3-B3-1 16 STF	LEY E/OF MAIN REET 8/3/2012 11734 11735 MHP120023 MHP13	30010 D/S 6762 SPP120027 6 Tile 663 136.2	3 2		3223 5 12 2.40 3		3122 3 6 2.00	136.2' MSA (DAE). No Reversal Video)
2 4_Minor 545 S003 9 ADI	RIAN CR 10/12/2005 12412 12419 MHT120017 MHT12	30044 DS 2499 SPM130041 8 VCP 303 306 20026 DIS 3992 SPT120017 8 VCP 255 259.3	1 3		3 9	1	0 0.00	Spot Repair
5 4_Minor 545 PPT 3-B3-3 8 STF	ENCOVE REET 8/27/2012 11478 11476 MHQ140035 MHQ14 681 Brookhurst		1 2		3221 3 8 2.67		0000 0 0 0.00	
1 4_Minor 546 28 17 Wy.	/. 3/24/2004 10699 11329 MHM110050 MHM12	20001 DS 2820 SPM110004 10 VCP 370 320 80023 D/S 6486 SPQ080027 8 VCP 262 262.0	3		1 1.00 3 9		0 0.00	Spot Repair
5 4_Minor 546 PPT B1 5 BIE	ENVILLE AVE 6/4/2012 9175 9335 MHM010011 MHM01	010012 D/S 5031 SPM010037 8 VCP 345 346.2	1 2		3221 3 8 2.67		0000 0 0 0.00	
	755 Stanford Ave. 3/25/2004 11328 11329 MHN120024 MHM1 MOTHY LN 7/27/2005 10801 10802 MHL080030 MHL08		1 3		1 1.00		0 0.00	10° bell Spot Repair
	RANGEWOOD	00031 D/S 4,544 SPE00029 8 VCP 376 377.6 370041 D/S 5721 SPR070013 10 VCP 309 308.6			3215 7 11 1.57		0000 0 0 0.00	
1 4_Minor 548 30 18 879	90 Trask Ave. 3/30/2004 11579 11580 MHL150001 MHL15	50002 DS 2847 SPL150015 12 VCP 330 331	5 2 1 3 3		3215 7 11 1.57 1 1.00 3 9		0000 0 0 0.00	Spot Repair
June Map 2	TTIGUA STREET 6/4/2012 9187 9188 MHM010025 MHM0: 581 Louise Cr. 4/2/2004 8417 8419 MHK110022 MHK11	110026 D/S 4492 SPM010010 8 VCP 280 288.1	3 2		3213 5 9 1.80	1	2100 1 2 2.00	Spot Repair

		Constal					Structural Defea	1 Coding			Operational and	Maintenana			Canada vation Features	912	
		General	Pipe v				Structural Delec	D D D	pair t Rating fects fect Soo	хөрч	Operational and	Maintenance		Score Score	Construction Features	neous Feature: y Aband	1001
No.	Exis	ting MH ID Previous MH ID	f Camer swer ID	th (ft)	Crack	Fracture	Broken Hole	Deforme Collapse Surface Damage	Sags Sags ck Struc xural De	T Deposits	Ro	nots (R)	Infiltration Ob	Defects Namin CA Main Call Index Call Call Call Call Call Call Call Cal	Intruding Se		Park Park
inity wing with the pection only the pection of the pec	ENO	ang mirio	sting Se vious S vious S terial	S Commight (ft)	C	F	В Н	J D X	AT O Duisi	D AE AE Other		T) Medium (M) Ba	I (B) I	Description Description	T L IS	al Cons	9 100 to
2 4_Minor 549 R021 5 Y ROXBURY AV 9/1/	TV Date Star 1/2005 1283	t End Start End 19 12804 MHQ100010 MHQ100011	1 D/S 6460 SPQ100042 8 VCP	355 348.6	L C M S H	LCMSF	sv vv sv vv s	M L S M L A V H P S LF	RP S & 5 F F	## AGS B % L % Z % E	8 L J C B L .	J C B L J C B L	J C G D R W C	Z % C R & B B B 80 FD FL	BI BD D L U R LD RD SRH SRB SF	RL Z SA CU MC F Z S	05 Comments Recommendations
June Map 2 BROOKHURST														0000			
1 4_Minor 550 37 11 12811 Monroe St. 4/8/	8/2004 7693	3 7692 MHJ120005 COJ120004	3 D/S 4370 SPM030005 8 VCP 4 US 724 SPJ120004 8 VCP	150 152.4 102 103	3 2				3213 5 9	1.00				0 0.00			Spot Repair
June	9/2005 1172	4 11725 MHQ110015 MHQ110016	6 D/S 6295 SPQ110049 8 VCP	366 364.4	3				3 9					0 0			
			4 D/S 5418 SPM000021 8 VCP 1 DS 746 SPJ120018 8 VCP	266 266.8 382 292	3 2				3213 5 9	1.80				0000 0 0 0.00			Spot Repair
2 4_Minor 551 R048 11 DAPPLEGRAY RD 11/1	/1/2005 1198	9 11990 MHR130018 MHR130019	9 D/S 3963 SPR130019 8 VCP	220 212.6	3				3 9		2			2 2			
8132 Garden Grove		15 13146 MHQ070026 MHQ070027 1 7104 COJ130001 MHJ130006	7 D/S 5894 SPQ070032 8 VCP	380 385.1 120 125	3 2				3213 5 9	1.80				0000 0 0 0.00			Spot Repair
			5 DS 844 SPJ130026 8 VCP 2 D/S 5355 SPP150002 12 VCP	120 125 340 334.9	3				3 9	84 5.00 1 5.00				86 172 1			CONTINUOUS DEPOSITS ATTACHED ENCRUSTATION
MAP MAP ATTENTION	4004	40000 14110070040 14110070045		000 000					2040					0000			
		9 9507 MHM100042 MHM110013	5 U/S 6190 SPP070014 8 VCP 3 DS 3281 SPM100045 8 VCP	289 292 150 149	2 2				3212 4 8	1.00				0000 0 0 0.00			Spot Repair
			2 D/S 4363 SPQ140040 8 VCP	300 310.9	3				3 9	1 15.00	2			3 4			
			4 D/S 5578 SPQ090004 8 VCP	365 363.2	2 2				3212 4 8	2.00				0000 0 0 0.00			
2 4_Minor 554 R053 5 BANNER DR 11/4			9 DS 3305 SPL110020 8 VCP 6 D/S 4860 SPQ140044 8 VCP	261 261 265 264.6	1 3				3 9	1.00				0 0.00			Spot Repair
MAP 2 July- 5 4 Minor 554 PPT 3 5 BIXBY AVE 6/26	26/2012 9404	8 9489 COM100002 MHM100043	3 D/S 3575 SPM100009 8 VCP	127 111.7	1 2				3211 3 7	2.33 16				2800 16 32 2.00			111.7 MSA (NO MH 9489).
1 4_Minor 555 7A 1 1 12371 Walnut 2/10	10/2004 1178	12 11783 MHP100031 MHP100032 MHS140001	2 DS 4738 SPP100038 6 VCP	240 244	1				0	0.00				4 0.55			Spot Repair
2 4_Minor 555 R046 1 Y FLAGSTONE PL 10/28	28/2005 1276	60 0 MHS140001 A	D/S 7711 SPS140053 8 VCP	415 401.2	+++	++++			4 4 8	5 7 5.00	2	+++++		14 26	+++++++++++++++++++++++++++++++++++++++		SMALL SAG
5 4_Minor 555 PPT 3-B2-2 9 CANDY LANE 8/13	13/2012 1314	0 13142 MHQ080042 MHQ080044	4 D/S 5852 SPQ080052 8 VCP	240 238	1 2				3211 3 7	2.33				0000 0 0 0.00			
																pos	
																sibl e	
																und er	
		MHS140001	B US 3938 SPO130016 6 VCP	2 280 37					0	0.00			1	5 4 1.33		1 wat er	Replace pipe
	28/2005 0	12766 MHS140001 A	D/S 7712 SPS140053 8 VCP	12 401.2					4 4 8	5 7 5.00	2			14 26			SMALL SAG
			S U/S 5713 SPR080025 8 VCP	310 244 6 245 243	1 2				3211 3 7	2.33				0000 0 0 0.00			2002
			B DS 3352 SPK110006 8 VCP 2 D/S 2093 SPK080045 8 VCP	6 245 243 218 221.1					4 4 8					2 0.01 5 12	1		Spot Repair SMALL SAG
5 4_Minor 557 PPT 3-82-4 17 JENNIFER LANE 8/21	21/2012 1247	1 12472 MHQ090024 MHQ090025	5 D/S 5585 SPQ090006 8 VCP	215 225.3	1 2				3211 3 7	2.33				0000 0 0 0.00			
																LD	
1 4_Minor 558 42 20 43 20 13211 Gilbert St. 4/20	20/2004 1208	I8 11521 MHL130016 MHL140018	3 DS 2525 SPL140001 8 VCP	315 82					0	0.00				243 0.93		30d eg, JO	Replace pipe
2 4_Minor 558 R056 8 PALOMA AV 11/9	/9/2005 1145	i3 13184 MHQ140002 A MHQ140001	U/S 3808 SPQ140005 8 VCP	190 235.0					4 4 8	1	1			2 3			SMALL SAG
5 4_Minor 558 PPT 3-82-5 1 TWINTREE AVE 8/29	29/2012 1212	9 12118 MHS100032 MHS100012	2 D/S 5792 SPS100045 8 VCP	300 298.6	1 2				3211 3 7	2.33				0000 0 0 0.00			
2 4_Minor 559 R046 11 RAINBOW ST 10/28	28/2005 1277	1 12781 MHR140006 MHR140009	9 D/S 6480 SPR140007 8 VCP	235 234.0					4 4 8		1 5	1		7 9			SMALL SAG
CARDEN CROVE	16/2012 1303	16 13080 MHR080011 MHR080010	0 U/S 5985 SPR080027 8 VCP	320 367.5	1 2				3211 3 7	2.33				0000 0 0 0.00			
2 4_Minor 560 R035 1 BLVD 9/27	27/2005 1257	9 12580 MHQ120046 MHQ120047	7 D/S 6586 SPQ120033 10 VCP	300 300.7		1			2 3 8					0 0			SMALL SAG
			7 D/S 1721 SPH080006 12 VCP	414 417.4					3200 2 6					2K00 60 120 2.00			
2 4_Minor 561 M007 3 MORGAN LN 8/12 Map 1 BELGRAVE	12/2005 1320	14342 MHQ060013 ANAHEIM 4	4 D/S 5982 SPQ060015 8 VCP	340 249.1	2 4	++++		+++++++++++++++++++++++++++++++++++++++	6 8		++++	+++++		0 0			
5 4_Minor 561 PPT May 62 AVENUE 5/29	29/2012 8852 25/2005 1305	2 8855 MHF090036 MHF090039 60 13051 MHR090007 MHR090008	9 D/S 1491 SPF090040 8 VCP 8 D/S 6226 SPR090007 12 VCP	260 257.5 320 324.8	2 4	++++	++++		3200 2 6 6 8	3.00 50 40 1 5.00 50 5.00	++++	+++++		2100 50 100 2.00 5 100 253		4	HIGH FLOW
5 4_Minor 562 PPT 3-4 10 LORANE WAY 7/31	31/2012 1293	12 12913 MHP070007 MHP070006	5 U/S 6236 SPP070021 8 VCP	117 117.5	2				3200 2 6	3.00				0000 0 0 0.00			U/S MH is CO
2 4_Minor 563 M008 3 DANIEL AV 8/15 MAP COLLEGE	15/2005 1314	7 13150 MHQ070028 MHQ070031	1 D/S 5896 SPQ070035 8 VCP	290 293.3	2 4	$++\mp$			6 8		$+++\mp$	++++++++++++++++++++++++++++++++++++		0 0			+
5 4_Minor 563 PPT 3-B3-1 9 AVENUE 8/6/			3 D/S 4141 SPQ110017 8 VCP 1 D/S 3878 SPK070010 8 VCP	195 203.4 205 208.1	2				3200 2 6 5 8					0000 0 0 0.00			
June Map 2				209 208.1	2	3			5 8	2		+++++			 		
5 4_Minor 564 PPT B1 11 AMIES RD 6/6/		6 9777 MHM020022 MHM020025 9 13150 MHQ070030 MHQ070031	5 U/S 3649 SPM020042 8 VCP 1 D/S 5898 SPQ070037 8 VCP	168 170.3 385 388.1	2 2	1			3200 2 6 5 8	3.00 7 28 5.00 T	8			0000 0 0 0.00			
5 4_Minor 565 PPT 3-B5 30 GARDEN GROVE 9/5/	5/2012 1087	76 11466 MHQ130018 MHP130033	3 D/S 4969 SPP130026 12 VCP	230 230.3	2				3200 2 6					0000 0 0 0.00		1	230.3' MSA (BULK HEAD). No Reversal Video
2 4_Minor 566 M004 9 BLVD 8/9/		io 10151 MHL070021 MHL070022	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	230 230.7	1 3 1	++++	++++		5 8		1	1		2 4	+++++++++++++++++++++++++++++++++++++++		
2 4_Minor 567 M005 4 MONTCLAIR CT 8/10	31/2012 1293 10/2005 1015	14 12933 MHP070008 MHP070007 15 10156 MHL070026 MHL070027	7 U/S 6184 SPP070008 8 VCP 7 D/S 5298 SPL070020 8 VCP	300 303.4 240 249.8	1 3 1				3200 2 6 5 8	3.00	3			0000 0 0 0.00 65 127			
		0 8441 MHK120036 MHK120037		332 333.1	10 7 1	+++			312A 18 30		1	\prod		1100 1 1 1.00		2	
MAP			D D/S 6258 SPP090021 12 VCP	175 177.3		++++			5 8		++++	+++++		1 1 1			+
5 4_Minor 568 PPT 4-B2-2 24 YOCKEY STREET 9/12		4 6999 MHK160003 MHK160004A		350 347.3	9 1	++++	++++		3129 10 21	2.10	1	+++++		1100 1 1 1.00	+++++++++++++++++++++++++++++++++++++++		MHS090022 IS BURIED
5 4 Minor 569 PPT 3-R5 32 WEST STREET 9/5/		12 12733 MHS090021 MHS090022 18 11700 MHR120003 MHR120036		191 192.5 527 522.8	7 1	1 1		++++++++	3127 8 17	213	1 19			23 26			MANHOLE
2 4_Minor 570 M021 11 Y STANFORD AV 9/15	15/2005 1165	5 11658 MHR120007 MHR120008	3 D/S 5685 SPR120019 10 VCP	285 293.8	2 1	1			3127 8 17	72 72 5.00 1 5.00				145 290			HIGH FLOW 285.7' MSA (LD). Inspection
5 4_Minor 570 PPT 3-6 4 3-6 3 PINE STREET 7/31	31/2012 1175	i2 11753 MHP110003 MHP110004	4 D/S 4628 SPP110030 6 Tile	535 285.7	6 1	++++	++++		3126 7 15	2.14 1 1	2 1	1		3122 10 21 2.10	2 2	2	Completed 277.2' MSA=OBZ, OBZ= OBP
2 4_Minor 571 M013 14 M014 1 MAYPOLE DR 9/1/	1/2005 1217	9 12180 MHR100027 MHR100028	3 D/S 5920 SPR100018 8 VCP	339 343.7	2 1 1				4 8		6			1 5 7 10		1	(OBSTACLE EXTERNAL PIPE OR CABLE)
			D D/S 338 SPK160006A 8 VCP	80 78.3					3126 7 15	2.14				2100 1 2 2.00			
			9 D/S 6215 SPQ120047 8 VCP	125 144.5					4 8		1			1 1			

	General	Structural Defect Coding	Operational and Maintenance	Construction Features
P P PG.	(f) (1) (7) (7) (1) (1) (1) (1) (1) (1) (1) (1) (1) (1	ormed lapsed Pig table An Rog Sillure 18	ed Index s	1 Abandon Intruding Seal
A	Previous MH ID O TO Sowe Sower (ii) Previous HI (iii) Previous HI	Crack Fracture Broken Hole Joint □ <td> 5 5 6 Deposits Roots (R) Infiltration Obstacles Vermin </td> <td> U</td>	5 5 6 Deposits Roots (R) Infiltration Obstacles Vermin	U
2 Street Name CCTV Date Start End	Start End G	L C M S H L C M S H SV VV SV VV S M L S M L A V H P S LF RP S S	Table Tabl	2 8 8 8 9 1 FL BI BD D L U R LD RD SRH SRB SRL Z SA CU MC 8 9 8 9 9 0 Comments Recommendations
	MHQ100038 MHQ100039 D/S 6071 SPQ100014 8 VCP 265 262 MHS120006 MHS120007 D/S 4480 SPS120001 8 VCP 305 319.1	2 1 31	22 3 7 2.33 50 2 3 8 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3	00 50 100 2.00 11 17 Same Inspection Map 3-38-3 #17.
	MHP090014 MHP090013 U/S 4753 SPP090017 8 VCP 120 121.3			00 0 0 0.000 Use this one & delete other. U/S MH is CO
MAP MAP CENTURY	MHR130028 MHR140035 DIS 6397 SPR130028 10 VCP 327 327.9 MH0130033 MH0130034 DIS 4927 SP0130024 12 VCP 40 50		3 8 29 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4	37 66 25 From both MH MSA (SIPHON), Inspection Couldn't completed
2 4_Minor 575 G007 6 Y MAC ST 7/20/2005 7998 8000	MHK070022 MHK070024 D/S 1854 SPK070021 8 VCP 312 310.0		1 2 5 250 3 8 2 71 500	73 146 1 1 1 1 1 1 1 1 1
	MHS120020 MHS120021 D/S 6372 SPS120014 8 VCP 163 217.8 MHK060034 MHK060035 D/S 5931 SPK060024 8 VCP 220 221.0	1 1 1 1 31	21 3 6 2.00 0 0 3 8 8 26 5.00 0	00 0 0 0.00
	MHQ090027 MHQ090028 D/S 6077 SPQ090011 8 VCP 230 235.6		12 3 5 1.67	00 0 0 0.00
MAP	MHL060020 MHL060021 D/S 3733 SPL060020 8 VCP 270 269.4	1 2	3 8	
	MHO140014 MHO140045 D/S 5625 SPQ140051 12 VCP 10 6.2 MHP080004 MHP080006 D/S 6252 SPP080029 8 VCP 280 279.7 Clay Clay Clay Clay Clay Clay Clay	1 1 2 3 31	11 2 4 200 0	00 0 0 0.00
	MHK140033 MHK140034 D/S 713 SPK140031 8 Tile 240 22.7 MHP070010 MHP070011 D/S 6186 SPP070010 8 VCP 300 296.0	1 1 2 31	11 2 4 200 0 0 3 8 2 2 0 0	20 0 0 0.00
	MHN070039 MHN070040 D/S 4042 SPN070044 8 VCP 207 209.1 MHP070013 MHP070014 D/S 6188 SPP070012 8 VCP 300 298.7		11 2 4 200	00 0 0 0.00
	MHS100026 MHS100032 D/S 5784 SPS100039 8 VCP 230 231.4	1 1 3	1 2 4 2.00	00 0 0 0.00
MAP	MHP070014 MHP070021 DS 6189 SPP070013 8 VCP 88 88.6 MHQ080023 MHQ080025 DS 6432 SPQ080017 8 VCP 262 264.7	1 2	3 8	0 0
2 4_Minor 582 R003 10 MAGNOLIA ST 7/27/2005 10800 10803	NH-QUBUUZS INFLUBBUUZS DIS 6432 SP-QUBUUTY 8 VCP 202 204.7 MH-L080028 MH-L080032 DIS 4343 SPL080028 8 VCP 285 281.4	1 1 2 3	3 8 9	0 0 0
	MHE120034 MHE120035 D/S 2119 SPE120031 10 VCP 400 354.3 MHO130027 MHQ130028 D/S 4862 SPQ130034 8 VCP 325 327.1	1 2 31	00 71 2 3 3 8 3 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9	24
	MHF110030 MHF110031 D/S 1274 SPF110021 8 VCP 350 351	1 31	00 65 3	2N 1
MAP	MHP080025 MHP080024 U/S 6242 SPP080024 8 VCP 116 118.5	2	2 8 2 82 5.00	84 250
	MHOZ20006 MHOZ20016 D/S 388 SPO220021 8 VCP 340 347.8 MHQ110026 MHQ110027 D/S 4132 SPQ110008 8 VCP 300 301.6	1 2 31	00 1 3 3.00 64 2 2 8 1 1	00 64 128 2.00
	MHF100017 MHF100018 D/S 1244 SPF100020 8 VCP 350 336.3	1 31	00 61 5	2K 2 Inspection Completed HIGH FLOW, UNABLE TO SEE
Map 1 BELGRAVE	MHQ090045 MHQ090044 U/S 6275 SPQ090063 12 VCP 74 291.5	2	2 8 1 32 5.00 2	36 72 1 ANY DEFECTS
2 4_Minor 587 G036 8 GAMMA ST 9/7/2005 12555 12556	MHF090039 MHF090040 D/S 1494 SPF090043 8 VCP 257 253.6 MHQ100037 MHQ100038 D/S 6070 SPQ100013 8 VCP 270 265.9	1 2 31	2 8 1 1 2	2 3
	MHF080048 MHF080049 D/S 1708 SPF080048 10 VCP 253 252 MHK070038 MHK070039 D/S 2087 SPK070042 8 VCP 80 86.2	1 31	00 1 3 3.00 47 2 3 7 1 1 15.00 1	20 47 94 2.00 SMALL SAG
5 4_Minor 588 PPT 3834 12 3834 13 TRASKAVENUE 8/30/2012 13982 10918 2 4_Minor 589 6002 3 MOSSLERST 7/13/2005 8576 8577	D/S 7607 new 6 VCP 249 241.3 MH-U070014 MH-U070015 D/S 2075 SPJ070015 8 VCP 325 326.3			20 81 127 1.57 2 2 238.3' MSA (LL)
Map 1	MHE090015 MHE090016 D/S 1389 SPE090026 8 VCP 301 299.4	5 1	8 7 2 6 2 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	10 12
	MHQ070003 MHQ070004 D/S 6325 SPQ070007 8 VCP 370 373.0	1 5	6 7	2 2
5 4_Minor 590 PPT 4-82-1 13 RIATA STREET 9/10/2012 7604 7605 2 4_Minor 591 M009 9 REVA DR 8/16/2005 12211 12212	MHK150032 MHK150033 D/S 651 SPK150035 8 VCP 349 347.3 MHQ080005 MHQ080006 D/S 6425 SPQ080010 8 VCP 370 368.4		00 1 3 3 3.00 4 2 2	00 4 8 2.00
5 4 Minor 591 PPT 3-B3-4 5 TRASK AVENUE 8/30/2012 12003 10877	MHR150005 MHR150006 D/S 3894 SPR150004 12 VCP 110 106.9	1 33	00 1 3 3.000 1 4	00 1 2 2.00
5 4 Minor 593 PPT 22.2 24 LAMPSON AVENUE 7/46/2042 9588 9589	MHL110028 MHL110029 D/S 4245 SPL110030 12 Tile 20 11.4	1 31		0 0 0
2 4_Minor 594 G004 7 POESST 7/15/2005 8585 8586 5 4_Minor 594 PPT 3-2 17 LOARA STREET 7/24/2012 12793 12792	MH-J080017 MH-J080018 D/S 2007 SPJ080001 8 VCP 330 325.2 MHP050003 MHP050004 D/S 5615 SPP050003 8 VCP 74 67.3	2 1 1 1 3 31	4 7 3 1 5.00	00 0 0 0.00
2 4,Minor 595 G018 8 DEWEY DR 84/2006 10284 10329 2 4,Minor 596 G021 10 Y JACALENE LN 8/15/2005 13193 13119 MAP H AMP H AMP AMP<	MHK050020 MHK050019 U/S 5940 SPK050042 8 VCP 300 300.0	1 1 2	4 7 8 68 5.00 1 1 1 2 1 1 1 2 1 1 1 2 1 1 1 1 2 1 1 1 1 2 1 1 1 1 2 1 1 1 1 1 1 2 1	4 5 76 152 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1
5 4_Minor 596 PPT 2-2-2 12 GLORIA AVENUE 7/19/2012 8605 8606	MHK140900 MHK140901 D/S 2441 SPK140901 8 PVC 85 87.7		00 1 3 3.00 0 0	00 0 0 0.00
5 4_Minor 597 PPT Map 1 23 KNOTT STREET 6/27/2012 8145 8142	MHH120011 MHG120029 U/S 919 SPH120009 8 Tile 108 106.5	1 31		00 0 0 1.00
MAP			4 7 3 1 3 1 3	7 10
2 4_Minor 599 M019 6 LEMONWOOD LN 9/13/2005 11707 11708		2 1 1 1	00 1 3 3.000 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	00 0 0 0.00 U/S MH is CO
5 4_Minor 599 PPT 3-2 9 EASEMENT 7/24/2012 13164 13165 2 4_Minor 600 M006 10 Y JACALENE LN 8/11/2005 13197 13198		1 2 1	4 7 80 74 5.00 1 1 1	00 0 0.000 HIGH FLOW
5 4_Minor 600 PPT 3-1 16 PATRICIA DR 7/23/2012 10618 9938 2 4_Minor 601 G009 6 DALE ST 7/22/2005 8511 8512		1 1 1 1	3 7 3 1	00 0 0 000
5 4_Minor 601 PPT 3-2 1 PATRICIA DR 7/23/2012 10615 10616	MHO050010 MHO060025 D/S 5565 SPO050025 8 VCP 150 150.1 MHK050026 MHK050028 D/S 1825 SPK050012 8 VCP 290 295.2		00 1 3 3 3.00 0	00 0 0 0.00
5 4_Minor 602 PPT 4-B2-2 45 BOYD AVENUE 9/10/2012 11052 11049	MHL150034 MHL150031 U/S 2472 SPL150020 8 VCP 240 237.6			00 0 0 0.00
2 4_Minor 603 G035 4 G035 5 Y STRATHMORE DR 9/6/2005 12809 12812	MHQ100017 MHQ100021 D/S 6343 SPQ100033 8 VCP 288 290.6	1 1 1	3 7 1 70 5.00 1 5.00	84 180 1 1 223.5 MSA-OBJ, OBJ=OBSTACLE IN JOINT
2 4_Minor 604 G003 8 MAC DUFF ST 7/14/2005 8038 8039	MHK130002 MHS130001 U/S 555 SPS130011 8 VCP 216 252.5 MHK060010 MHK060011 D/S 1891 SPK060031 8 VCP 182 176.8	1 31		00 0 0 0.00
5 4_Minor 604 PPT MAP 14 BROOKHURST EASEMENT 7/24/2012 14626 14625				00 0 0 0.00

				General				Structural Defect Coding		Operational and Maintenance		Construction F	eatures	[g]_
		o c			Pipe g				ed Pipe ailure epair	Index S		s Score	neous n Featur	ay Aban
	No. ape No WD No	ν Δραστίου Location	Fx	isting MH ID Previous MH ID	f Came swer ID sewer IE	gth (ft)	Crack Fracture	Broken Hole Joint	Deforms Collapse Surface Damage Lining F Coint Re Coint Re Cox Struct	O Denosits Roots (R)	Infiltration Obstacles Ve	A M De C I I I I I I I I I I I I I I I I I I	Intruding Seal Waterial W stroction	ied Abe
ase ority nking	D No. D no. pection	D Watc			sting Sa sting Sa vivious Sa vivi	S Comm	C F	0	S CP A MT CP Suit Struct	To Deposits Roots (R)	Other	T C O O N Defe	SI COLOR	S Identif
Cor Rar	Tag Inst Na A	Street Name	CCTV Date St	art End Start End	Pre Bxi:	8	C M S H L C M S	H SV VV SV VV S M L S	M L A V H P S LF RP S & F	S AGS B % L % Z % B L J C B L J	BLJCGDRWCZ%C	R A B B O FD FL BI BD D L U R LD	RD SRH SRB SRL Z SA CU MC F	S
2 4_Minor 605	G007 7	MAC ST	7/20/2005 79	99 8000 MHK070023 MHK070024	24 D/S 1855 SPK070022 8 VCP	130 124.0	1 2		3	7 1	1 5	2 6		JOINTS) 5 % STRAW, 25.1' DAGS 5%.
5 4_Minor 605 PPT 2 4_Minor 606		LINDALOA LANE		162 13163 MHP050006 MHP050009	05 U/S 5613 SPP050005 8 VCP 6 D/S 4837 SPL070032 8 VCP	263 262.1 267 275.8 2	1		3100 1	3 3.00		0000 0 0 0.00		
2 4_Minor 606	MAP 5					267 275.8 2	1		3	7 1		2 3		
5 4_Minor 606 PPT 2 4_Minor 607	3-B3-5 9 M016 12			74 12002 MHR150003 MHR150004	04 D/S 7643 SPR150002 12 VCP 15 D/S 6088 SPR110034 8 VCP	275 262.7 325 334.4 2	1		3100 1	3 3.00		0000 0 0 0.00		
5 4_Minor 607 PPT	MAP				7 D/S 1017 SPI120017 8 VCP	280 269.4	1		3100 1	3 3.00		0000 0 0 0.00		
2 4_Minor 608	R006 15 MAP				4 D/S 4237 SPL060028 8 VCP		1		3	7		0 0		
5 4_Minor 608 PPT 2 4_Minor 609	R054 3	HOPE STREET GLENCOVE DR		289 11293 MHN130024 MHN140004 389 10890 MHQ140007 MHQ140000	04 D/S 2891 SPN130023 8 VCP 08 D/S 4354 SPQ140031 8 VCP	332 324.8 360 363.3 2	1 1		3100 1	3 3.00		3100 1 3 3.00 1		
5 4_Minor 609 PPT		FLOWER STREET		298 11297 MHN140006 MHN13003		340 333.5	1		3100 1	3 3.00		0000 0 0 0.00		
2 4_Minor 610	R018 1	CHAPMAN AV	8/29/2005 122	252 12253 MHT090036 MHT090037	77 D/S 6028 SPT090034 10 VCP	155 155.1 2	1		3	7		0 0		
5 4_Minor 610 PPT 2 4_Minor 611	3-B3-6 9 S002 2			51 6652 MHP150009 MHP150013	3 D/S 4824 SPP150008 8 VCP	185 383.5 370 368.6	1 2		3100 1	3 3.00		0000 0 0 0.00		
2 4_MMO 011	June						1 2		***************************************	16 2 13		31 47		
5 4_Minor 611 PPT 2 4_Minor 612	Map 1 17	CHAPMAN AVE CHAPMAN AV	6/21/2012 71 8/30/2005 131	68 7169 MHI090027 MHI090028 107 13108 MHR090012 MHR090013	8 D/S 1723 SPI090006 15 VCP 3 D/S 6270 SPR090029 12 VCP	400 399.6 275 272.5 2	1 1		3100	7		0000		
	MAP													126.7 MSA (DAE). No Reversal
5 4_Minor 612 PPT 2 4_Minor 613	4-B1-4 4 R037 6	BANGOR ST	9/18/2012 103 9/28/2005 121	10310 MHN170010 MHN170011 123 12125 MHS090003 MHS100029	11 D/S 2132 SPN170001 8 VCP 29 D/S 5786 SPS100040 8 VCP	160 126.7 310 315.7 2	1		20 2000 20	7		4131 1 6 6.00 0 0	1 1 1	VIGEO
5 4_Minor 613 PPT	MAP 3-B3-5 1	Y WEST STREET	8/31/2012 116	573 11672 MHR110026 MHQ10000	01 U/S 5690 SPQ110033 10 VCP	295 290.3 47	$ \cdot \cdot \cdot \cdot $	$\parallel \parallel $	2B11 40	35 194	$\parallel \parallel $	0000 0 0 0 0 0	$ \cdot \cdot \cdot \cdot \cdot $	
2 4_Minor 614	R063 3	Y TRASK AV	12/1/2005 114	143 13177 MHQ150004 MHQ150000	06 D/S 5469 SPQ150021 12 VCP	345 264.1	1 2		3	7 1 5.00 65 5.00		66 197		
5 4_Minor 614 PPT 2 4_Minor 615	1 22 G037 8	Y AVENUE			3 D/S 1188 SPF080014 8 VCP 28 D/S 4133 SPQ110009 8 VCP	268 266.4 190 190.7	1 1	+++++	15 2800 15	30 2.00 9 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	2	2A12 12 22 1.83 4 7		
	MAP													
5 4_Minor 615 PPT 2 4_Minor 616	3-B4-1 1 G022 2				01 D/S 6247 SPO080003 10 VCP 09 D/S 5769 SPQ080035 8 VCP	110 166 255 255.6	1 1		13 2A00 13 2	26 2.00		4100 0 4 0.00 75 150	1	
5 4_Minor 616 PPT		MAGNOLIA STREET			4 D/S 4672 SPL050064 8 VCP	130 131.6			8 2800 8	16 2.00		0000 0 0 0.00		
2 4_Minor 617	G025 7	ROBERT LN	8/19/2005 131	128 13129 MHQ080030 MHQ08003	31 D/S 5838 SPQ080038 8 VCP	300 302.2	1 1		2	7		0 0		
5 4_Minor 617 PPT 2 4_Minor 618	June Map 1 18 M013 6				9 D/S 1730 SPI090036 15 VCP 16 U/S 5963 SPR090012 8 VCP	400 400.7 190 200.7			6 2600 6	12 2.00		0000 0 0 0.00		200.7' MSA= OBZ
2 4_WIIIOI 610	MAP	GARDEN GROVE				190 200.7	1 1 1			7 29 5.00	1 70 12	42 74	1	200.7 WSA= OBZ
5 4_Minor 618 PPT 2 4_Minor 619	3-B4-2 19 G045 9	BLVD	9/24/2012 129	902 12903 MHQ120054 MHQ120059 133 12137 MHS100046 MHS100060	55 D/S 5821 SPQ130037 24 VCP 50 D/S 5827 SPS100049 8 VCP	433 432.8 4 290 287.5	1 1 1		2411 5	9 1.80 7 2		0000 0 0 0.00		215.7' Unmapped MH
	MAP 2 July-	LORALEEN STREET												
5 4_Minor 619 PPT 2 4_Minor 620	2 8 R051 1	Y HARBOR BLVD			5 U/S 3330 SPL090013 8 VCP 13 D/S 5780 SPS100035 10 VCP	40 302.9 250 246.4	1		2 4 2400 4	8 2.00 7 2 1 1		3 5		
5 4_Minor 620 PPT	MAP 3-B3-1 6	CHESTER AVENUE	0/0/0040 136	515 12514 MHQ110030 MHQ11003	29 U/S 4135 SPQ110011 8 VCP	135 284.3 2			2200			1100 1 1 1 100		
2 4_Minor 621	R032 3	GARDEN GROVE	9/23/2005	MHR120031 MHR12003		241 240.8	1		1 2	7 16 11 5.00		27 54		
	June				Clay									
5 4_Minor 621 PPT 2 4_Minor 622		KNOTT STREET EUCLID ST	6/27/2012 81 11/21/2005 110	36 8135 MHH120003 MHH120003 006 11005 COP140001 COP140003	02 U/S 913 SPH120003 8 Tile 12 U/S 5297 SPP140040 8 VCP	221 220.1 ₃ 60 60.9			3 3	6		0000 0 0 0.00		SMALL SAG
5 4_Minor 622 PPT	MAP 3-B3-1 3	DORDA AVENUE	8/6/2012 125	518 12519 MHQ110033 MHQ11003	34 D/S 4139 SPQ110015 6 VCP	325 328.1 3			2300 2	6 200		0000 0 0 000		
2 4_Minor 623	R046 7				2 D/S 6516 SPR130010 8 VCP	295 296.0			3 3	6	1	1 1		SMALL SAG
5 4_Minor 623 PPT 2 4_Minor 624	2-1-5 12 G004 12	STREET MOEN ST		706 11075 MHN130033 CON13000 45 8546 MHJ080011 MHJ080012	01 U/S 2636 SPN130036 8 VCP 2 D/S 2045 SPJ080012 8 VCP		2 1 3 1			6 1.50		0000 0 0 0.00		U/S MH is CO
5 4_Minor 624 PPT	MAP	JOSEPHINE STREET			60 D/S 3378 SPK130007 10 Tile	45 33.3 2			2211 3	5 1.67		0000 0 0 0.00	2	
2 4_Minor 625	G018 6	ELMER LN	8/4/2005	MHK050005- A MHK050000	06 D/S SPK050005-A 8 VCP	320 319.8 2	2		4	6 1		1 1		
5 4_Minor 625 PPT 2 4_Minor 626	MAP 2-1-1 17 M006 7	WELDON DR RICKY AV	7/9/2012 84	72 8469 MHL120016 MHL120012	2 U/S 3128 SPL120013 8 VCP 03 D/S 5971 SPQ060004 8 VCP	321 322.4 ₂ 335 346.6	1 3 1		2211 3	5 1.67		0000 0 0 0.00		
	Map 1													
5 4_Minor 626 PPT 2 4_Minor 627	May 25 M009 10				3 D/S 1340 SPE090017 8 VCP 07 D/S 6426 SPQ080011 8 VCP	320 316.4 2 365 368.2	3 1	+++++	2200	63		2K00 0 0		
5 4_Minor 627 PPT	MAP 3-5 4	NELSON STREET	7/25/2012 122	270 11007 MHO110006 COO110003	03 U/S 5408 SPO110006 8 Tile	215 224.5 2			2200 2	4 2.00		0000 0 0 0.00	1	224.5' MSA (COUNTY LINE). No Reversal Video
2 4_Minor 628	G039 8 MAP	ORA DR	9/13/2005 125	593 12594 MHP090015 MHP090016	6 D/S 4755 SPP090019 8 VCP	200 196.3	2 1		3	6		0 0		
5 4_Minor 628 PPT	2 July- 2 12				29 D/S 3234 SPM100030 8 VCP	295 296.2 1	1		2111 2	3 1.50		1100 1 1 1.00		
2 4_Minor 629 5 4_Minor 629 PPT	G018 13 MAP 2-2-1 25	ELMER LN LORNA STREET		74 7978 MHK050032 MHK05004: 44 9389 MHK120039 MHK130049	11 D/S 1829 SPK050016 8 VCP Clay 19 D/S 3422 SPK130024 8 Tile	265 264.9 218 175.4 1	1 1 1 1	+++++	2111 2		++++++++	0000 0 0 0.00		
2 4_Minor 630	G007 3	MACNAB ST	7/20/2005 79	93 7995 MHK070017 MHK070019	9 D/S 1849 SPK070016 8 VCP		1 1 1			6 2 1 5.00		3 7		
5 4_Minor 630 PPT 2 4_Minor 631	3-4 5 G009 7	DANIEL AVE SOMERS DR			35 D/S 5899 SPQ070038 8 VCP 44 D/S 2426 SPJ080035 8 VCP	215 220.7 ₁	1 1 1		2111 2	3 1.50 6 1 1 1 1		0000 0 0 0.00		
	MAP 2 July-			NEW										
5 4_Minor 631 PPT 2 4_Minor 632	3 3 G014 2				54 D/S 4037 SPN070039 8 VCP 23 D/S 4731 SPK080004 8 VCP	250 257.3 244 253.5	1 1 1		1 2111 2	3 1.50 1		4110 2 4 2.00 1	4	
5 4_Minor 632 PPT	Map 1 May 39	LIBITIEV AVENU	E/00/0040	00 7401 MUE400007 MUE4	8 D/S 1214 SPF100010 8 VCP	250 255			2405			3800		
2 4_Minor 633	G021 8		8/15/2005 129	976 13193 MHQ070039 MHQ07004	10 D/S 6307 SPQ070001 8 VCP	256 255 1 174 175.6	3		2100	6 2		2K00 2 4		346.3' MSA (DAE). End of the
5 4_Minor 633 PPT 2 4_Minor 634	MAP 1-2 3 G031 3	Y STREET		24 7825 MHE110012 MHE110013	3 D/S 1445 SPE110044 8 Tile	350 346.3 ₁ 220 219.4			2100 1	2 2.00 27		2D00 27 54 2.00		346.3' MSA (DAE). End of the Sewer Line Clean Deposits
	Map 1						1 1 1					3 7		
5 4_Minor 634 PPT 2 4_Minor 635	G034 12				2 D/S 1339 SPE090016 8 VCP 3 D/S 6337 SPQ100027 8 VCP	158 156.3 1 288 289.6	1 1 1		2100	6 47 70 5.00 1 5.00 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1		2A00 119 237		
	MAP	STANFORD												
5 4_Minor 635 PPT 2 4_Minor 636	3-B3-1 10	JACALENE LN	8/11/2005 131	197 13196 MHQ060005 MHQ06000	24 U/S 5139 SPP120017 8 VCP 14 U/S 5973 SPQ060006 8 VCP	226 220.4 1 150 285.5 1	1 1		2100 1	2 2.00 1 3 3 3		2100 1 2 2.00		

	General Bline	Structural Defect Coding	Operational and Maintenance S S S S S S S S S S S S S S S S S S S
0 N N O O O O O O O O O O O O O O O O O	(i) (ii) (iii) (ii	introperation of the control of the	Telects Trade of Trad
	Previous MH ID See (e)	Crack Fracture Broken Hole Joint \$\vec{\delta} \vec{\delta} \delt	Part
	Start End □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □	1 2100	1 2 2.00 1 1 815.4" MSA (DSZ). No Reversal Video Video 1 2 2.00 1 1 9 1 1 Video 3344. TMSA-PROBABLE HIGH
MAP	MHR110015 MHR110028 D/S 6085 SPR110032 8 VCP 390 384.8 MHK150035 MHK160024 D/S 655 SPK150038 8 VCP 281 280	1 1 1 1 2100	3 6 1 1 1 FLOW
	MHKT50035 MHKT60024 DIS 655 SPK150038 8 VCP 281 280 MHS090031A MHS090031 U/S 6154 SPR090002 12 VCP 225 100.8	 	0 1 2 200 4 4 1,00 4 4 1,00 3 6 8 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1
ORANGEWOOD	MHO130966 MHO130040 D/S 6768 SPO130966 8 VCP 204 119.2	 	3 1 2 2.00
MAP EDGEBROOK	MHR070009 MHR070010 D/S 5986 SPR070026 10 VCP 372 374.0 MHK140028 MHK140012 D/S 705 SPK140030 8 Tile 168 165.7		3 6 2 2 2 2 UIS MH was 8907 6 D/S MH was 7955. We checked GIS & changed both both both both both both both both
	MHK070033 MHK070032 U/S 1921 SPK070036 8 VCP 290 301.9		2 2 6 1 1 1 3 1 1 3 5 6 5 6 1 1 1 1 3 1 1 1 3 1 1 1 1 3 1 1 1 1 3 1 1 1 1 3 1 1 1 1 1 3 1 1 1 1 1 3 1
	MHL030008 MHL030007 U/S 5025 SPL030035 8 VCP 168 171.3 MHR090014 MHR090015 D/S 5961 SPR090010 8 VCP 245 237.9		2 6 31 14 5.00 2 50.00 3 1 1 1 1 1 5 3 56 109
	MHR090015 MHR090002 D/S 5962 SPR090011 8 VCP 190 200.5 MHQ090010 MHQ090013 D/S 6416 SPQ090046 8 VCP 115 163.6		3 1 2 2.00 2 2 6 2 1 5.00
MAP	MHP110009 MHP110007 U/S 4632 SPP110034 6 Tile 535 250.1		2 2 1 300 2 2 1 300 4 12 300 4 1 1 2 300 4 1 1 Video
5 4_Minor 643 PPT B1 88 MAGNOLIA STREET 6/15/2012 10376 10375	MHK060042 MHK060043 D/S 5162 SPK080042 8 VCP 267 275.7 MHR070017 MHR070018 D/S 5723 SPR070015 8 VCP 300 300.2	1 2100	2 0 0000 0000 0 0 0 0 0
	MHR160029 MHR170008 DIS 4349 SPR160021 8 VCP 333 332.5	1 2100	0000 0 0 0.00
5 4_Minor 645 PPT	MHS110016 MHS110013 US 6037	1 2100	2 6 3 2 2 0 1 2 200 1 1 2 200 1 1 0 1 0 1 0 1
MAP	MHQ080041 MHQ080042 DIS 5851 SPQ080051 8 VCP 90 89.9 MHR090022 MHR090023 DIS 5479 SPR090035 8 VCP 340 335.8		
2 4_Minor 647 R001 10 FLORENCE LN 7/25/2005 10136 10137	MHL080015 MHL080016 D/S 5188 SPL080014 8 VCP 258 255.6 MHR120051 MHR120052 D/S 6141 SPR120059 24 VCP 420 418	2	2 6 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1
	MHR120012 MHR120013 D/S 6467 SPR120039 8 VCP 275 281.5		
	MHS160010 MHS160012 D/S 458 SP\$160012 8 VCP 75 72.4 MHR120013 MHR120018 D/S 6092 SPR120024 8 VCP 280 278.5	2 2	0 1 2 200
	MHT090005 MHT090006 D/S 3931 SPT090023 8 VCP 220 220 MHT120023 MHT120024 D/S 4089 SPT120021 8 VCP 222 220.7	<u> </u>	0 2 2 1.00 000 0 0 0.00 0 0 0.00 0 0 0.00 0 0 0 0.00 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
	MHF120009 MHF120008 U/S 1623 SPF120034 8 VCP 350 354.6		1 1 1.00
5 4_Minor 651 PPT 1 27 EMERALD STREET 5/7/2012 8777 8778	MHF080046 MHF080047 D/S 1706 SPF080046 10 VCP 290 287.7	1 1100	1 1 1.00
Map 1 Map 1 TUNSTALL	MH-L080024 MH-L080026 D/S 4339 SPL080024 8 V/CP 300 298.3 MHE110005 MHE110006 D/S 1436 SPE110036 8 V/CP 310 366.8		2 6 63 5.00 1 5.00 3 3 1 1 71 144
	MHS100019 MHS100020 D/S 6492 SPS100010 8 VCP 328 328.2	2	2 6 21 6 5.00 3 1 1 1 5 2
	MHF100025 MHF100021 U/S 1249 SPF100024 8 VCP 350 346.6 MHS090013 MHS090015 D/S 5904 SPS090028 8 VCP 140 139.3		0 1 1 1 00 6 6 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2
	MHM030026 MHM030011 D/S 3662 SPM030038 8 VCP 362 364.8 MH0140036 MH0140037 D/S 4207 SP0140017 8 VCP 275 275.		0 1 1 100 1 1 2100 1 2 200 1 2 200 1 2 2 00 1 1 1 1
	MHQ140029 MHQ140028 U/S 3824 SPQ140009 8 VCP 385 385.4		0 1 1 1.00 1 1 1.00
June VALLEY VIEW	MHD140037 MHD140038 DIS 4208 SPQ140018 8 VCP 275 275.6 MHE120031 MHE120023A U/S 2123 SPE120023 10 VCP 50 31.6		2 6 1 30.00
2 4_Minor 657 R056 7 Y NEWELL ST 11/9/2005 11452 11453 MAP NEWHOPE	MHQ130007 MHQ140002 DIS 3811 SPQ130009 8 VCP 290 297.9	2	
5 4_Minor 657 PPT 3-84-2 9 STREET 10/2/2012 12509 12582 2 4_Minor 658 S004 7 ASPENWOD AV 10/13/2005 12687 12688 MAPP ASPENWOD AV 10/13/2005 12687 12688		 	0 1 1 1.00
I GARDEN GROVE	MHL110037 MHL110034 DIS 7146 SPK110024 12 VCP 290 63.1 MHS120053 MHS120064 DIS 4595 SPS120025 10 VCP 350 349.0		0 1 1 1 1.00 Pipe fixed January 2008 2 6 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
	MHK080011		0 1 1 1.00 000 0 0 0.00 UIS MH IS CO
MAP	MHP140019 MHP140020 DIS 4294 SPP140019 8 VCP 340 336.7 MHP070001 COP070001 UIS 6257 SPP070026 8 VCP 133 133.2		2 6 4 1 5.00 5 10 5 10 U/S MH is CO
2 4_Minor 661 R058 2 Y RAMONA DR 11/11/2005 12321 12322	MHP140021 MHP140022 D/S 4438 SPP140046 8 VCP 180 176.5	2	
5 4_Minor 661 PPT 4-B2-2 31 HALE CIRCLE 9/12/2012 6979 6980 2 4_Minor 662 S007 7 SUNGROVE AV 10/21/2005 12434 12440	MH-L160006 MH-L160005 U/S 283 SPL160020 8 VCP 178 194.1 MHS120012 MHS120052 D/S 4486 SPS120007 8 VCP 220 218.3	1 1100	0 1 1 1.00 2 6 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1
	MHL150044 MHL160006 U/S 284 SPL160021 8 VCP 197 201.6 MHQ150008 MHP150001 D/S 5468 SPQ150020 12 VCP 340 339.4		2 1 1 1.00
	MHK140020 MHK150900 DIS 703 SPK140029 10 Clay Tile 250 248.7 MHQ140012 MHQ140013 DJS 4801 SPQ140020 8 VCP 195 175.3		0 1 1 1.00
5 4_Minor 664 PPT 3B2-6 3 BLUE SPRUCE 8/30/2012 12401 12467 AVE 8/30/2012 12401 12467 SPRUCE 8/30/2012 12401 SPR	MHT110021 MHT110023 DIS 3977 SPT110022 8 VCP 140 276 MHS120009 MHS120010 DIS 4483 SPS120004 8 VCP 250 257.0		
MAP	MHS120009 MHS120010 DIS 4483 SPS120004 8 VCP 250 257.0 MHP150012 MHP150011 UJS 4826 SPP150010 8 VCP 185 288.1		
			2 6 2 45 5.00 4 4 1 1 1 1 5 2 100 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1

				General					Structural Defect C	oding			Operational and Maintenance			Construction Features	8 5	
	9 0	NO.			Pipe					sed Pipe e e ge ge Failure	Repair Lot Ratin Defects	x pul			int Rating		laneous in Featur	andones
JO.	on No.	Inspec.	Exis	sting MH ID Previous MH ID	Sewer II Sewer II	fi) angth (ft)	Crack	Fracture	Broken Hole	Deform Collap Surfac	Point F Sags Luick Stra uctural [Deposits			ration Obstacles Vermin	(Lateral) Line I	uding Seal Wiscel Material W Isc	uffied At
Phase Priority Ranking Contract	DVD No DVD No Inspectiv	DVD War serversa	CCTV Date Sta	rt End Start End	Direction Existing Existing Previous Size (in)	GIS Con Length (C M S H L	СМВН	B H O	LSMLAVHP S LF	PACP G	AE AE Other AGS B % L % Z %		(W) Ball (B)	Other	FL BI BD D L U R LD RD SRH	SRB SRL Z SA CU MC L J SA SRB SRL Z SA CU MC L J SA SR	ତ୍ର Comments Recommendations
5 4_Minor 666 PPT		MARGIE LANE			U/S 6445 SPQ070015 8 VCP	285 288.9	1				1100 1 1	1.00			0000 0 0 0.00			
2 4_Minor 667	G003 14 June Map 2	Y DALE ST			D/S 1897 SPJ060002 8 VCP	131 203.0					1 2 6	14 9 5.00 1 5.00	2		26 51			
5 4_Minor 667 PPT 2 4_Minor 668	B1 65 G004 5				D/S 5947 SPL060045 15 VCP D/S 1922 SPK070037 8 VCP	301 303.2 335 342.5	3	1			1100 1 1 1 4 5	1.00	6		0000 0 0 0.00			
5 4_Minor 668 PPT	Map 2 B1 23	HARCOURT AVE	6/7/2012 899	4 8993 MHL030019 MHL030018	U/S 4531 SPL030019 8 VCP	320 321.5	1				1100 1 1	1.00			0000 0 0 0.00			
2 4_Minor 669	M003 2	OMA PL	8/8/2005 1016	68 10170 MHL060013 MHL060015	5 D/S 3730 SPL060017 8 VCP	288 289.8	3				4 5		16 2 2	2 1	22 34			
5 4_Minor 669 PPT 2 4_Minor 670	3-B3-4 17 M017 11				3 D/S 6172 SPR100045 8 VCP 3 D/S 5636 SPR100007 10 VCP	315 323.9 155 160.4	1				1100 1 1	1.00			0000 0 0 0.00			
	MAP 2 July-	BIXBY AVE									400				0000			
5 4_Minor 670 PPT 2 4_Minor 671	3 4 M013 11				2 D/S 3574 SPM100008 8 VCP B D/S 5913 SPR100012 8 VCP	125 330.4 200 202.1	3				1100 1 1	1.00			0 0 0			
5 4_Minor 671 PPT 2 4_Minor 672	3-B5 9 G011 4	STREET		37 13186 MHQ130035 MHQ130036 21 10822 MHL070014 MHL070015	B D/S 5696 SPQ130040 6 VCP B D/S 4836 SPL070031 8 VCP	356 346.8 228 231.3	1 1	2			1100 1 1	1.00			0000 0 0 0.00	1		
5 4_Minor 672 PPT	MAP 3-B4-2 20	GARDEN GROVE BLVD	0/24/2012 1286	98 12902 MHR120053 MHQ120054	I D/S 5820 SPR120061 24 VCP	434 438.4					1100 1 1	1.00			0000 0 0 000			
2 4_Minor 673 2 4 Minor 674	G019 4 G019 5	YANA DR Y YANA DR	8/5/2005 797	6 7978 MHK050039 MHK050041	D/S 1832 SPK050019 8 VCP 5 D/S 1834 SPK050021 8 VCP	265 271.8 250 260.0	2 1	1			3 5	3 1 5.00 18 37 5.00	1		5 10			
2 4_Minor 675 2 4_Minor 676	M021 12 M009 8	Y EMRYS AV	9/15/2005 1164	48 11674 MHR110011 MHR110027		250 212.6 255 255.7	2 1				3 5	57 51 5.00 2 5.00			110 220 0 0			MEDIUM GREASE 180' TO 210'
2 4_Minor 677 2 4_Minor 678	M017 7 G031 6	MERRILL ST Y JENNIFER LN	9/9/2005 1165	57 11658 MHR110025 MHR120008	B D/S 6089 SPR120020 8 VCP B D/S 5586 SPQ090007 8 VCP		1 1		2		3 5	1 3 5.00	2 3		0 0			
2 4_Minor 679 2 4_Minor 680	G036 4 G036 7		9/7/2005 1255		5 D/S 6067 SPQ100010 8 VCP	280 269.1 294 296.0	1	1			2 5	1	2		1 2 2 2			
2 4_Minor 681 2 4_Minor 682	G042 4 G004 9	HILTON LN POES ST	10/4/2005 1238	33 12385 MHT110002 MHT110005	5 D/S 5444 SPT110002 8 VCP 1 D/S 2403 SPJ080027 8 VCP	235 237.0 245 273.5	1 1	1			2 5	3 1 5.00			2 4			
2 4_Minor 683	G021 4	JACALENE LN	8/15/2005	MHQ070036 ANAHIEM1	U/S SPQ070043-A 8 VCP	101 101.4	1	1			2 5				0 0			NO FLOW
2 4_Minor 684 2 4_Minor 685	G031 8 G031 10	JANETTE LN NORMA LN	8/30/2005 1256	58 12569 MHQ090030 MHQ090031	9 D/S 4739 SPQ090012 8 VCP I D/S 4741 SPQ090014 8 VCP	250 249.5 230 232.2	1 1	1			2 5	4			0 0 4 8			
2 4_Minor 687 2 4_Minor 688	M002 6 G002 8 G019 1	BOWLES AV NEARING DR	7/13/2005 857	9 8580 MHJ070017 MHJ070018	9 D/S 3771 SPK060022 8 VCP 1 D/S 2078 SPJ070018 8 VCP	80 114.3 ·	1				2 5	16	6 2 2		16 32 11 18			
2 4_Minor 689 2 4_Minor 690	G019 1 M002 2	BOWLES AV TRACY AV ROYAL PALM		4 8053 MHK050036 MHK050036 19 10862 MHK060035 MHK060036	5 U/S 1905 SPK050040 8 VCP 6 D/S 3768 SPK060019 8 VCP	185 180.5 - 185 229.0 -					2 5	1 50.00	12		13 15 0 0			
2 4_Minor 691 2 4_Minor 692	M004 13 M017 9	Y BLVD LAMPSON AV	9/9/2005 1220	54 10155 MHL070025 MHL070026 05 12160 MHR100005 MHR100006	5 D/S 5680 SPR100033 10 VCP	195 194.0 - 165 155.4 -	1 1				2 5	38 5.00			38 76 32 64			
2 4_Minor 693 2 4_Minor 694	M015 8 R007 4	BUARO ST MAGNOLIA ST		82 12183 MHR100029 MHR100030 44 10787 MHL050043 MHL050044	D/S 5671 SPR100021 10 VCP D/S 4239 SPL050053 8 VCP	315 321.6 · 254 251.8 ·	1 1				2 5	1			1 2			
2 4_Minor 695 2 4_Minor 696	R010 4 R011 1	LAURIANNE LN GAYLORD DR		0 9744 MHL050009 MHL050013 69 12968 MHP080004 MHP080003	B U/S 5067 SPL050012 8 VCP B U/S 6251 SPP080028 8 VCP	260 266.8 1 135 133.6 1	1				2 5	1 10.00	7		0 0			MHP 080003 IS CLEANOUT
2 4_Minor 697 2 4_Minor 698	R015 5 R024 7	CLIFFWOOD AV SUMO CR		97 13098 MHR070022 MHR070023 16 11717 MHQ110007 MHQ110008	B D/S 5725 SPR070017 8 VCP B D/S 6287 SPQ110041 8 VCP	325 325.4 220 220.2 3	1				2 5				0 0			
2 4_Minor 699 2 4_Minor 700	R016 10 R016 12	BEAXWOOD ST Y SIRIUS AV	8/24/2005 1225	56 12258 MHT080002 MHT080004 58 13210 MHT080004 COT080001	D/S 6554 SPT080004 8 VCP	133 267.0	1 1				2 5	8 5.00 3 5.00	6 22		6 6 33 47			
2 4_Minor 701 2 4_Minor 702	R037 10 R037 12	CHOISSER RD CHOISSER RD	9/28/2005 1212	28 12122 MHS100031 MHS100026	0 D/S 5789 SPS090019 8 VCP 6 D/S 5791 SPS100044 8 VCP	259 260.5 c 275 279.1 c	1 1				2 5		2		2 2 0 0 0			
2 4_Minor 703 2 4_Minor 704	S002 3 R056 3	Y NINA PL	11/9/2005 1146	61 11462 MHQ130015 MHQ130016		370 368.8 - 555 572.1 -	1				2 5	2	1 2 2 5 6 2	9	3 3 24 57			
2 4_Minor 705 2 4_Minor 706	R062 9 R030 3	9TH ST	9/21/2005 1248		D/S 5587 SPP120001 8 VCP	335 347.6 315.9	1				2 5	3			3 6 0 0			340.8' NEW MANHOLE FOUND. SMALL SAG
2 4_Minor 707 2 4_Minor 708	R046 3 M017 3	Y PALM ST Y COLLEGE AV	9/9/2005 1165	50 11651 MHR110014 MHR110015	D/S 6474 SPR130005 8 VCP D/S 6084 SPR110031 8 VCP	275 280.6 370 372.6	4				2 2 4		8 1		32 62 89 171			SMALL SAG
2 4_Minor 709	G013 10 G029 2	POES ST ORANGEWOOD AV		2 13574 MHJ080021 MHJ080022 92 13093 MHR070011 MHR070012	2 D/S 2052 SPJ080019 8 VCP 2 D/S 5720 SPR070012 10 VCP	310 306.1 310 307.7	2	1			3 4	2	1		1 4 7			
2 4_Minor 711 2 4_Minor 712	G055 1 M018 15	Y BUARO ST COLLEGE AV	12/7/2005	MHR100037 MHR100001		279 278.9	2				3 4	69 13 5.00			82 164			
2 4_Minor 713 2 4_Minor 714	M024 1 G007 12	Y CHAPMAN AV Y VICILIA ST	10/27/2005 1295	58 12959 MHP090027 MHO090001		310 305.4 ·	2	2			3 4				58 174 64 131		1	
2 4_Minor 715 2 4_Minor 716	G013 9 G012 10	CHAPMAN AV Y MACNAB ST	7/28/2005 801		D/S 2414 SPK090045 8 VCP	375 378.9 - 250 253.0 -		1			2 4	2			2 4			MHK080001 IS A SIPHON
2 4_Minor 718	G001 11	ORANGEWOOD AV		7 8568 MHJ070005 MHJ070006		65 65.7	1 1				2 4				0 0			
2 4_Minor 719	G020 4	MAC MURRAY ST ORANGEWOOD		4 9765 MHK050008 MHK050009		136 136.8	1 1				2 4	2			2 4			MHK050009 IS A BURIED MANHOLE
2 4_Minor 720 2 4_Minor 721	G029 1 G046 12	Y AV Y OETRLY DR	10/10/2005 1272		7 D/S 6500 SPS100018 8 VCP	307 310.1 2 250 260.0	1 1				2 4	2 44 5.00 65 15.00	1 1		1 47 93 6 88 234			
2 4_Minor 722 2 4_Minor 723	G051 8 G054 5	Y BUARO ST	12/6/2005	MHR100001 MHR110016		133 132.6	1 1				2 4	32	1 23 1		27 31 2 34 66			
2 4_Minor 724 2 4_Minor 725	M018 3 M012 3		8/26/2005 1224		3 D/S 5594 SPQ120013 6 VCP D/S 6022 SPT090015 10 VCP	110 125.5 65 59.9					2 4		1 1		19 36 0 0			
2 4_Minor 726 2 4_Minor 727	M013 2 M014 9	HAMPTON AV TWINTREE LN	9/2/2005 1218	80 12183 MHR100028 MHR100030	D/S 5921 SPR100019 8 VCP	145 146.6 269 269.9					2 4		4	1	5 8 0 0 0			
2 4_Minor 728 2 4_Minor 729	M018 11 R001 12 R009 8	SAFFORD ST LORALEEN ST	7/25/2005 1013	32 10134 MHL080011 MHL080013	3 D/S 4021 SPQ120020 6 VCP 5 D/S 5184 SPL080010 8 VCP	290 292.5 325 323.1	1 1				2 4				18 36			
2 4_Minor 730 2 4_Minor 731	R064 8	Y EASEMENT Y EASEMENT GARDEN GROVE	12/5/2005 674	0 6743 MHS130007 MHS140039		145 147.2 479 393.1	1 1				2 4		5		0 0 10 20			42.2' NEW MH (NO ID NUMBER)
2 4_Minor 732 2 4_Minor 733	R042 9 R008 14	BLVD HARCOURT AV	8/8/2005 1034		D/S 4992 SPL050058 8 VCP	92 90.4 <u>2</u> 131 131.1	1 1	+++			2 4 2 4		2	++++++	4 4	+++++++	- 	
2 4_Minor 734 2 4_Minor 735	R018 7 R055 6	Y CHAPMAN AV SAFFORD ST	8/29/2005 1301 11/8/2005 1145	14 13015 MHS090007 MHS090008 54 11455 MHQ130008 MHQ130009	B D/S 6150 SPS090003 12 VCP D/S 3813 SPQ130010 8 VCP		1 1 1				2 4				21 42			HIGH FLOW
2 4_Minor 736 2 4_Minor 737	R020 6 S004 9	Y BUARO ST	8/31/2005 0	0 COR090001 MHR090025	5 D/S 5677 SPR090019 10 VCP B D/S 6374 SPS120016 8 VCP	180 193.9 2 105 107.0 2					2 4	28 5.00	2		28 56			
2 4_Minor 738 2 4_Minor 739	R034 7 R054 7	Y SUNGROVE ST Y GLEN COVE DR	9/26/2005 1274 11/7/2005 1089	41 12712 MHS090029 MHS100019 91 10892 MHQ140009 MHQ140010	D/S 5648 SPS100028 8 VCP D/S 4358 SPQ140035 8 VCP	215 211.0 285 290.6	1 1 1				2 4 2 4	7 8 5.00	1 7 3		23 38 5 7			
2 4_Minor 740 2 4_Minor 741	G022 4 M017 8	REVA DR Y BUARO ST	8/16/2005 1298	80 12214 MHQ080011 MHQ080010		237 239.5 340 340.6		1 1			1 4			1	2 4 81 164 1			U/S MH IS BURIED (MHQ080010)
2 4_Minor 742	R061 6 R028 5	Y BARNETT WY 9TH ST	11/29/2005 1190	04 11905 MHP140007 MHP140008		385 377.1 335 329.8		1			1 4	3 42 5.00			45 90			CONTINUOUS DEPOSITS ATTACHED ENCRUSTATION
2 4_Minor 743 2 4_Minor 744	G024 1	DALE ST	8/18/2005 798	4 7985 MHJ050001 MHJ050002	D/S 1840 SPJ050001 8 VCP	30 46.7		1			1 4							
2 4_Minor 745	G024 12	ROBERT LN	8/18/2005 1312	2/ 13213 MHQ070008 COQ070004	U/S 5835 SPQ070029 8 VCP	136 134.8		1			1 4				0 0			

				General	Pipe				Structural Defe	ect Coding	nre	Rating cts	×e	Operational :	and Maintenance		tating	Sore	Cons	struction Features	sno	Batures Aband.	
	No.	P (Y)			r ID er ID.	£ 1 £				pewde	face nage ng Faile	Struct F	Bct Ind				Maint R	efects ndex		Intruding	cellane	tion Fe turvey.	
tor	on No.	Location Location	Exis	sting MH ID Previous MH ID	Sewe s Sew	(ft)	Crack C	Fracture	Broken Hole B H	Joint D X	Surf Dan Linir	Suick S ructura	Deposits	Fine (F) Ta	Roots (R)		bstacles Vermin S	Tap ((Lateral)	Line Mate	erial S	s for S	
hase riority anking	ape No VD No ryb no	VD W	00T/ D-/-		xisting xisting reviou ize (in)	ength (O S O	0 15 00 0	ACP C	AE AE Other				Other G	otal Oo otal Oo			2 2 2 2 2 2	eason IS Ide	
2 4_Minor 746	G040 6				D/S 6056 SPP100002 10 VCP	335 340.0	LCMSHI	1 1	H SV VV SV VV S	M C S M C A V H P	S LF RP S	1 4	25 80 5.00 2 20.00	1	LJCBLJCBL	JCG DRW	2	112 221 2	BIBDDL	U R LD RD SRH SRB	3 SRL Z SA CU MC	- 2 0	Comments Recommendations
2 4_Minor 747 2 4 Minor 748	G047 9 R017 5	CITRUSWOOD AV Y WEST ST			D/S 5830 SPS100052 8 VCP D/S 6103 SPQ070023 10 VCP	176 178.5 69 68.3		1 1				1 4	1					1 2 0 0					
2 4_Minor 749	R016 1	WILKEN WY	8/24/2005 1310	01 13103 MHR070029 MHR070031	D/S 5729 SPR070021 8 VCP	297 298.0		1				1 4						0 0					
2 4_Minor 750	R012 3	Y PRESIDIO WY		MHI 070013.	U/S 6238 SPP070023 8 VCP	116 117.1		1				1 4	12 5.00					12 24					MHP 070012 IS CLEANOUT
2 4_Minor 751 2 4_Minor 752	G011 6 G009 11	MAGNOLIA ST ROCKVIEW DR		21 10820 A MHL070013 33 8564 MHJ080030 MHJ080031		317 273.8 275 302.2	3				1	1 4	2 2	1			1	3 5					
2 4_Minor 753	G010 9	ABERDEEN LN		90 10292 MHK070007 MHK070009 0 9762 MHK050004 MHK050006	D/S 3875 SPK070007 8 VCP	250 252.1 250 266.4	3					3 3					2	2 2					
2 4_Minor 754 2 4_Minor 755	G020 1 R003 11	MAC MURRAY ST MAGNOLIA ST			D/S 5553 SPK050004 8 VCP D/S 4721 SPL080031 8 VCP	250 266.4 258 257.1	3					3 3	4		1			4 8 3 12			2		
2 4_Minor 756	G006 3	ORANGEWOOD Y AV		7 7996 MHK070048 MHK070020		215 215.9	1	1				2 3	2 5.00	1 2				5 9					
2 4_Minor 757 2 4_Minor 758	G027 11	DARYL LN EMRYS AV		04 13105 MHR070032 MHR070033 45 11648 MHR110008 MHR110011	D/S 5732 SPR070024 8 VCP D/S 6048 SPR110026 8 VCP	195 195.8 272 268.6	1	1				2 3		3				3 3					
2 4_Minor 759	M016 11 M017 5	DUNGAN LN	9/9/2005 1165	53 11654 MHR110022 MHR110023	D/S 6086 SPR110033 8 VCP	255 252.8	1 1					2 3		6				6 6					
2 4_Minor 760	M021 10	STANFORD AV	9/15/2005 1165		D/S 5684 SPR120017 10 VCP	350 358.3	1 1					2 3	85					85 170					
2 4_Minor 761	M022 4	CHAPMAN AV	10/26/2005	MHR090006 MHS090031	A U/S SPR090002A 12 VCP	134 134.1	1 1					2 3						0 0					
2 4_Minor 762 2 4 Minor 763	R024 9 R008 13	Y LAMPSON AV Y HOMEWAY DR		98 12799 MHQ110045 MHQ100003 96 10782 MHL050033 MHL050037		340 339.0 160 169.3	1 1					2 3	72 5.00 1 10.00 49 5.00	15				88 162 52 101					DAZ = DNF SAND AT 44.3' TO 48'
2 4_Minor 764	S007 2	SUNGROVE AV	10/21/2005 1243	32 12433 MHS120010 MHS120011	D/S 4484 SPS120005 8 VCP	255 257.1	1 1					2 3	49 5.00				3	0 0					
2 4_Minor 765 2 4_Minor 766	G044 7 M013 1	Y BLUE SPRUCE AV HAMPTON AV		21 12423 MHT110025 MHT110027 99 12198 MHR090020 MHR090019	D/S 4095 SPT110030 8 VCP U/S 5966 SPR090015 8 VCP	285 283.8 150 149.6	+++	1	1	++++++		2 3	2 80 5.00	13	1 1 1	++++	+++-	97 263	+++		++++	+	
2 4_Minor 767	G006 6	YANA DR	7/19/2005 850	4 8505 MHK070040 MHK070041	D/S 2089 SPK070044 8 VCP	342 345.8	1					1 3	2	2 2				6 8					
2 4_Minor 768 2 4_Minor 769	G010 10 G019 7	ANGUS CT KATELLA AV	8/5/2005 0	0 MHK050001 MHK050042		175 177.0 270 270.2	1 1	+++	++++	++++++		1 3	1 2		++++++	+++++	++++	1 2 2			++++	++	
2 4_Minor 770	G020 14	ALLEY	8/8/2005 974	6 9650 MHL050014 COL050003	U/S 5071 SPL050016 8 VCP	77 81.3	1					1 3		2	1			3 5					
2 4_Minor 771 2 4_Minor 772	G032 8 G036 11	WEST ST PICKETT LN	9/7/2005 1260	94 11693 MHQ090002 MHQ090001 04 12545 MHQ100023 MHQ100022	U/S 4762 SPQ100019 8 VCP	205 206.3 100 96.1	1 1			 		1 3	2 1 1 10.00		<u> </u>			0 0					
2 4_Minor 773 2 4 Minor 774	G059 5 M015 9	Y LAMPSON AV Y BUARO ST		05 12744 MHR100005 MHS100001 33 12184 MHR100030 MHR100031		206 189.5 185 196.3	1 1					1 3	47 1 5.00 36 5.00 1 65.00					48 96 38 75				\blacksquare	HIGH WATER LEVEL
2 4_Minor 775	M016 1	HOGGAN AV	9/8/2005 1437	70 12189 MHR100037 MHR100036	U/S 5958 SPR100029 8 VCP	271 234.7	1					1 3	30 5.00 1 65.00				1 5	1 4			1		234.7 MSA= OBZ
2 4_Minor 776 2 4_Minor 777	R006 14 R007 6	ROSANNA AV MAGNOLIA ST		B4 10785 MHL050041 MHL060043 B8 10789 MHL060045 MHL060046		291 290.3 15 11.5	1 1	+ $+$ $+$ $+$ $+$ $+$ $+$ $+$ $+$ $+$ $+$ $+$ $+$		++++++++++++++++++++++++++++++++++++		1 3		$++$ \mp \mp	++++++++++++++++++++++++++++++++++++	+++	++	0 0	$+ \Box$			$+ \mathbb{T}$	
2 4_Minor 778	R008 4	VINEVALE ST	8/8/2005 1078	33 10786 MHL050039 MHL060044	D/S 4234 SPL050050 8 VCP	270 268.6	1					1 3						0 0					
2 4_Minor 779 2 4_Minor 780	R001 8 R001 11	LORALEEN ST Y LORALEEN ST		37 10140 MHL080016 MHL080018 34 10137 MHL080013 MHL080016	D/S 5189 SPL080015 8 VCP D/S 5186 SPL080012 8 VCP	190 195.1 346 345.6	1					1 3	1	1	2			0 0					
2 4 Minor 781	R009 13	ORANGEWOOD AV		33 10826 MHL070030 MHL070033		30 31.4	1					1 3						0 0					
2 4_Minor 782	R010 3	LAURIANNE LN	8/10/2005 974	0 9736 MHL050009 MHL050004	U/S 5063 SPL050008 8 VCP	130 138.0	1					1 3						0 0					
2 4_Minor 783 2 4_Minor 784	R011 6 R011 11	LOARA ST BIXLER DR		26 12927 MHP080009 MHP080010 31 12932 MHP080014 MHP080015	D/S 6177 SPP080006 8 VCP D/S 6182 SPP080011 8 VCP	300 281.2 300 290.9	1 1					1 3		2 2	1	 		5 7 0 0					
2 4_Minor 785	R049 7	Y PALOMA AV	11/2/2005 1089	96 10897 MHQ140020 MHQ140021	D/S 4362 SPQ140039 8 VCP	300 305.5	1					1 3		4 26	1			31 33					
2 4_Minor 786 2 4_Minor 787	R051 2 R015 11	HARBOR BLVD LEOTA LN		19 12120 MHS100013 MHS100014 48 13049 MHR070026 MHR070027		300 300.1 195 193.6	1 1					1 3						0 0			+		
2 4_Minor 788 2 4 Minor 789	R015 13 R014 4	JEWEL LN BLUEBELL AV		02 13103 MHR070030 MHR070031 94 13095 MHR070016 MHR070017		195 194.0 333 332.0	1					1 3						0 0					
2 4_Minor 790	R025 10	DUNKLEE LN	9/12/2005 1165	59 11660 MHR120010 MHR120011	D/S 6090 SPR120022 8 VCP	330 275.5	1					1 3						0 0					
2 4_Minor 791 2 4 Minor 792	S002 13 S0 R029 1	02 14 ASPENWOOD AV 9TH ST		13 12415 MHT120020 MHT120022 37 12476 MHQ110049 MHQ120001		150 157.5 472 473.1	1 1					1 3		2				2 2			1		125.6' MSA=?
2 4_Minor 793	R029 2	9TH ST	9/20/2005 1247	76 12477 MHQ120001 MHQ120002	D/S 6541 SPQ120005 10 VCP	258 258.0	1					1 3						0 0					
2 4_Minor 794 2 4_Minor 795	R004 12 R054 4	Y MAC ALPINE RD GLENCOVE DR		10 10301 MHK080003 MHK080006 90 10891 MHQ140008 MHQ140008		275 273.6 285 284.7	1 1					1 3		4				0 0					
2 4_Minor 796 2 4 Minor 797	R054 5 R003 4	Y VIKING CR TIMOTHY LN		90 11432 MHQ140008 COQ140005 02 10803 MHL080031 MHL080032		160 165.9	1					1 3						0 0					
2 4_Minor 797 2 4_Minor 798	R065 2	Y EASEMENT	12/8/2005 1283	33 12834 MHQ100044 MHQ100045	D/S 5477 SPQ100038 6 VCP	378 375.0 455 476.8	1 1					1 3		1 2				3 3					300.3' NEW MH (NO ID NUMBER)
2 4_Minor 799 2 4_Minor 800	R017 2 R018 2	WEST ST CHAPMAN AV		11 13087 MHQ060016 MHQ060041 53 12254 MHT090037 MHT090038	D/S 5767 SPQ060003 10 VCP D/S 6029 SPT090035 10 VCP	321 321.0 240 234.3	1					1 3						1 2 0 0	1				
2 4_Minor 801	R019 9				D/S 6277 SPR090034 12 VCP	415 372.2	1					1 3						0 0					
2 4_Minor 802 2 4_Minor 803	R037 8 R027 2				D/S 5787 SPS100041 8 VCP D/S 6409 SPQ100036 8 VCP	280 268.4 301 299.1	1 1					1 3	15 5.00	+				15 30					
2 4_Minor 804	R037 11	CHOISSER RD	9/28/2005 1212	27 12128 MHS100030 MHS100031	D/S 5790 SPS100043 8 VCP	180 181.5	1					1 3					2	2 2					
2 4_Minor 805 2 4_Minor 806	S001 3 R021 2	CHOISSER RD SHETLAND RD			D/S 5704 SPS110022 8 VCP D/S 6334 SPQ100024 8 VCP	344 343.9 210 202.7	1 1	+++				1 3		8	2	+++++	 	0 0			++++	++	
2 4_Minor 807	R020 5 R037 4		8/31/2005 0	0 MHR090024 COR090001	D/S 5676 SPR090018 10 VCP D/S 5907 SPS090031 8 VCP	130 133.1 300 296.2	1					1 3		5				5 5					
2 4_Minor 808 2 4_Minor 809	R025 6	DUNGAN LN	9/12/2005 1166	33 11664 MHR120016 MHR120017	D/S 6157 SPR120026 8 VCP	260 270.1	1 1					1 3		2				0 0 2 2					
2 4_Minor 810 2 4_Minor 811	R048 12 R063 2	DAPPLEGRAY RD Y TRASK AV		90 11991 MHR130019 MHR140033 06 11443 MHQ150003 MHQ150004		340 339.7	1	\Box				1 3	2 44 5.00 8 5.00				1 5	3 8 54 114			+	\blacksquare	
2 4_Minor 812	R053 4	Y BANNER DR	11/4/2005 1198	88 11992 MHR140032 MHR140034	D/S 3869 SPR140035 8 VCP	95 96.0	1 1					1 3	44 5.00 8 5.00					0 0					
2 4_Minor 814	R030 9	STANFORD AV GARDEN GROVE			D/S 4023 SPQ120022 8 VCP	300 299.6	1	+++	++++			1 3	$\overline{}$	+++	+++++	+++++	++++	0 0	+++-		++++	+	
2 4_Minor 815 2 4_Minor 817	R031 3 R038 2	BLVD ALLEY	9/22/2005 1324	46 13247 MHR120028 MHR120029 29 12630 MHT090012 MHT090013	D/S 6404 SPR120008 10 VCP D/S 5257 SPT090004 8 VCP	349 348.6 245 248.0	1 1	+++		++++++		1 3	2	++++	+++++	+++++	1 5 1	4 9 3 12	+++-		3		OBZ=OBJ (OBSTACLE IN JOINT)
2 4_Minor 818	R028 7				5 D/S 6582 SPP110007 10 VCP	90 91.0	1					1 3						0 0					CONTINUOUS DEPOSITS
2 4_Minor 819	S005 10	LAMPSON AV	10/14/2005 1209	95 12096 MHS100008 MHS100009	D/S 5662 SPS100031 8 VCP	300 301.4	1					1 3	82 5.00	1				83 165	$\Box\Box\Box$				ATTACHED ENCRUSTATION
2 4_Minor 820	S005 5	LAMPSON AV		02 12703 MHS100005 MHS100006		278 280.0	1					1 3	88 5.00	1				89 177	$\Box\Box\Box$				CONTINUOUS DEPOSITS ATTACHED ENCRUSTATION
2 4_Minor 821	R043 11	EL REY PL GARDEN GROVE			D/S 4583 SPR120005 8 VCP	90 93.8	1	+++	++++	++++++		1 3		++++	+++++	+++++	++++	0 0	+++-				
2 4_Minor 822 2 4_Minor 823	R033 3 R061 12	BLVD Y NEWHOPE ST	11/29/2005 1086	66 11423 MHQ140019 COQ140001	B D/S 6589 SPQ120038 10 VCP U/S 4803 SPQ140023 8 VCP	280 286.0 105 103.0	1 1	+++	++++	++++++		1 3	6 1 1 5.00	2	++++++	+++++	++++	2 2 8 17			++++	++	
2 4_Minor 824	R048 5	STUART DR GARDEN GROVE	11/1/2005 1199	96 11997 MHR130022 MHQ130027	D/S 3968 SPR130022 8 VCP	325 328.7	1					1 3						0 0					
2 4_Minor 825	R043 2	BLVD BLVD	10/25/2005	MHS120047 MHS120048	D/S SPS120052 10 VCP	34 33.8	1	+ + +	++++			1 3		++++			++++	0 0	+++		++++	$\perp \downarrow \downarrow$	MOSTLY DEPOSITS ATTACHED
2 4_Minor 826	R062 6	Y NEWHOPE ST		66 10867 MHQ140019 MHQ140024		330 327.7	1	+ + +	++++			1 3	48 1 5.00	++++				49 99	+++		++++		GREASE 5 %.
2 4_Minor 827 2 4_Minor 828	R060 1 R061 2	HAVENWOOD DR ALLEY	11/29/2005 1145		B D/S 3817 SPQ130014 6 VCP	158 159.9 218 216.6	1 1	+++	++++	++++++		1 3		++++	++++++	+++++		0 0	++++		++++	++	
2 4_Minor 829	R068 3	HARBOR BLVD	12/9/2005 1323	35 12465 MHR130025 MHR120033	U/S 6402 SPR130029 10 VCP	380 372.2	1					1 3						0 0					235.3' MSA= DUE TO PLASTER
2 4_Minor 830 2 4_Minor 831	R039 14 G002 5	ANZIO ST YORKSHIRE AV		46 12647 MHT100022 MHT100023	D/S 5363 SPT100023 8 VCP D/S 2405 SPJ070023 8 VCP	216 235.3 300 299.2		+++	++++	++++++	1	1 2	1 5.00 1 50.00	1		+++++	3	13 37	+++		1 7	$+\!\!+\!\!\!+$	IN LINE, SMALL SAG
2 4_Minor 831 2 4_Minor 832	G001 2	POES ST	7/12/2005 852	3 8588 MHJ070001 MHJ070002	D/S 2010 SPJ070002 8 VCP	325 329.0	2			 		2 2		2 4	 			6 6				11	
2 4_Minor 833 2 4 Minor 834	G016 4 G045 8	ARTHUR DR WILLOWOOD AV			D/S 2423 SPJ080034 8 VCP U/S 5826 SPS100048 8 VCP	240 245.9 176 176.9	2 2					2 2	30 1 15.00	12				42 72					
2 4_Minor 835	G055 3	Y LAMPSON AV	12/7/2005 1216	63 12147 MHR100009 MHR100001	D/S 5638 SPR100009 10 VCP	340 336.8	2					2 2	2 1 15.00 81 43 5.00	5	1		1	4 8 130 256			2	\pm	MMC= LINING CHANGE(MLC)
2 4_Minor 836	M003 1	MONTCLAIR CT	8/8/2005 1016	67 10168 MHL060012 MHL060013	D/S 3729 SPL060016 8 VCP	346 348.1	2	$\perp \perp \perp \Box \Box$				2 2		65	1 1				шШ			$\perp \perp \top$	

					General		Pipe		S	tructural Defect Coding] de e	ating	X X X			Operational and	d Maintenance			ating	ole	Construction Fe	atures	ous atures	
	o de	VD No.	E Location	Existing MH ID	Previous MH ID	ewer ID.	h (ft) ent	Crack	Fracture Broken	Hole Joint	Deformed	Collapsed F Surface Damage ining Failu	Sags	tural Defec tural Defec	Denneits		P	toots (R)	Infiltration	Obstacles Ver	X Maint Re	Defect Sc ct Index	(Lateral) Line	Intruding :	Affisce llan ec	
Phase Priority Panking	Contractor Tape No. OVD No. Inspection	Reversal D'	O Street Name	CCTV Date Start Ford	Start End	Existing Se	Aaterial Aaterial Joint Length SIS Comm SIS Comm Compt (ff)	C	F B	H J SV VV S M L S	S D	H P S IE	ACP Quic	Total Struc Total Struc Structural [D AE AE	Other	ie (F) Tap	(T) Medium (M)	Ball (B)	OB V	ACP Quic	Total O&M	T L	IS RD SRH SRB	S Identi	mendations
2 4_Minor 837 2 4_Minor 838	M009 1 M009 2		SAMUEL DR SAMUEL DR	8/16/2005 13001 12206	MHQ070001 MHQ070002 D/3 MHQ070002 MHQ070003 D/3	S 6324 SPQ070006	8 VCP 370 373.	2						2 2 2			3		1		0 4			NO OTHER OTHER	The E of Common Transfer of Comm	UNGLANOVIO
2 4_Minor 839 2 4_Minor 840 2 4_Minor 841	M018 10 R018 3 G005 2		SAFFORD ST Y CHAPMAN AV WASCO RD	8/29/2005 12254 13004	MHQ120028 MHQ120029 D/3 MHT090038 MHT090039 D/3 MHK070035 MHK070036 D/3	S 6093 SPT090036 1	10 VCP 368 367.	2						2 2 2 1 2 2	1 30 5.00 1 30.0		2			4	36 6	68			HIGH FLOW	
2 4_Minor 842 2 4_Minor 843	G009 14 G013 8		SANDY DR MOEN ST	7/22/2005 8565 8566	MHJ080032 MHJ080033 D/3 MHJ080014 MHJ080015 D/3	S 2064 SPJ080025	8 VCP 295 301.		1 1					1 2	2 4		23				25 2	27				
2 4_Minor 845 2 4_Minor 846	G017 8 G020 8		ELMER LN LA GRAND AV	8/8/2005 10340 10341	MHK050028 MHK050029 D/9 MHK050016 MHK050017 D/9	S 5558 SPK050009	8 VCP 220 219.		1 1					1 2	2	1 5.00	1				5 1	10	1			
2 4_Minor 847 2 4_Minor 848 2 4_Minor 849	G021 2 G038 11 G042 7		ROBERT LN STANFORD AV HEATHER CR	9/12/2005 12497 12498	MHQ070033 MHQ070034 D/3 MHQ120030 MHQ120031 D/3 MHT110005 MHT110008 D/3	S 4022 SPQ120021 ;	8 VCP 300 296.	3	1 1 1					1 2	2	1 5.00				1	2 2	4				
2 4_Minor 850 2 4_Minor 851	G048 4 G050 10		BLUE SPRUCE AV PALM ST	10/17/2005 12111 12112 10/27/2005 12762 12763	MHS110027 MHS110028 D/3 MHR130002 MHR130003 D/3	S 5772 SPS110027 (S 6471 SPR130002 (S	8 VCP 275 272. 8 VCP 280 283.		1 1					1 2 1 2	3 4						3 4	8				
2 4_Minor 852 2 4_Minor 853	G050 11 G050 4		PALM ST PALM ST	10/27/2005	MHR130003 MHR130004 D/A MHR130003- MHR130004- A D/A	SPR130003-A	8 VCP 283 282.		1 1					1 2	3	2 5.00					10 2	24	3 1	1		
2 4_Minor 854 2 4_Minor 855	G055 6 M002 4		Y NINTH ST Y BOWLES AV		MHP100038 MHP110041 D/3 MHK060033 MHK060037 D/3				1 1					1 2	66 34 5.00 1 5.00 5 5.00					2	103 2		1		1	
2 4_Minor 856 2 4_Minor 857	G058 6 R031 2		HARBOR BLVD GARDEN GROVE Y BLVD		MHR110040 MHR110040A D/3 MHR120027 MHR120028 D/3				1					1 2						7	7	7				
2 4_Minor 858 2 4_Minor 859	G020 5 M008 1		MAC MURRAY ST DANIEL AV	8/8/2005 10338 9765	MHK050014 MHK050009 U/3 MHQ070028 COQ070001 U/3	S 5949 SPK050043	8 VCP 190 195.							1 2	1	1 5.00	1	1			5 1	11	1		MHK050009 IS A BURIED MANHOLE	
2 4_Minor 860 2 4_Minor 861	M017 6 R006 12		DUNGAN LN ROSANNA AV	9/9/2005 11654 11655 8/4/2005 10122 10784	MHR110023 MHR120007 D/3 MHL050040 MHL050041 D/3	S 6087 SPR120018 (S 5941 SPL050055 (8 VCP 250 252. 8 VCP 218 214.	1 1						1 2 1 2		1 20.00	6	1			7	9 3			DAZ = DNZ	
2 4_Minor 862 2 4_Minor 863	R010 6 R011 3		LAURIANNE LN REGINA WY	8/12/2005 12971 12970	MHL050021 MHL050025 D/. MHP080006 MHP080005 U/.	S 6253 SPP080030 I	8 VCP 135 134.	1						1 2			4		1		0				MHP 080005 IS CLEANOUT MMC=PVC, HIGH FLOW, 233.7'	
2 4_Minor 864 2 4_Minor 865 2 4_Minor 866	R026 3 R015 1 R004 11		Y WEST ST KIM LN MAC ALPINE RD	8/22/2005 13099 13096	MHR110026 MHR110027 D/ MHR070024 MHR070018 U/ MHL080036 MHK080003 D/3	S 5724 SPR070016 I		1						1 2	7 3 90.0					1	0	_			2 NEW MH (MHR110027A)	
2 4_Minor 867 2 4_Minor 868	M024 9 R018 9		CHAPMAN AV CHAPMAN AV	10/28/2005 13112 13113	MHQ090055 MHQ090056 D/3 MHS090009 MHS090010 D/3	S 6348 SPQ090038 1	8 VCP 288 287.	1						1 2 1 2 1 2			1				0 4 1	0			4 HIGH FLOW	
2 4_Minor 869 2 4_Minor 870	R019 5 R015 9		CHAPMAN AV WILKEN WY GARDEN GROVE		MHS090012 MHS090030 D/3 MHR070025 MHR070027 D/3									1 2 1 2							8 3				8	
2 4_Minor 871 2 4 Minor 872	R032 9		BLVD ROCKINGHORSE RD		MHR120034 MHR120035 D/ MHQ130028 MHQ130029 D/		10 VCP 329 329. 8 VCP 220 198.							1 2							0	0				
2 4_Minor 873 2 4_Minor 874	R037 9 R023 7		GREENTREE AV EMRYS AV	9/28/2005 12125 12128	MHS100029 MHS100031 D/ MHR110003 MHR110001 U/	S 5788 SPS100042	8 VCP 280 274.	1						1 2							0	_			MHR110001 IS CLEANOUT	
2 4_Minor 875 2 4_Minor 876	R024 11 R049 3		KATHY LN BANNER DR	11/2/2005 11976 11975	MHQ110005 MHQ110006 D/3 MHR140025 MHR140024 U/3	S 3856 SPR140025	8 VCP 205 196.	1						1 2	1						0	2				
2 4_Minor 877 2 4_Minor 878 2 4_Minor 879	R053 3 S005 11 R056 10		SORELL DR LAMPSON AV SAFFORD ST	10/14/2005 12096 12097	MHR140031 MHR140032 D/ MHS100009 MHS100010 D/ MHQ130009 MHQ140003 D/	S 5663 SPS100032	8 VCP 254 251.	1						1 2			3		1	1	1 1 4	1				
2 4_Minor 880 2 4_Minor 881	S002 6 G044 8		SUNGROVE ST Y BLUE SPRUCE AV	10/11/2005 12700 12701	MHS110008 MHS100004 D/3 MHT110027 MHT110029 D/3	S 6384 SPS110005	8 VCP 180 176.			2				1 2 2 2	6	79 5.00					0 85 2	0				
			ORANGEWOOD																						The second pipe ID represents two current pipe IDs. 19.5 MSA= ?, MHL070044 IS AT THE TRUNK LINE, NO INSPECTION U/S TO	
2 4_Minor 882	M006 5		AV	8/11/2005 10833 13958	MHL070043 MHL070044 D/3	S 7561 SPL070043	8 VCP 115 19.				1			1 2							1	2	1		1 D/S The second pipe ID represents two current pipe IDs. 19.5* MSA=?,	
2 4_Minor 883	M006 5		ORANGEWOOD AV	8/11/2005 13958 10834	MHL070043 MHL070044 D/3	S 7562 SPL070043	8 VCP 115 19.				1			1 2							1 :	2	1		MHL070044 IS AT THE TRUNK LINE, NO INSPECTION U/S TO D/S	
2 4_Minor 884 2 4_Minor 885	G001 13 G004 6		Y MOEN ST WASCO RD		MHJ070010 MHJ070011 D/3 MHK070033 COK070002 U/3		8 VCP 325 330. 8 VCP 155 139.							1 1	1	1	2	1 1	1		6 1	17			14.8' MSA = DUE TO ROOT BALL LATERAL	
2 4_Minor 886 2 4_Minor 887 2 4_Minor 888	G004 8 G005 3 G008 5		POES ST WASCO RD TWANA DR	7/18/2005 8072 8500	MHJ080018 MHJ080019 D/3 MHK070036 MHK080039 D/3 MHK070031 MHK080039 D/3	S 2083 SPK080041	8 VCP 168 169.	1						1 1 1 1 1 1 1	2	1 5.00	2			1	1	1				
2 4_Minor 889 2 4_Minor 890	G008 5 G009 9 G014 4		MOEN ST CHAPMAN AV	7/22/2005 8547 8548	MHX070031 MHX080039 D/3 MHJ080013 MHJ080014 D/3 MHK090040 MHK090041 D/3	S 2047 SPJ080014	8 VCP 160 158.	1						1 1 1	3 2			1 1			14 2 3 39 5	6	1	1		
2 4_Minor 891 2 4_Minor 892	G020 2 G036 6		MAC MURRAY ST JERRY LN	8/8/2005 9762 9764 9/7/2005 12559 12558	MHK050006 MHK050008 D/3 MHQ100041 MHQ100040 U/3	S 5555 SPK050006 (S 6073 SPQ100016 (8 VCP 194 196. 8 VCP 294 296.	1 1						1 1	2 3	1 5.00 1 1		1			8 1	13				
2 4_Minor 893 2 4_Minor 894	G045 2 G053 5		WILLOWOOD AV Y RAMANO DR GARDEN GROVE	11/17/2005 11888 12323	MHS100043 MHS100044 D/3 MHP140020 MHP140023 D/3	S 4295 SPP140020	8 VCP 250 251.	1						1 1	2	1				1	3	5				
2 4_Minor 895 2 4_Minor 896 2 4_Minor 897	G054 6 M002 11 M002 14		Y BLVD OMA PL Y OMA PL	8/5/2005 10164 9672	MHQ130017 MHQ130018 D/3 MHL060009 COL060001 U/3 MHL060011 MHL060013 D/3	S 3723 SPL060010 ;	8 VCP 106 96.0	1						1 1 1 1 1 1 1 1	10 41 5.00 2 5.00		37	1 2 1	1		0 95 1	0				
2 4_Minor 898 2 4_Minor 899	M018 1 M011 3		SAFFORD ST ROBERT LN	9/12/2005 12487 12488 8/25/2005 13133 13134	MHQ120020 MHQ120021 D/3 MHQ080035 MHQ080036 D/3	S 5592 SPQ120011 (S 5843 SPQ080043 (6 VCP 190 185. 8 VCP 231 231.	1 1						1 1	30		2	. 2 1			0 32 6	0				
2 4_Minor 901 2 4_Minor 902	S003 8 R002 10		DUNKLEE AV Y TRISTAN DR	7/26/2005 10794 10796	MHT120016 MHT120017 D/3 MHL080022 MHL080024 D/3	S 4337 SPL080022 ;	8 VCP 320 322.	1						1 1 1	50 5.00 1 30.0		3			1	3 52 1					
2 4_Minor 903 2 4_Minor 904			SANDALWOOD CE SORELL DR	11/4/2005 11987 11986	MHS110025 MHS110026 D/ MHR140031 MHR140030 U/	S 3867 SPR140033		1						1 1			1				0	_				
2 4_Minor 905 2 4_Minor 906	R068 6 M001 14		Y HARBOR BLVD Y JOYZELLE AV		MHR140037 MHR140038 D/ MHK060031 MHK060032 D/			1 1						1 1		81 5.00				11	92 2					
																									Multiple reaches were evaluated with one inspection. There is a lateral @ 306.8 does not exist on inspection report. Also there is a	
	P																								MH @ 814. This MH does not exist on inspection report. This MH is MHM30036 in GIS. MHMM30036 (on inspection report)	
4 5_O&M 234	COUN TY 8		Y CERRITOS	10/10/2007 9212 9213	MHM030036 MHM030039 D/3	S 4517 SPM030007	8 VCP 320 958.							0 0	198					13	211 4	1.94			is going to be MHM030040. Multiple reaches were evaluated	
																									with one inspection. There is a lateral @ 306.8' does not exist on inspection report. Also there is a	
	P																								MH @ 814'. This MH does not exist on inspection report. This MH is MHM030036 in GIS. MHM030036 (on inspection report)	
4 5_O&M 235	COUN TY 8		Y CERRITOS	10/10/2007 9213 9214	MHM030036 MHM030039 D/	S 4518 SPM030008	8 VCP 320 958.							0 0	198					13	211 4	1.94			is going to be MHM030040.	

					General			Dina					Stru	uctural Defect Co	ding	81 1-1	Buil 4	000		Operat	tional and Maintena	ance		2		Const	truction Features		nres and	2 0	
	No.	ес. No.				amera	er ID.	Pipe	t t	(g)					omed lapsed Pig	face nage ng Failure	Struct Rat	al Defect						Maint Rati	efects efect Scor		Ir	ntruding Seal	ction Feat	Abandon	
se rity king tractor	e No. O No. ection No ersal Tap	Matche Location Location		Existing MI	H ID Previous MH ID	ction of C	vious Sew	a (in) erial	Commen	gth (ft)	Crack C	Fracture F	Broken B	Hole H O	Joint S S	Por En Dag Co	OP Quick	Structur ctural Def	Deposits D AE AE Other	Fine (F)	Roots (R) Tap (T) Me	dium (M) Ball (B)	Infiltration Obsta	acles Vermin S of oner	Tap (L	ateral)	Line L	Material S	Constru	dentified	
Pric On Ran	Tap DVI Insp Rev Rev	Street Name	CCTV Date	Start E	End Start En	Dire D	Pre	Size	88	C. Lea	L C M S	H L C M S	H SV VV S	SV VV S M L	S M L A V H P	P S LF RF	P S D D T	S AG	S B % L % Z %	B L J C	BLJCB	L J C B L J C	G D R W C Z	% C R d	70 FD FL	BI BD D L I	U R LD RD SRH	H SRB SRL Z SA C	J WC E 8	Comments There is a lateral @ 306.8' do	Recommendations es not
																														exist on inspection report. All there is a MH @ 814'. This I does not exist on inspection	so MH report.
4 5_O&M 236	P COUN TY 8	Y CERRITOS	10/10/2007	9214 9	9215 MHM030036 MHM03	30039 D/S 4519	SPM030009	8 VCP		175 958.8							0	0 19	8					13	211 409 1.94				0	This MH is MHM030036 in G MHM030036 (on inspection is going to be MHM030040.	
	P COUN																													Multiple reaches were evalua with one inspection.	red
4 5_O&M 237	TY 3B 5	Y CERRITOS	10/17/2007	8938 8	3939 MHM030044 MHL03	0040 D/S 3652	SPM030033	8 VCP		115 427.9							0	0 14	1						141 282 2.00				0	Multiple reaches were evalua	red
4 5_O&M 238	COUN TY 3B 5	Y CERRITOS	10/17/2007	8939 9	9343 MHM030044 MHL03	00040 D/S 3653	SPL030002	8 VCP		330 427.9							0	0 14	1						141 282 2.00				0	with one inspection.	
	D P COUN																													Multiple reaches were evalua with one inspection.	ed
4 5_O&M 239	TY 2 8	Y CERRITOS	10/10/2007	9216 9	9217 MHM030039 MHM03	30041 D/S 3585	SPM030011	8 VCP		130 275.6							0	0 9						6	96 186 1.94				0	Multiple reaches were evalua	ned.
4 5_O&M 240	D P COUN TY 2 8	Y CERRITOS	10/10/2007	9215 9	9216 MHM030039 MHM03	30041 D/S 4520	SPM030010	8 VCP		144 275.6							0	0 9						6	96 186 1.94				0	with one inspection.	
4 5_O&M 241	P COUN TY 3C 1	Y CERRITOS	40/47/2007	9027 9	8938 MHM030043 MHM03	20044 D/S 2661	SDM020022	8 VCD		215 220.0								0 7							73 146 2 00						
	P COUN									2.3 220.0								1							.0 140 2.00				3	Heavy Dep.Att. Grease 5-50'	
4 5_O&M 242	TY 3C 1	Y CERRITOS	10/17/2007	9217 8	3936 MHM030041 MHM03	30042 D/S 5411	SPM030041	8 VCP		200 198.4							0	0 6			1	1			62 127 2.05				0		
4 5_O&M 243	D P COUN TY 2 5	Y BANTA	11/3/2007	8964 8	3971 MHL040006 MHM04	40013 U/S 4411	SPM040037	8 VCP		272 272.9							0	0 1:	5 6	1					22 50 2.27				0		
4 5_O&M 244	8 2306	Y HARRIET LN	9/11/2006	9352 9	9351 MHM020017 MHM02	20016 U/S 3491	SPM020037	8 VCP		69 66.4							0	0	14					4	18 32 1.78				0		
4 5_O&M 245	COUN TY 3B 7	Y JEAN	10/17/2007	8351 8	3349 MHM040026 MHM04	40020 D/S 4422	SPM040048	8 VCP		30 31.9				+ + +			0	0	7						7 21 3.00				0		
4 5_O&M 246	COUN TY 13	Y RANDOM			9117 MHM990016 COM99					80 83.1							0	0						4	4 4 1.00	1			3		
3 5_O&M 373 GGSD 3 5_O&M 374 GGSD		SANTA CATALINA SANTA CATALINA			7964 MHD080001 MHD08 7964 MHD080003 MHD08					298 297 298 295							0	0 0.00		5		1			4 4 1.00 6 8 1.33						
3 5_O&M 375 GGSD	30 1044 MIXE	Y BARTLETT	1/31/2005	7967 7	7963 MHD080005 MHD07	70001 U/S 1590	SPD080004	8 VCP		119 116							0	0 0.00	4	1					5 13 2.60						
3 5_O&M 376 GGSD 3 5_O&M 377 GGSD		SANTA BARBARA Y BARTLETT			7840 MHD080006 MHE08 7967 MHD080010 MHD08					299 294 308 307							0	0 0.00	16	3 5		2			3 3 1.00 23 59 2.57						
3 5_O&M 378 GGSD 3 5_O&M 379 GGSD		Y SANTA MONICA Y SANTA MONICA			3616 MHD080014 MHD08 3617 MHD080015 MHD08					344 341 344 338							0	0 0.00	1						1 2 2.00						
3 5_O&M 380 GGSD	30 1042	Y SANTA RITA	1/31/2005	7845 7	7844 MHD080017 MHE08	30029 D/S 1453	SPE080037	8 VCP		269 266							0	0 0.00	10 8				4		22 56 2.55						
3 5_O&M 381 GGSD 3 5_O&M 382 GGSD		Y SANTA RITA Y MANLEY			3619 MHD080019 MHD08 3617 MHD080020 MHD08					372 368 258 257							0	0 0.00 2	26	1					27 79 2.93 2 4 2.00						
3 5_O&M 383 GGSD 3 5_O&M 384 GGSD		Y HOLLAND Y HOLLAND			3625 MHD090001 MHD09 3626 MHD090002 MHD09					350 348 350 349							0	0 0.00 1	3 17	2 44					30 60 2.00 1 33 53 1.61						
3 5_O&M 385 GGSD	31 1046	Y HOLLAND	2/2/2005	8628 8	3627 MHD090005 MHD09	90004 U/S 1610	SPD090004	10 VCP		300 297							0	0 0.00 8	66	2 8			1		76 208 2.74					250' to 297.4' bad video.	Redo inspection
3 5_O&M 386 GGSD 3 5_O&M 387 GGSD		Y VANGUARD Y VANGUARD			3630 MHD090007 MHD09 3631 MHD090009 MHD09					333 332 333 328							0	0 0.00	50 8	1					59 125 2.12 18 48 2.67						
3 5_O&M 388 GGSD		Y MANLEY			3632 MHD090009 MHD09					259 254							0	0 0.00						15	15 15 1.00			2			
3 5_O&M 389 GGSD 3 5_O&M 390 GGSD		Y BELGRAVE Y AMY	3/7/2005	8638 8	3644 MHD090015 MHD09 3639 MHD090016 MHD09	90017 U/S 1927	SPD090015	8 VCP		256 254 290 288							0	0 0.00 6	36						41 82 2.00 36 72 2.00						
3 5_O&M 391 GGSD 3 5_O&M 392 GGSD		Y AMY Y LAURELTON			3639 MHD090017 MHD09 3642 MHD090020 MHD09					290 287 243 239							0	0 0.00	26						28 54 1.93 53 106 2.00	1					
3 5_O&M 393 GGSD 3 5_O&M 394 GGSD		Y LAURELTON	3/3/2005	8642 8	8643 MHD090021 MHD09	90022 U/S 1931	SPD090019	8 VCP		243 240							0		25						25 50 2.00						
3 5_O&M 395 GGSD	32 1079	Y CASPER Y CASPER	3/3/2003	0040	3640 MHD090022 MHD09 3643 MHD090023 MHD09	0010 070 1020	01 0000011	0 001		258 257 260 258							0	0 0.00 2	72				1		76 152 2.00						
3 5_O&M 396 GGSD 3 5_O&M 397 GGSD	32 1084 32 1084	Y BELGRAVE Y BELGRAVE			3646 MHD090024 MHD09 7856 MHD090025 MHD09					350 349 350 348								0 0.00	55 63						55 110 2.00 63 126 2.00						
3 5_O&M 398 GGSD	33 1090	Y AMY	3/24/2005	7853 8	3638 MHD090027 MHD09	90016 U/S 1950	SPD090025	8 VCP		370 350							0	0 0.00 2	3 69				1		93 187 2.01						
3 5_O&M 399 GGSD 3 5_O&M 400 GGSD	35 1147	HUNTLEY HUNTLEY	4/27/2005	7905 7	7832 MHD100004 MHE10 7798 MHD100005 MHD10	00004 U/S 1934	SPD100025	8 VCP		370 369 370 365								0 0.00		3					3 3 1.00 1 1 1.00						
3 5_O&M 401 GGSD 3 5_O&M 402 GGSD		Y CASPER Y EDEN CIR			7907 MHD100008 MHD10 7910 MHD100009 MHD10					305 304 92 88							0	0 0.00	40 7	4	+		1		47 101 2.15 6 17 2.83		\Box			Deposit settled	
3 5_O&M 403 GGSD	36 1156	Y LUDLOW	5/3/2005	7910 7	7912 MHD100010 MHD10	00012 D/S 1546	SPD100009	8 VCP		278 276								0 0.00	24	3 13		1			41 67 1.63						
3 5_O&M 404 GGSD 3 5_O&M 405 GGSD	36 1158	Y LUDLOW Y HELENE CIR	5/4/2005	7912 7	7799 MHD100010 MHE10 7911 MHD100012 MHD10	00011 U/S 1547	SPD100010	8 VCP		346 343 198 197								0 0.00	5 3	4 7	++++	1 1	+++++		19 40 2.11			1			
3 5_O&M 406 GGSD 3 5_O&M 407 GGSD	36 1156	Y LUDLOW Y VERA CIR	5/3/2005	7912 7	7914 MHD100012 MHD10 7913 MHD100014 MHD10	00014 D/S 1548	SPD100011	8 VCP										0 0.00	33	1 12					33 66 2.00 73 135 1.85						
3 5_O&M 408 GGSD	36 1161	Y CASPER	5/8/2005	7915 7	7908 MHD100015 MHD10	00008 U/S 1544	SPD100007	8 VCP		304 300							0	0 0.00	8			2			8 16 2.00			1			
3 5_O&M 409 GGSD 3 5_O&M 410 GGSD		Y LUDLOW Y CASPER			7914 MHD100015 MHD10 7915 MHD100016 MHD10				-	139 168 255 255				+++				0 0.00 3	3 6	4		1			38 73 1.92 6 18 3.00						
3 5_O&M 411 GGSD 3 5_O&M 412 GGSD	36 1171	Y CASPER CERULEAN	5/12/2005	7917 7	7916 MHD100017 MHD10 7928 MHD100025 MHD11	00016 U/S 1561	SPD100015	8 VCP										0 0.00	3						3 9 3.00						
3 5_O&M 413 GGSD	P5 A 3	MANLEY	11/29/2007	7926 7	7927 MHD110002 MHD11	10003 D/S 1754	SPD110004	10 VCP		218 216							0	0 0.00	27				1		1 3 3.00 27 54 2.00						
3 5_O&M 414 GGSD 3 5_O&M 415 GGSD	37 1196 37 1197	CERULEAN CASPER			7929 MHD110006 MHD11 7930 MHD110007 MHD11					350 347 205 204								0 0.00	1 4	+ + +	$\Box\Box\Box$		2 1		8 22 2.75 3 6 2.00	1		+++			
3 5_0&M 416 GGSD 3 5_0&M 417 GGSD	37 1352	STANFORD	6/6/2005	7933 7	7932 MHD110010 MHD11	10009 U/S 1570	SPD110010	8 VCP		350 346							0	0 0.00					1		1 3 3.00						
3 5_O&M 418 GGSD	38 1355	CASPER STANFORD	6/7/2005	7935 7	7931 MHD110012 MHD11 7936 MHD110012 MHD11	10013 D/S 1573	SPD110013	8 VCP		203 201 256 253								0 0.00	2				1		2 4 2.00 1 2 2.00					Medium Grease	
3 5_O&M 419 GGSD 3 5_O&M 420 GGSD	38 1355	STANFORD BARTLETT	6/7/2005	7936 8	8667 MHD110013 MHD11 7937 MHD110014 MHD11	10015 D/S 1756	SPD110014	8 VCP	1	302 300 260 258			$H\Pi$	+TH		+		0 0.00		11	$H\Pi\Pi$	1 1	1		1 2 2.00 13 18 1.38		+				
3 5 O&M 421 GGSD	39 1383	BARTLETT	6/22/2005	8660 8	3667 MHD110015 MHD11	10022 U/S 1763	SPD110030	8 VCP		262 261								0 0.00	1	11					1 2 2.00						
3 5_O&M 422 GGSD 3 5_O&M 423 GGSD		PARK PARK			7940 MHD110020 MHD11 7941 MHD110021 MHD11					256 254 256 255							0	0 0.00	2		++++		1		1 3 3.00		+++			+ +	
3 5_O&M 424 GGSD 3 5_O&M 425 GGSD	38 1370	PARK BARTLETT	6/8/2005	8660 7	7942 MHD110022 MHD11 8661 MHD110022 MHD11	10021 U/S 1664	SPD110031	8 VCP		118 118 262 259								0 0.00	45				1		1 4 4.00 45 90 2.00						
3 5_O&M 426 PPT		TIFFANY AVE			7825 MHD110023 MHE11					262 259 258 71								0 0.00	1 1						1 2 2.00			1		MSA = Deposits	
3 5_O&M 427 GGSD 3 5_O&M 428 GGSD		TUNSTALL	6/13/2005	7818 7	7943 MHD110024 MHD11	10023 U/S 1940	SPD110026	8 VCP		258 245				$\bot \bot \bot \bot$			0	0 0.00							0 0 0.00			1		MSA = Debris. Inspection sto ft short of U/S MH.	ps 13
3 5_O&M 428 GGSD 3 5_O&M 429 GGSD 3 5_O&M 430 GGSD	P5 A 15 P5 B 3	CAROUSEL MARIETTA	11/13/2007	7944 7	7943 MHD110024 MHD12 7959 MHD110025 MHD12	20019 D/S 1588	SPD120011	8 VCP		318 316 160 161							0		3						61 122 2.00 3 6 2.00 6 12 2.00						
3 5_O&M 430 GGSD	P5 A 6	MARIETTA	11/29/2007	7946 7	7947 MHD110027 MHD11	10028 D/S 1581	SPD110023	8 VCP		360 358			ШТТ				0		6	$\Box\Box$	шШ		$\Box\Box\Box\Box$		6 12 2.00						

				General			T		Structural Defe	ect Codina	T _ T	151		Operation	al and Maintenance					Construction Features		8 Ti	
		9 -		Contra	Pipe .				Ordered a Bore	ad ad a p	pair pair t Rating	fect So	хөрс	Ороналог	di dio Marionaro			Rating		SOLICITATION TO CALCIED	snoor	y Aband	
	9	VD No.		disting MH ID Previous MH ID	Camer ID wer ID swer ID	(f) and (f)	O	F	Darley Hale	eforme	ining Fa	ural De	pelect		D (D)		Charles Name	k Maint Defect Defect		Intruding S	Seal Si	ruction r Surve	DD 71
ity ity ractor	No. No.	Watche DV Sal Ins Pocation Tocation	ь	disting MH ID Previous MH ID	ting Se ling Se lous Sr (in)	Comm.	C	Fracture F	B H	J D X	Mr Q F	Struct	Deposits D AE AE Other	Fine (F)	Tap (T) Medium (M	Ball (B)	I OB V	P Quic	ap (Lateral) T	L IS	al ≥	Const	De
Phas Prior Rank	Tape DVD Inspi	Street Name	CCTV Date St	art End Start End	Direc Exisis Prev Size	Joint GIS GIS	L C M S H L	смвн	sv vv sv vv s	S M L S M L A V H P S	LF RP S A F	Total	AGS B % L % Z % E	3 L J C E	BLJCBLJ	BLJCG	DRWCZ%C	B Total	FL BI BD D	L U R LD RD SRH SRB	SRL Z SA CU MC	Reas	Comments Recommendations
3 5_O&M 431 GGS 3 5_O&M 432 GGS		MARIETTA BARTLETT			3 U/S 1665 SPD110032 8 VCP 3 D/S 1761 SPD110029 10 VCP	266 26 262 26					0	0 0	.00 2					2 4 2.00 2 4 2.00					
3 5_O&M 433 GGS 3 5_O&M 434 GGS	D P5 A 7	ACACIA BARTLETT			2 U/S 1661 SPD120015 8 VCP 5 D/S 1762 SPD120016 10 VCP	118 11 269 26						0 0	.00 10					10 20 2.00 52 104 2.00					
3 5_O&M 435 GGS		ANTHONY			6 D/S 1718 SPD120018 12 VCP	295 29					0	0 0	.00 5					5 10 2.00					
3 5_O&M 436 GGS 3 5_O&M 437 PP1		ANTHONY ANTHONY AVE		68 7948 MHD120006 MHD120007	7 D/S 1719 SPD120020 18 VCP D/S 1551 SPD120002 12 VCP	295 29 300 76					0	0 0	.00 6					6 12 2.00					MSA = Deposits
3 5_O&M 438 PP1		ACACIA AVE			D/S 1553 SPD120004 12 VCP	268 26						0 0	.00 2					0 0 0.00 2 4 2.00	2		1		MOA = Depusits
3 5_O&M 439 GGS	D P4 A-	ACACIA		55 7951 MHD120014 MHD120010		216 21					0	0 0	.00 41					41 82 2.00					Heavy deposits at some joints
3 5_O&M 440 GGS 3 5_O&M 441 GGS	D P5 A 11 D P5 B 8	CHRISTAL			U/S 1663 SPD120019 8 VCP 5 D/S 1666 SPD120021 8 VCP	350 34 350 34					0	0 0 0	.00 68		++++++			68 136 2.00 68 136 2.00					+
3 5_O&M 442 GGS 3 5_O&M 443 GGS	D P5 B 7 D P5 B 5	CHRISTAL BAILEY			7 D/S 1585 SPD120008 12 VCP D/S 1587 SPD120010 8 VCP	350 35 298 28					0	0 0	.00 1					1 2 2.00 6 13 2.17			1		
3 5_O&M 444 GGS	D P5 B 6	CHRISTAL	11/13/2007 79	58 7957 MHD120018 MHD120017	7 U/S 1586 SPD120009 8 VCP	220 21						0 0	.00 2					2 4 2.00					
3 5_O&M 445 GGS 3 5_O&M 446 GGS	D P5 B 2 D P5 B 1	MARIETTA MARIETTA			0 D/S 1589 SPD120012 8 VCP D/S 1942 SPD120014 8 VCP	217 21 217 21					0	0 0 0	.00 17		++++++			17 34 2.00 8 16 2.00					+
3 5_O&M 447 PP1		VALLEY VIEW ST	12/20/2007	MHE080001 MHE090006	 	349 34						0 0	.00 3					3 6 2.00					
3 5_O&M 448 GGS	D 34 1120	Y SANTA BARBARA		86 8885 MHE080010 MHE080009		163 11					0	0 0	.00 17		++++++			17 34 2.00	1				
3 5_O&M 449 GGS		Y SANTA BARBARA				163 16					0	0 0	.00 20				1	21 41 1.95					
3 5_O&M 450 GGS 3 5_O&M 451 GGS		Y SANTA BARBARA Y BAILEY		887 8888 MHE080011 MHE080012 888 8889 MHE080012 MHE080013	2 D/S 1516 SPE080016 8 VCP 3 D/S 1398 SPE080030 8 VCP	218 21 244 34				 	0	0 0	.00 55 14 .00 111 6	2	 		6	77 160 2.08 118 241 2.04					<u>+ </u>
3 5_O&M 452 GGS	D 34 1134	SANTA BARBARA Y ALLEY		91 8890 MHE080015 MHE080014		332 32					0	0 0	.00 18					18 36 2.00	2				
3 5_O&M 453 GGS 3 5_O&M 454 GGS		STONEGATE Y SANTA MONICA			5 U/S 1738 SPE090012 8 VCP 3 U/S 1452 SPE080036 8 VCP	PRIVATE 375 39 350 34		+++		++++++++=	0	0 0	.00 28 24	+++	+++++	++++7	24	28 56 2.00 48 144 3.00	+++1	+++++	++++		
3 5_O&M 455 GGS	D 32 1086	Y BLACKMER Y BLACKMER	3/24/2005 78	42 7844 MHE080028 MHE080029	9 D/S 985 SPE080003 8 VCP 1 D/S 988 SPE080005 8 VCP	260 25 178 17					0	0 0	00 85 4				1	90 181 2.01					
3 5_O&M 456 GGS	D 32 1086	1 BLACKMER	3/24/2005 /8	7040 MITEUSUUZ9 MITEUSUU51	2/3 300 SEEU8UUUS 8 VCP	178 17				+++++++++++++++++++++++++++++++++++++++		0 0	.00 56 1	++++	+++++	+++++		57 114 2.00	++++				DAE at 198.2 ft (15-20% blocked).
3 5_O&M 457 GGS	D 33 1088 D 33 1089	Y CHAPMAN		7849 MHE080030 MHE080050	U/S 990 SPE080007 8 VCP D/S 1454 SPE090036 8 VCP	260 19		+++			0	0 0	.00 62 17	+++	++++++	+++++	1	80 161 2.01 114 228 2.00	++++		1		DAE at 198.2 ft (15-20% blocked). Reverse inspection needed.
3 5_O&M 458 GGS 3 5_O&M 459 GGS		Y BLACKMER Y ST MARK		0 0 MHE080030 MHE080032 0 0 MHE080031 MHE080032		338 33 201 20					0	0 0	.00 110 4					114 228 2.00 53 106 2.00					
3 5_O&M 460 GGS	D 33 1101	Y SANTA CATALINA	3/31/2005 89	114 7788 MHE080032 MHE080031	U/S 1403 SPE080033 8 VCP	219 35		$\Box\Box$			0	0 0	.00 22 78	\prod				100 200 2.00	ШП				
3 5_O&M 461 GGS	D 33 1101	Y SANTA CATALINA	3/31/2005 89	115 8914 MHE080033 MHE080032	2 U/S 1343 SPE080025 8 VCP	349 34					c	0 0	.00 15 99					114 228 2.00		1			
3 5_O&M 462 GGS	D 33 1098	Y SANTA CATALINA	4/1/2005 89	116 8915 MHE080034 MHE080033	3 U/S 1344 SPE080026 8 VCP	350 34					0	0 0	.00 54					54 108 2.00		1			
3 5_O&M 463 GGS	D 33 1097	Y SANTA CATALINA	3/31/2005 78	59 7858 MHE080036 MHE080035	5 U/S 1457 SPE080038 8 VCP	360 35					0	0 0	.00 65					65 130 2.00					Possible lateral @ 150.2'. Bad
3 5_O&M 464 GGS	D 33 1098	Y SANTA CATALINA	3/31/2005 89	117 8916 MHE080037 MHE080034	U/S 1345 SPE080027 8 VCP	350 34						0 0	.00 8 12				1	21 42 2.00					lighting and high water level. Some parts were not inspected. Redo inspection
3 5_O&M 465 GGS		Y SANTA CATALINA		117 7859 MHE080037 MHE080036		349 34						0 0	.00 109		1			110 221 2.01					Possible infiltration at joints
3 5_O&M 466 GGS 3 5_O&M 467 GGS		ST MARK Y TUNSTALL			7 U/S 1346 SPE080028 8 VCP 0 U/S 1517 SPE080040 8 VCP	326 32 220 21					0	0 0	.00 21 36				7	57 114 2.00 53 99 1.87					
3 5_O&M 468 GGS	D 34 1104	Y TUNSTALL		63 7862 MHE080042 MHE080041		350 31					0	0 0	.00 3 34				14	51 88 1.73					Possible infiltration at joints MSA = Heavy deposits. Possible
3 5_O&M 469 GGS 3 5_O&M 470 GGS		Y TUNSTALL Y SANTA RITA		64 7863 MHE080043 MHE080042	2 U/S 1519 SPE080042 8 VCP 1 D/S 1520 SPE080043 8 VCP	350 10 258 25						0 0	.00 22 19				1 1	42 102 2.43 121 276 2.28			1		infiltration at joints. Redo inspection
3 5_O&M 471 GGS	D 34 1118	Y ST MARK	4/7/2005 78	66 7867 MHE080045 MHE080031	D/S 1522 SPE090042 8 VCP	231 22					0	0 0	.00 53 16				7	76 145 1.91					
3 5_O&M 472 GGS 3 5_O&M 473 GGS	D 34 1117 D 33 1102	Y ST MARK Y WINTON		66 7865 MHE080045 MHE080044 73 7872 MHE080047 MHE080046		148 20 172 19					0	0 0	.00 36 28		++++++		3	67 131 1.96 60 120 2.00	1				+
3 5_O&M 474 GGS 3 5_O&M 475 GGS		Y WINTON Y WINTON		74 7873 MHE080048 MHE080047 75 7874 MHE080049 MHE080048		313 31 350 34						0 0	.00 84	1				85 169 1.99 114 228 2.00					Possible infiltration at joints Possible infiltration at joints
3 5_O&M 476 GGS	D 33 1103	Y WINTON	4/5/2005 78	76 7875 MHE080050 MHE080049	U/S 1531 SPE080048 8 VCP	259 25						0 0	.00 79				1	80 161 2.01					Possible infiltration at joints
3 5_O&M 477 GGS 3 5_O&M 478 PP1	D 33 1087 50 20	Y BLACKMER 50 22 VALLEY VIEW ST		148 7849 MHE080051 MHE080030 113 8814 MHE090001 MHE090002	0 D/S 989 SPE080006 8 VCP 2 D/S 1617 SPE090006 8 VCP	240 23 340 15					0	0 0	.00 77					77 154 2.00 8 16 2.00	1	1	1		MSA = DAE (30%)
3 5_O&M 479 PPT					2 U/S 1618 SPE090007 8 VCP D/S 1499 SPE090009 8 VCP	350 34 350 35						0 0	.00 3					3 6 2.00 1 2 2.00	2				
			12/20/2007									,											Inspection ends at 65.9' on DVD.
3 5_O&M 481 GGS				01 8900 MHE090006 MHE090007		300 20		+++		+++++++++++++++++++++++++++++++++++++++	0	0 0	.00 22	1	+++++	++++		23 45 1.96	1	+++++	++++		Inspection report length is 205'. Redo inspection
3 5_O&M 482 GGS		BELGRAVE ALLEY VALLEY VIEW		04 8903 MHE090010 MHE090009		362 36		+++		+++++++++++++++++++++++++++++++++++++++	0	0 0	.00 2	+++	+++++	++++		2 4 2.00	++++	+++++			Medium Deposit
3 5_O&M 483 PP1 3 5_O&M 484 PP1		EASEMENT VALLEY VIEW EASEMENT	t	111 8912 MHE090022 MHE090023 112 8913 MHE090023 MHE090024		370 40 335 32		+++		+++++++++++++++++++++++++++++++++++++++		0 0	.00 7	+++	+++++	++++		7 14 2.00	2	+++++			+ +
3 5_O&M 485 GGS	D 33 1089	Y BLACKMER	3/24/2005 78	50 7852 MHE090025 MHE090026	D/S 1150 SPE090004 8 VCP	258 25					0	0 0	.00 4					83 166 2.00					
3 5_O&M 486 GGS 3 5_O&M 487 GGS	D 33 1100	Y AMY Y BLACKMER	3/31/2005 78	52 7854 MHE090026 MHE090028	7 U/S 1456 SPE090038 8 VCP B D/S 1148 SPE090003 8 VCP	234 23 258 25		+++		+++++++++++++++++++++++++++++++++++++++		0 0	.00 76	+++	+++++	++++		76 152 2.00 123 246 2.00	++++	+++++			+
3 5_O&M 488 GGS	D 33 1100	Y BLACKMER Y BELGRAVE	3/31/2005 78	54 7857 MHE090028 MHE090030	D/S 1147 SPE090002 8 VCP D/S 1795 SPE090040 8 VCP	294 29 350 22						0 0	.00 81 34				2	117 236 2.02 63 128 2.03					MSA = High water level
3 5_O&M 489 GGS 3 5_O&M 490 GGS		Y BELGRAVE Y TUNSTALL			5 D/S 1525 SPE090045 8 VCP	350 22 131 13					0	0 0	.00 44 17				4	63 128 2.03 14 28 2.00			1		
3 5_O&M 491 GGS		Y TUNSTALL		770 7871 MHE090036 MHE090037		350 18					0	0 0	.00 44		\Box	$\Box\Box\Box$	1	45 92 2.04	$\Box\Box\Box$		1		MSA = Heavy deposits. Possible infiltrations at joints. Redo inspection
3 5_O&M 493 GGS 3 5_O&M 494 GGS		Y WINTON Y BLACKMER			B U/S 1533 SPE090049 8 VCP	201 19 90 8				+++++++++++++++++++++++++++++++++++++++	0	0 0	.00 6 5	+++	+++++	++++		11 22 2.00 12 24 2.00	++++	+++++			+ +
3 5_O&M 495 GGS 3 5_O&M 496 GGS	D 36 1173	Y BLACKMER Y BLACKMER	5/16/2005 78	33 7832 MHE100002 MHE100001	U/S 1418 SPE100037 8 VCP B D/S 1419 SPE100038 8 VCP	256 25 258 25					0	0 0	.00 47	+++				47 94 2.00 46 92 2.00					
3 5_O&M 497 GGS	D 36 1152	Y LUDLOW	5/3/2005 77	99 7833 MHE100004 MHE100002	2 U/S 1422 SPE100041 8 VCP	347 34						0 0	.00 48	2	2 2	3		57 170 2.98					
3 5_O&M 498 GGS 3 5_O&M 499 GGS		FAIRCHILD TRINETTE	6/7/2005 78	103 7804 MHE100009 MHE100010	5 D/S 1423 SPE100042 8 VCP 0 D/S 1425 SPE100044 8 VCP	110 10 320 31		+++				0 0	.00 1	1	+++++	++++		1 2 2.00 1 1 1.00	++++	+++++			+ +
3 5_O&M 500 GGS 3 5_O&M 501 GGS	D 38 1360	BLACKMER CERULEAN		06 7805 MHE100012 MHE100011 06 7813 MHE100012 MHE100013	U/S 1428 SPE100047 8 VCP 3 D/S 1434 SPE100049 8 VCP	258 25 300 29						0 0	.00		+ + + + + + + + + + + + + + + + + + +		2 8	2 4 2.00 9 19 2.11				\blacksquare	
3 5_O&M 501 GGS		CERULEAN VALLEY VIEW		13 7814 MHE100013 MHE110005		200 19					0	0 0	.00				4	4 8 2.00					DAE 20% of the cross sectional
3 5_O&M 503 PP1		Y ALLEY VIEW Y ALLEY VALLEY VIEW		82 8881 MHE100019 MHE100018		193 19		+++			0	0 0	.00 1	+++	++++++	+++++		1 2 2.00	++++				area
3 5_O&M 504 PPT 3 5_O&M 505 PPT		ALLEY CHASE ST		0 0 MHE100020 MHE110014	D/S 1513 SPE110002 8 VCP D/S 1242 SPE100003 8 VCP	350 14 189 13		+++			0	0 0	.00 1	++++	++++++	+++++		1 2 2.00 4 8 2.00	++++	+++++	1		MSA = DAE (20%)
3 5_O&M 506 PP1	50 25	LAMPSON AVE	12/21/2007 77	'81 8861 MHE100024 MHE100053	3 U/S 1400 SPE100027 8 VCP	136 17						0 0	.00 3					3 6 2.00					
3 5_O&M 507 GGS 3 5_O&M 508 GGS		CHASE CHASE			5 U/S 1243 SPE100004 8 VCP 6 U/S 1247 SPE100005 8 VCP	227 2: 280 27				+++++++++++++++++++++++++++++++++++++++	0	0 0	.00 1	+++	+++++	++++		1 2 2.00 1 2 2.00	++++	+++++	1		MSA = Heavy DAE
3 5_O&M 509 GGS 3 5_O&M 510 PPT		CHASE VALLEY VIEW	12/8/2005 88	01 8802 MHE100027 MHE100028	3 D/S 1254 SPE100006 8 VCP 0 U/S 1401 SPE100028 8 VCP	180 22 190 19						0 0	.00	1	477777	\Box		1 1 1.00 2 4 2.00					
3 5_O&M 511 PP1	52 12	VALLEY VIEW	12/27/2007 77	83 7782 MHE100030 MHE100031	U/S 1745 SPE100008 10 VCP	52 48					0	0 0	.00 1					1 2 2.00					
3 5_O&M 512 PP1 3 5_O&M 513 PP1		BAILEY ST BAILEY ST			U/S 1746 SPE100009 10 VCP 3 D/S 1747 SPE100010 10 VCP	188 10 90 9					0	0 0	.00 1	+++	+++++	++++		1 2 2.00 1 2 2.00		+++++	1		MSA = Deposits
		. —	. — —	· · · · · · · · · · · · · · · · · · ·					. — — — —														, — — — — — — — — — — — — — — — — — — —

				General					S	Structural Defect Coo	dina	T_T_	5		Operations	al and Maintenance					Construction Features		8 Ti	
	, g			Condu	Pipe					Sildotaria Boico: Oo	Day of Bridge	spair t Rating	fect Soo		Ороналога	a card wantercarde			t Rating Score		Surface and the surface and th	snoou	Feature by Abano	peuopu
	No. ape No OVD No	P Location	Exis	sting MH ID Previous MH ID	ewer ID	th (ft)	gt) (t)	Crack Fractu	re Broken	Hole	Deforme Collapse Surface Damage	Sags Ck Struc	ctural De Defect I	Deposits		Roots (R)	Infi	tration Obstacles Verm	ck Main	Tap (Lateral)	Intrud Line Ma	ding Seal Signatural W	struction or Surve	Abel
ase ority nking	D No. D No. versal T	D Watc			ection o	nt Leng	TV Len		В	0	J D X	Mr CP Qui	tal Struc uctural	AE AE Other	Fine (F)	Tap (T) Medium (M)	Ball (B)	I OB V	CP Qui		L	IS M	as ons f	S de de la company de la compa
3 5_0&M 514 GGSD	36 1175				D/S 1501 SPE100015 8 VCP	349	344 C	M S H L C M	S H SV VV	SV VV S M L	LSMLAVHPS LF	RP S € 5 0	0.00	AGS B % L % Z % B	1 J C B	LJCBLJC	B L J C G E	R W C Z % C	R € 5 5 8 F	D FL BI BD	D L U R LD RD SRH SR	RB SRL Z SA CU MC	Tol	Ö Comments Recommendations
3 5_O&M 515 PPT 3 5_O&M 516 PPT	52 15				D/S 1502 SPE100016 8 VCP		209 224					0	0 0.00	1 1					1 2 2.00					
3 5_O&M 517 GGSD 3 5_O&M 518 GGSD		Y RICHMOND RICHMOND		7 8870 MHE100040 MHE100037 2 7791 MHE100043 MHE100042	D/S 1504 SPE100018 8 VCP U/S 1410 SPE100029 8 VCP		292 298					0	0 0.00	5	3	2		1	6 12 2.00 5 9 1.80					
3 5_O&M 519 GGSD 3 5_O&M 520 GGSD	37 1178	LUDLOW	5/19/2005 8875	5 8874 MHE100047 MHE100046 3 8875 MHE100048 MHE100047	U/S 1508 SPE100022 8 VCP	340	339 338					0	0 0.00	1	1 1	1 1			5 10 2.00					
3 5_O&M 521 GGSD	37 1180	WINTON	5/19/2005 7795	5 7794 MHE100050 MHE100049	U/S 1413 SPE100032 8 VCP	256	254					0	0 0.00	1 1					1 2 2.00 2 5 2.50					
3 5_O&M 523 GGSD	38 1376	TUNSTALL	6/13/2005 7817	2 7811 MHE110004 MHE110003 7 7816 MHE110008 MHE110007	U/S 1438 SPE110038 8 VCP	233						0	0 0.00	1 1					1 2 2.00			1		MSA = DAE
3 5_O&M 524 GGSD 3 5_O&M 525 PPT				4 7823 MHE110012 MHE110011 5 7827 MHE110013 MHE110018			347 143					0	0 0.00	1				1	1 2 2.00					
3 5_O&M 526 PPT 3 5_O&M 527 PPT	52 17 52 18	CERULEAN AVE CERULEAN AVE		4 8649 MHE110015 MHE110014 0 7904 MHE110016 MHE110015		350 350	1 350					0	0 0.00	4					0 0 0.00 4 8 2.00			1		MSA = Deposits
3 5_O&M 528 PPT 3 5_O&M 529 GGSD		TIFFANY AVE TAYLOR		7 7828 MHE110018 MHE120001 3 7424 MHE110026 MHF120016		160	84 351					0	0 0.00	1 24					1 2 2.00 34 68 2.00			1		MSA = Deposits
3 5_O&M 531 GGSD 3 5_O&M 531 GGSD	52 1661		12/14/2005 8924	4 8925 MHE110034 MHE110035 5 8927 MHE110035 MHE110037	D/S 1350 SPE110008 8 VCP		210					0	0 0.00	5					5 10 2.00					
3 5_O&M 532 GGSD	P6 8	CRESENT	12/1/2007 8927	7 8926 MHE110037 MHE110036	U/S 1352 SPE110010 8 VCP	180	177					0	0 0.00	13	1	1		7	16 33 2.06 23 46 2.00					
3 5_O&M 533 GGSD 3 5_O&M 534 GGSD	P3-2 7 P4 A- 1 9	ADAMS		8 8934 MHE110038 MHE110047 0 8929 MHE110041 MHE110040	D/S 1354 SPE110012 8 VCP	122	137					0	0 0.00	1					9 18 2.00					
3 5_O&M 535 GGSD	P4 A-	CHASE		0 8931 MHE110041 MHE110044			255					0	0 0.00	7					7 14 2.00					
3 5_O&M 536 GGSD 3 5_O&M 537 GGSD	177 7				D/S 1406 SPE110031 8 VCP	205 166	205					0	0 0.00	14					14 28 2.00 4 8 2.00					
3 5_O&M 538 GGSD	P4 A- 1 11	CHASE	11/1/2007 893	1 7752 MHE110044 MHE110050	D/S 1388 SPE110028 8 VCP	210	254					0	0 0.00	4					4 8 2.00					
3 5_O&M 539 GGSD 3 5_O&M 540 GGSD				2 8931 MHE110045 MHE110044 3 8932 MHE110045 MHE110046	U/S 1357 SPE110015 8 VCP U/S 1358 SPE110016 8 VCP	213 200	257 201		HH			0	0 0.00	2 16	+	HHHH		+++-	2 4 2.00 16 32 2.00	+ H		++++++++++++++++++++++++++++++++++++	\Box	+ -
3 5_O&M 541 GGSD	P2 2 P4 A-	CERULEAN	9/20/2007 8933	3 8934 MHE110046 MHE110047	D/S 1359 SPE110017 8 VCP	180	179					0	0 0.00	8					8 16 2.00					
3 5_08M 542 GGSD 3 5_08M 543 GGSD	1 7 P4 A-	LONGDEN		1 8840 MHE110049 MHE120008 9 8840 MHE110049 MHF110045		347 258		++++			+++++++	0	0 0.00	68					68 136 2.00 41 82 2.00	++			Н	
3 5_O&M 543 GGSD 3 5_O&M 544 GGSD	P4 A-	STANFORD	11/10/2007	9 8840 MHE110049 MHF110045 2 7753 MHE110050 MHE120011		258 350		++++			+++++++	0	0 0.00	68					68 136 2.00	+++			H	
3 5_O&M 545 GGSD 3 5_O&M 546 GGSD		SPRING STANFORD	8/14/2007 7756	6 8932 MHE110051 MHE110045		210	257 258					0	0 0.00	6 8					6 12 2.00 8 16 2.00					
3 5_O&M 547 GGSD	P1 6 P1 9	Y OLIVE ST	8/21/2007 7766	0 7761 MHE110052 MHE120017	D/S 1337 SPE110021 8 VCP	189	159					0	0 0.00	11					11 22 2.00			2		
3 5_O&M 548 GGSD 3 5_O&M 549 GGSD		ALONZO COOK ALLEY WEST OF ADAMS			U/S 1381 SPE110024 8 VCP	350	172					0	0 0.00	1					1 2 2.00					
3 5_O&M 550 GGSD			8/21/2007 775	1 7765 MHE120007 MHE120021	D/S 1364 SPE120006 8 VCP	350						0	0 0.00	1					1 2 2.00			1		MSA = DAE Inspection stopped just short of D/S
3 5_O&M 551 GGSD 3 5_O&M 552 GGSD				3 7754 MHE120011 MHE120012 7 7756 MHE120014 MHE110051	D/S 1366 SPE120008 8 VCP U/S 1369 SPE110020 8 VCP	350 352	349 352					0	0 0.00	4	1				5 9 1.80 1 2 2.00			1		MH.
3 5_O&M 553 GGSD 3 5_O&M 554 GGSD	P1 10	Y SPRING	775	7 7758 MHE120014 MHE120015	D/S 1370 SPE120011 8 VCP D/S 1371 SPE120012 8 VCP	350						0	0 0.00	1					1 2 2.00					MSA = DAE
3 5_O&M 555 GGSD	P1 3		8/22/2007 7759	9 7755 MHE120016 MHE120013	U/S 1368 SPE120010 8 VCP		41					0	0 0.00	3					3 6 2.00			1		MSA = DAE
3 5_O&M 556 GGSD 3 5_O&M 557 GGSD		ANTHONY	8/22/2007 776	3 7762 MHE120018 MHE120019 4 7759 MHE120020 MHE120016	U/S 1372 SPE120013 8 VCP	350 204	010					0	0 0.00	7					10 20 2.00 7 14 2.00			1		Inspection stopped 31 ft short of U/S MH.
3 5_O&M 558 GGSD 1 5_O&M 559	P1 1 1 10 23	ANTHONY x 10222 Larson		4 7765 MHE120020 MHE120021 36 11287 NHN130021 MHN130022	D/S 1377 SPE120017 8 VCP DS 2886 SPN130018 6 VCP		25 365					0	0 0.00	1 1 5.00 99	1	7 1		1	1 2 2.00 148 0.77	3		1		MSA = DAE Clear deposit, Cut R, Fix Lat
3 5_O&M 559 GGSD				1 7897 MHE120024 MHE120023			230					0	0 0.00	1 3.00 33				1 50	51 4 4.00			1		MSA = Obstacle. Close to ending MH
1 5_O&M 560 3 5_O&M 560 GGSD	24 23 P2 13	x 9452 Russell ALONZO COOK			DS 2510 SPM140033 8 VCP U/S 1384 SPE120021 8 VCP		388 248					0	0 0.00	74 28					118 0.68 28 56 2.00					Clear deposit
1 5_O&M 561 3 5_O&M 561 GGSD	29 6 P2 5	x 9750 Trask Ave. EDWARD WARE			DS 2864 SPM150002 18 VCP		295 235					0	0 0.00	59 39					114 0.68 39 78 2.00					Clean grease
	24 21	x 9452 Imperial	3/18/2004 1206	68 12069 MHM140006 MHM140007	DS 2507 SPM140030 8 VCP	5 370	372						0 0.00	26 31 45					110 0.75 45 90 2.00					Clear deposit
1 5 O&M 563	12 17				DS 2383 SPN110007 8 VCP		114						0 0.00	1 36 5.00					108 1.00				ш	Clear deposit
3 5_O&M 563 GGSD 1 5_O&M 564					U/S 1258 SPF080053 8 VCP DS 4630 SPP110032 6 VCP		264 148					0	0 0.00	7					7 14 2.00 62 0.68			1 10	CU	
3 5_O&M 564 GGSD	43 1508	CHAPMAN			U/S 1093 SPG080019 8 VCP	314	312						0 0.00	5				1	6 12 2.00					
1 5_O&M 565 3 5_O&M 565 GGSD	13 11 11 43 1507	10791 Acacia Pkwy. CHAPMAN		37 13389 MHO120010 MHO120009 0 7361 MHF080007 MHF080007	US 5121 SPO120008 6 VCP D/S 1179 SPF080005 8 VCP	400 328	159 326					0	0 0.00	31				1	59 0.76 1 4 4.00					Cut roots
1 5_O&M 566 3 5_O&M 566 GGSD					DS 4794 SPP100030 8 VCP D/S 1180 SPF080006 8 VCP		538 322						0 0.00	9	2 2	1 3 3	4		55 0.79 5 10 2.00					Cut roots
1 5_O&M 567 3 5_O&M 567 GGSD	4 15	x 12372 Pine St.	2/10/2004 1177	75 11764 MHP100024 MHP100014	DS 4795 SPP100031 8 VCP D/S 1304 SPF080035 8 VCP	3 600							0 0.00	19	1	4	1	1	44 0.69 2 6 3.00					Cut roots
	26 23	Alley Between		18 11519 MHL130027 MHL130028			239						0 0.00	22					41 0.67					Clean grease
3 5_O&M 568 GGSD					D/S 1181 SPF080007 8 VCP		262					0	0 0.00						1 3 3.00				RB	
1 5_O&M 569 3 5_O&M 569 GGSD	50 14 50 16	5 12631 Loraleen St.		9587 MHL110026 MHL110027 4 7363 MHF080016 MHF080014		340 362							0 0.00	16		1 1	1		7 11 1.57			2	-	Cut roots
1 5_O&M 570	21 11	x 13093 Nelson	3/15/2004 0	0 MHO130037 MHO130006	DS 3953 SPO130029 6 VCP							1	0 0.00	8 1	1	2			36 0.81	2		3		Replace and upsize pipe
3 5_O&M 570 GGSD 1 5_O&M 571	43 1492 32 25			4 8754 MHF080016 MHF080015 96 11297 MHN130032 MHN130035	U/S 1302 SPF080033 8 VCP DS 2895 SPN130027 8 VCP	100 5 325	178 324	++++			+++++++	0	0 0.00		1	+++++		++++	1 1 1.00 35 0.68	++		9		Replace and upsize pipe
3 5_O&M 571 GGSD	41 1459	ONYX	8/26/2005 737	1 7372 MHF080022 MHF080023	D/S 1190 SPF080016 8 VCP	332	328					0	0 0.00		1	1 2	1		5 14 2.80					
	17 11 40 1450	9591 Halekulani Dr.			US 3117 SPM110050 8 VCP U/S 1192 SPF080018 8 VCP		113	++++			++++++		0 0.00	16	1	+++++			34 0.71				Н	Cut roots
3 5_O&M 572 GGSD 1 5_O&M 573	40 1450	12552 Oceanbreeze		9 9510 MHM110017 MHM110018	U/S 1192 SPF080018 8 VCP	285		++++			+++++++	0	0 0.00		3 6	2			3 3 1.00	+++		++++	H	Cut roots
3 5_O&M 573 GGSD		SANTA CATALINA		5 7374 MHF080026 MHF080025			282					0	0 0.00		9				9 9 1.00					
1 5_O&M 574	1 11	x Ave.			DS 2574 SPO090037 8 VCP								0 0.00	11 5.00					28 0.67					Clear deposit
1 5_O&M 575	42 1488 39 4	8121 Bestel	4/13/2004 7084	4 7083 MHJ140032 MHJ140031	D/S 1203 SPF080029 8 VCP US 819 SPJ140028 8 VCP	170	306 160						0 0.00	14	3				3 3 1.00 27 0.74					Clear deposit
3 5_O&M 575 GGSD 1 5_O&M 576	42 1465	12522 Aristocrat		8 7375 MHF080029 MHF080026 9 8380 MHK110005 MHK110006	U/S 1194 SPF080020 8 VCP		252 355	++++			 	0	0 0.00	1	1				2 3 1.50	$+H^{-}$		++++		
1 5_O&M 576 3 5_O&M 576 GGSD		x Ave. SANTA BARBARA			5 DS 3350 SPK110004 8 VCP 1 U/S 1196 SPF080022 8 VCP	3 355		++++			+++++++	0	0 0.00	10	1	1 1		1 10	1 1 1.00	+++		++++	H	Cut roots, Clear obstacles
1 5_O&M 577	26 21	13200 Casa Linda	3/29/2004 1209	93 11519 MHL130021 MHL130028	DS 2687 SPL130012 8 VCP	390	398						0 0.00	8 4					24 0.62					Clean grease, Cut roots
3 5_O&M 577 GGSD	42 1467	SANTA BARBARA	9/9/2005 7378	8 8767 MHF080029 MHF080030	D/S 1648 SPF080054 8 VCP	193	192					0	0.00	2	7	1			10 16 1.60					

			General				Structural	I Defect Coding		8		Operation	nal and Maintenance			n	Con	struction Features		S P	7	
	io. (7)			Pip	9			pad Pipe	Failure Repair uct Ratin Defects	Defect So						cts Score			llaneous	on Featur	pandoned	
on No.	DOD N DOD Location	Exist	ting MH ID Previous MH ID	Sewer I	ngth (ft) mment (ft)	Crack Fracti	re Broken Hole	Sourta Deform	Lining Point Point Sags Sags ructural	ructural al Defec	Deposits	Fine (F)	Roots (R) Tap (T) Medium (M) B	Infiltration	Obstacles Vermin	SM Defe SM Defe sect Ind	(Lateral)	Line Intrudir	ng Seal Serial W	onstruction s for Sur	A httfied A	
Phase Priority Ranking Contract Tape Nk DVD No	Street Name	CCTV Date Start	t End Start End	Direction Existing Previous Size (in)	Joint Le	LCMSHLCM	S H SV VV SV VV	O S N L S M L A V H P	Total St	Structur SBA	AE		B L J C B L J C B	LJCGDRV	Other W C Z % C R	PACP C Total O& Total O&	L BI BD D L	U R LD RD SRH SRE	B SRL Z SA CU N	Total Cc Reasons	Ω Ω O Comments	Recommendations
1 5_O&M 578 32 2				S US 2704 SPL140012 8 VCP						0 0.00	10	0 4				24 0.73						Cut roots
3 5_O&M 578 GGSD 42 1467 1 5_O&M 579 24 27	SANTA BARBARA 13461 Shapell	3/18/2004 12079		1 DS 2517 SPM140040 8 VCP					0	0 0.00 12	3 2					5 12 2.40						Clean grease
3 5_08M 579 GGSD 42 1470 1 5_08M 580 32 4		3/31/2004 11622	2 11588 MHL140028 MHL140013	U/S 1324 SPF080038 8 VCP B DS 2802 SPL140043 8 VCP	250 249				0	0 0.00	23 8	3			6	29 52 1.79			1			Cut roots, Check flow capacity
3 5_O&M 580 GGSD 42 1470 1 5_O&M 581 22 23	Y TURQUOISE x 10512 Nutwood St.	3/15/2004	MHN120006-A MHN130001	2 U/S 1325 SPF080039 8 VCP 1 DS SPN120009-A 10 VCP	308 305 5 294 294				0	0 0.00 7	52				1 30 2	66 118 1.79					Medium DAE	Clean grease, Clear OB
3 5_O&M 581 GGSD 42 1471 1 5_O&M 582 38 11				3 U/S 1230 SPF080040 8 VCP 2 US 804 SPJ140013 8 VCP	100 62 295 294				0	0 0.00	12 3	3 1 3	3 1			12 24 2.00 19 0.66			1		MSA = Heavy DAE	Cut roots
3 5_O&M 582 GGSD 41 1463 1 5_O&M 583 26 22	GARNET Alley Between Central&Imperial		3 8774 MHF080036 MHF080037 9 11545 MHL130028 MHL140036	7 D/S 1233 SPF080043 8 VCP 5 DS 2694 SPL140002 8 VCP	192 188 180 178				0	0 0.00		1				1 1 1.00						Clean grease. Cut roots
3 5_O&M 583 GGSD 42 1471		9/12/2005 8774	4 8771 MHF080037 MHF080034	4 U/S 1231 SPF080041 8 VCP					0	0 0.00	7					7 14 2.00				ОВ		Octain ground, Out roots
1 5_O&M 584 47 16 3 5_O&M 584 GGSD 42 1471	x 9562 Lenore Dr. SANTA RITA		6 9410 MHM110024 COM110003 1 8774 MHF080040 MHF080037	3 US 2988 SPM110042 6 VCP 7 U/S 1649 SPF080055 8 VCP	4 190 178 258 256				0	0 0.00	1 10.00 1	1 1 3	3		1 20	18 0.65 1 2 2.00			1	N		Clear deposit, Clear OB&R
1 5_O&M 585 33 15 3 5_O&M 585 GGSD 42 1473			8375 MHK110002 MHK110001 1 7383 MHF080040 MHF080042	1 US 3346 SPK110001 8 VCP 2 D/S 1199 SPF080025 8 VCP	344 344 257 255				0	0 0.00	4	,			2	18 0.68 6 12 2.00						Cut roots
1 5_O&M 586 30 1	Alley by Central Ave.	3/29/2004 11516	6 11517 MHL130025 MHL130026	S DS 2691 SPL130016 8 VCP	525 259					0 0.00 5	2.00 4					17 0.66						Clean grease, Cut roots
3 5_O&M 586 GGSD 42 1488 1 5_O&M 587 40 30	AMETHYST x 13472 Jefferson St.			2 D/S 1200 SPF080026 8 VCP 7 US 798 SPJ140007 8 VCP	308 303 3 360 350				0	0 0.00	1 90.00 1	3	6			4 5 1.25 17 0.72						Clear deposit, Cut roots
3 5_08M 587 GGSD 42 1473 1 5_08M 588 50 13			3 7384 MHF080042 MHF080043 6 9585 MHL110026 MHL110025	3 D/S 1201 SPF080027 8 VCP	248 246 347 247				0	0 0.00	1					1 2 2.00						Cut roots
3 5_0&M 588 GGSD 41 1455 1 5_0&M 589 40 26	CHAPMAN	8/25/2005 8782	2 7385 MHF080051 MHF080052	2 D/S 1758 SPF080057 8 VCP	350 347				0	0 0.00	11	! :	3 2			16 0.65						
1 5_0&M 589 40 26 3 5_0&M 589 GGSD 41 1455 1 5_0&M 590 35 13	CHAPMAN	8/25/2005 7385	7386 MHF080052 MHF080053	0 DS 793 SPJ130014 8 VCP 3 D/S 1692 SPF080030 8 VCP 9 DS 694 SPK130030 8 VCP	350 198				0	0 0.00	3 8					16 0.65 3 6 2.00 16 0.68			1		MSA = High Water Level	Cut roots Cut roots
3 5_O&M 590 GGSD 48 1582	SPRINGDALE FRONTAGE			5 D/S 1176 SPF090003 8 VCP					0	0 0.00	1	2	8			11 29 2.64						out too
1 5_O&M 591 3 10 3 5_O&M 591 PPT 50 36	12251 Nutwood St. SPRINGDALE ST		5 11218 MNW13028 MNW13031 6 7357 MHF090010 MHF090011	DS 2392 SPN100001 8 VCP	130 123 297 294				0	0 0.00	8	3				15 0.69 0 0 0.00			1		MSA = Debris	Cut roots
1 5_O&M 592 10 11 3 5_O&M 592 GGSD 45 1535	Easement	2/20/2004 11748	8 11747 MHP120035 MHP120036	5 DS 4402 SPP120036 8 VCP 3 U/S 1287 SPF090010 8 VCP	200 191				0	0 0.00 0 0.00 4	6	1 12	1		13	14 0.64 31 37 1.19	1					Cut roots, Repair lateral
1 5_O&M 593 35 7	8642 Stanford Ave.		3 8422 MHK120025 MHK120024	4 US 3400 SPK120026 8 VCP 4 U/S 1288 SPF090011 8 VCP	140 155					0 0.00	7	,				14 0.79						Cut roots
3 5_O&M 593 GGSD 45 1535 1 5_O&M 594 45 20	x Pvt.	5/4/2004 0	0 MHP110039 MHP110006	3 US 4627 SPP110029 8 VCP	6 140 133				0	0 0.00	8	1 18				34 42 1.24 13 0.63 1	1		3			Fix Lat, Check flow capacity
3 5_O&M 594 GGSD 45 1535 1 5_O&M 595 33 20	Y CHAPMAN 8941 Anthony Ave.		5 8734 MHF090016 MHF090015 4 8396 MHK120012 MHK120013	5 U/S 1289 SPF090012 8 VCP 3 DS 3383 SPK120020 8 VCP	30 48 220 220				0	0 0.00	14				1 20 10	45 56 2.24						Cut roots
3 5_O&M 595 GGSD 45 1536	CHAPMAN	10/17/2005 8735	5 8736 MHF090016 MHF090017	7 D/S 1290 SPF090013 8 VCP	314 310				0	0 0.00		2	4	1		7 18 2.57						Cuttous
1 5_O&M 596 50 16 3 5_O&M 596 GGSD 45 1536	12561 Loraleen St. CHAPMAN			3 DS 3313 SPL110029 8 VCP 3 D/S 1658 SPF090050 8 VCP	340 344 350 349				0	0 0.00		1	2 2 1 1			13 0.70 2 4 2.00						Cut roots
1 5_O&M 597 48 16 3 5_O&M 597 GGSD 45 1537				6 US 3233 SPM100029 8 VCP 0 D/S 1644 SPF090032 8 VCP					0	0 0.00	2	3	3 1			13 0.66 5 7 1.40						Cut roots
1 5_O&M 598 48 18 3 5_O&M 598 GGSD 45 1537	Rea Cir.	5/14/2004 9531	1 9530 MHM100029 MHM100028	B US 3235 SPM100031 8 VCP 1 D/S 1645 SPF090033 8 VCP					0	0 0.00	16	8 1	1 2			13 0.74 24 40 1.67						Cut roots
1 5_O&M 599 12 8 3 5_O&M 599 GGSD 46 1543	13351 Westlake St. VANGUARD		5 11110 MHO140034 MHO140039	9 DS 2838 SPO140021 12 VCP 3 U/S 1497 SPF090047 8 VCP						0 0.00	1 20.00 2	2 2	2			12 0.65 3 4 1.33						Clear deposit, Cut roots
1 5_0&M 600 26 24 3 5_0&M 600 GGSD 46 1540	Alley By Central	3/29/2004 11514	4 11515 MHL130023 MHL130024	4 DS 2689 SPL130014 8 VCP U/S 1485 SPF090034 8 VCP						0 0.00 6	1	2				12 0.58						Clean grease
0 0_04111 000 0000 40 1040	Emilyada	10/18/2005	3 6040 WWW 636024 WWW 636021	0.0 1.00 0.1 0.0000	257 251					0.00						1 2 230				ca mer		
																				a roll ove		
3 5_O&M 601 GGSD 46 1539	VANGUARD	10/18/2005 8848	8 8847 MHF090024 MHF090023	4 DS 2326 SPN140002 6 VCP 3 U/S 1486 SPF090035 8 VCP					0	0 0.00	9	5		1		12 0.71 10 21 2.10			2	r		Cut roots
1 5_08M 602 18 9 3 5_08M 602 GGSD 46 1541 1 5_08M 603 18 10	x 13262 Cypress EMERALD x 13340 Cypress	10/18/2005 8848	8849 MHF090024 MHF090025	8 DS 2289 SPO140044 8 VCP 5 D/S 1487 SPF090036 8 VCP 0 DS 2291 SPO140046 8 VCP	120 119					0 0.00 2	16					12 0.82 16 32 2.00 10 0.68			2			Clr grease, Check flow capacity Clr grease. Check flow capacity
3 5_O&M 603 GGSD 46 1541	EMERALD Easement/13071	10/18/2005 8849	9 8850 MHF090025 MHF090026	3 D/S 1488 SPF090037 8 VCP	350 349					0 0.00 2	21					21 42 2.00			2	RT		Cil grease, Crieck llow capacity
1 5_O&M 604 43 3 3 5_O&M 604 GGSD D 1 1565	Coast St. Y TOPAZ		1 7110 MHJ130029 MHJ130028 3 8744 MHF090033 MHF090034		310 194 326 321					0 0.00	08	1	2	1	12	10 0.60			1	В		Cut roots
1 5_O&M 605 32 8	12582 Aristocrat Ave.		0 8384 MHK110006 MHK110013		355 357					0 0.00	4	2			12	10 0.64				Ш		Cut roots
3 5_O&M 605 GGSD MIXE D 1 1561 1 5_O&M 606 32 21	Y TURQUOISE 8802 Acacia Ave.	10/27/2005 8854 4/1/2004 8392	4 8853 MHF090038 MHF090037 2 8393 MHK120007 MHK120008	7 U/S 1492 SPF090041 8 VCP 3 DS 3366 SPK120010 8 VCP	210 210 300 301				0	0 0.00	26				10	36 62 1.72 10 0.64						Cut roots
3 5_O&M 606 GGSD MIXE D 1 1561	Y TURQUOISE	10/27/2005 8855	5 8854 MHF090039 MHF090038	3 U/S 1493 SPF090042 8 VCP	350 348				0	0 0.00	81				36	117 198 1.69						
1 5_O&M 607 30 11 3 5_O&M 607 GGSD D 1 1558	9140 Imperial EMERALD			5 DS 2712 SPL140020 8 VCP 5 U/S 1489 SPF090038 8 VCP	275 226 350 348				0	0 0.00	1 5					1 2 2.00			+			Cut roots
1 5_0&M 608 46 21 3 5_0&M 608 PPT 50 33	9902 Beverly Ln. BELGRAVE EASEMENT		6 9504 MHM100015 MHM100014 6 8857 MHF090040 MHF090041	4 US 3429 SPM100023 8 VCP	325 336 226 163					0 0.00	2	2 2	2			10 0.64						Cut roots
1 5_O&M 609 18 4	10401 Mildred Ave.		2 11171 MHO130044 MHO130043		285 287				0	0 0.00	5	;				10 0.60						Cut roots
3 5_0&M 609 GGSD MIXE D 1 1560 1 5_0&M 610 4 13	Y AMY 11041 Jerry Ln.		9 8853 MHF090045 MHF090037 8 11777 MHP100027 MHP100026	7 U/S 1498 SPF090048 8 VCP 5 US 4640 SPP100033 6 VCP	309 299 285 285				0	0 0.00	44	3 4			20	64 108 1.69 9 0.71						Cut roots
3 5_O&M 610 GGSD D 1 1562	Y DIAMOND	10/27/2005 0		3 U/S 1789 SPF090025 18 VCP	281 277				0	0 0.00 28	6	3 4			13	47 81 1.72						Cut roots
1 5_O&M 611 47 17 MIXE			3 9542 MHM100036 MHM100035		285 281					0 0.00	+		1 1	1		9 0.71			$+ + + \mp$	\Box		Cut roots
3 5_O&M 611 GGSD D 1 1563 1 5_O&M 612 19 7	Y DIAMOND 9741 Stanford Ave.		1 8750 MHF090050 MHF090049 1 11550 MHM120017 MHM120018	9 U/S 1299 SPF090026 8 VCP B DS 3073 SPM120034 8 VCP	150 147 205 188				0	0 0.00	45		2 1		37	82 127 1.55			++++			Cut roots
3 5_08M 612 GGSD 50 1617 1 5_08M 613 39 7	POPLAR	11/14/2005 7393	3 7392 MHF100002 MHF100001	U/S 1206 SPF100003 8 VCP US 677 SPJ140005 8 VCP	173 178				0	0 0.00	1	3				8 0.75 4 5 1.25 8 0.69			2			Check flow capacity
3 5_O&M 613 GGSD 50 1620 1 5_O&M 614 38 8	PICKETT	11/15/2005 7395	7396 MHF100004 MHF100005	5 D/S 1209 SPF100006 8 VCP 2 DS 803 SPJ140012 8 VCP	277 271				0		4 2			1		5 12 2.40						Cut roots
3 5_O&M 614 GGSD 50 1621	TOPAZ	11/15/2005 7402	2 7401 MHF100008 MHF100009	0 U/S 1215 SPF100011 8 VCP	213 253					0 0.00	1					1 2 2.00				\Box		
1 5_O&M 615 32 26 3 5_O&M 615 GGSD 50 1621				4 DS 3370 SPK120014 8 VCP 0 U/S 1216 SPF100012 8 VCP					0	0 0.00	1 4					8 0.63 1 2 2.00						Cut roots

		General				Structura	al Defect Coding	- I I	Т	Operational and Maintenance			Construction Features	w v	
9 0			Pipe				odid pe	ailure apair xxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxx	хэри			t Rating Score		neous Feature	Paudpu
N algab N OVO NO	Existing MH II	H ID Previous MH ID	ewer ID	th (ft)	Crack Fractu	e Broken Hole	Deform thick	Point R Sags Ck Stru ck Stru ct Stru ct Stru	T Deposits	Roots (R)	Infiltration Obsta	cles Vermin 30 De ge la	Intruding Seal	Miscella struction or Surve	led Abs
onty onty multiple onty onty pa No. D No. Pection versal I D Water			isting S evious S evious S terial	S Comn	C F	ВН	0 S	CP Qui	D AE AE Other	Fine (F) Tap (T) Medium (M)	Oth	T See Se V Ou V	L IS	M Marian	Sklenis
£ ½	CCTV Date Start End 4/12/2004 7094 763	End Start End 633 MHK130026 MHK130025	US 831 SPK130049 8 VCP	325 321	L C M S H L C M	S H SV VV SV V	V S M L S M L A V H P S I	LF RP S & D D	6 AGS B % L % Z %	B L J C B L J C B L J C E	L J C G D R W C Z	% C R 4 5 5 8 FD FL BI	BD D L U R LD RD SRH SRB SRL Z	SA CU MC P 2	Cut roots Recommendations
3 5_08M 616 GGSD 51 1631 HUNTLEY 1 5_08M 617 49 23 12592 Ohmer Wy.			D/S 1237 SPF100016 8 VCP DS 3301 SPL110016 8 VCP	350 344 250 248				0 0	0.00	1 1	1	1 1 1.00 8 0.63			Cut roots
3 5_O&M 617 GGSD 51 1651 DUDMAN 1 5_O&M 618 32 6 12672 Magnolia			D/S 1245 SPF100021 8 VCP DS 3214 SPL110056 8 VCP	350 350 381 381				0 0	0.00 2	3		2 4 2.00	1		Clean grease
3 5_O&M 618 GGSD 51 1651 DUDMAN 13112 Magnolia			D/S 1246 SPF100022 8 VCP	350 344				0 0	0.00 4	2 1		7 13 1.86			
1 5_08M 619 44 7 Ave. 3 5_08M 619 GGSD 51 1623 RICHMOND		796 MHF100020 MHF100021	US 2957 SPL130039 8 VCP D/S 1248 SPF100023 8 VCP	218 224 350 349				0 0	0.00	2 1	1	8 0.74 5 11 2.20			Cut roots
1 5_O&M 620 30 7 10361 Garden Grove Blvd.	3/30/2004	MHN130010 MHN130011		456 456				0	0.00			8 0.74		2	Replace and upsize pipe
3 5_O&M 620 GGSD 51 1630 LUDLOW 1 5_O&M 621 24 18 13060 Flower St.	3/18/2004 11295 1129	1296 MHN130030 MHN130032	D/S 1250 SPF100025 8 VCP DS 2894 SPN130026 8 VCP	350 347 325 325				0 0	0.00 1			1 2 2.00 8 0.75		2	Check flow capacity
3 5_08M 621 GGSD 51 1630 LUDLOW 1 5_08M 622 21 9 10352 Trask			D/S 1251 SPF100026 8 VCP DS 2854 SPO150025 15 VCP	350 348 310 331				0 0	0.00 3			3 6 2.00 8 0.68		2	Check flow capacity
3 5_O&M 622 PPT 50 8 LAMPSON 1 5_O&M 623 4 6 12352 Elmwood			U/S 1301 SPF110026 8 VCP DS 4638 SPP100028 6 VCP	356 328 651 651				0 0	0.00 1			1 2 2.00 2		1	MSA = end of pipe Cut roots
3 5_08M 623 PPT 50 11 Y LAMPSON		391 MHF110004 MHF110003 I		84 85				0 0	0.00 14 1			15 30 2.00			DAE 40% of the cross sectional area
1 5_0&M 624 40 24 8172 Larson Ave. 3 5_0&M 624 PPT 50 27 TOPAZ ST			US 791 SPJ130012 8 VCP D/S 1212 SPF100008 8 VCP	200 77 168 169				0 0	0.00	1	1	7 0.66			Cut roots
1 5_O&M 625 38 19 13351 Monroe St. 3 5_O&M 625 GGSD P3-1 7 AMETHYST	4/14/2004 7072 762	624 MHJ140018 COJ140001	US 810 SPJ140019 8 VCP U/S 1219 SPF110007 8 VCP	320 115 300 297				0	0.00	2 1		7 0.59 61 123 2.02			Cut roots
1 5_O&M 626 33 3 33 4 x 8788 Oakdale Dr.		1604 MHK130018 MHK130019		5 229 228				0 0	0.00 1 59 1		1	30 7 0.81		2 OB Z	Clear deposit, Clear OB
3 5_0&M 626 GGSD P4 A- 1 8 KENNELY	11/6/2007 7409 741	410 MHF110014 MHF110015 I	D/S 1220 SPF110008 8 VCP	231 229				0 0	0.00 44			44 88 2.00			
1 5_08M 627 44 1 12862 Magnolia Ave.	4/23/2004 9357 935	358 MHL120036 MHL120037	DS 3163 SPL120035 8 VCP	303 304				0	0.00	1	1	6 0.62			Cut roots
3 5_08M 627 GGSD 2 3 TRINETTE		414 MHF110021 MHF110027		170 168		++++	+++++++++++++++++++++++++++++++++++++++	0 0	0.00 33			33 66 2.00		+++	
1 5_O8M 628 25 21 x 8932 Ann Cross Dr.		383 MHK110011 MHK110012		5 230 240		++++	+++++++++++++++++++++++++++++++++++++++	0	0.00	+++++++++++++++++++++++++++++++++++++++	1	20 2 6 0.62			Clear obstacles
3 5_O&M 628 GGSD 2 3 TRINETTE 1 5_O&M 629 35 19 8532 Emerson Cr.	4/12/2004 7094 765	655 MHK130026 MHK130027	U/S 1228 SPF110013 8 VCP DS 692 SPK130028 8 VCP	30 300 205 209				0 0	0.00 60	2		60 120 2.00			Clean grease, Cut roots
3 5_08M 629 GGSD P3-1 7 AMETHYST			U/S 1281 SPF110022 8 VCP	233 231				0 0	0.00 46			46 92 2.00			
1 5_08M 630 50 1 12702 Loraleen St. P4 A- 3 5_08M 630 GGSD 2 3 TRINETTE		584 MHL110025 MHL110024	US 3310 SPL110026 8 VCP U/S 1229 SPF110014 8 VCP	70 83				0 0	0.00	2		59 118 2.00			Cut roots
1 5_O&M 631 48 10 12181 Carthay Cir.	5/13/2004 9550 952	525 MHM090024 MHM100023	DS 3282 SPM090025 8 VCP	260 260				0 0	0.00	2		6 0.62			Cut roots
3 5_0&M 631 GGSD P3-1 7 AMETHYST 1 5 0&M 632 17 10 9591 Halekulani Dr.		416 MHF110024 MHF110023 I 446 MHM110045 COM110001	U/S 1262 SPF110015 8 VCP US 3118 SPM110051 8 VCP	258 257 171 170				0 0	0.00 44			44 88 2.00			Cut roots
3 5_0&M 632 GGSD P3-2 1 AMETHYST			U/S 1263 SPF110016 8 VCP	281 310				0 0	0.00 60	3		60 120 2.00			Cuttons
1 5_O&M 633 48 12 9731 Lampson Ave. 3 5_O&M 633 GGSD P3-2 2 AMETHYST		505 MHM110010 MHM110011 419 MHF110025 MHF120013	DS 4247 SPM110054 10 VCP D/S 1264 SPF120007 8 VCP	335 337 350 350				0 0	0.00	2		6 0.62 45 90 2.00			Cut roots
1 5_08M 634 15 3 13120 Hope			DS 2888 SPN130020 8 VCP	325 327				0	0.00	3		6 0.62			Cut roots MHF110028 corrected to
3 5_08M 634 GGSD P3-1 6 CERULEAN 1 5_08M 635 4 14 11 11141 Jerry Ln.		423 MHF110026 MHF110029 I	U/S 1283 SPF110024 8 VCP US 4793 SPP100029 6 VCP	258 256 135 113				0 0	0.00 29			29 58 2.00			MHF110229 Cut roots
3 5_O&M 635 GGSD P3-1 4 SYLVAN ST 12951 Garden			U/S 1271 SPF110018 8 VCP	256 254				0 0	0.00 6			6 12 2.00			
1 5_O&M 636 21 15 Grove Blvd. 3 5_O&M 636 GGSD P3-1 5 CERULEAN		3188 MHP130008 MHP130012 431 MHF110028 MHF110029	US 4930 SPP130001 12 VCP D/S 1272 SPF110019 8 VCP	225 225 254 254				0 0	0.00	3		5 0.65 14 28 2.00			Cut roots
1 5_O&M 637 31 11 8940 Bestel Ave. 3 5_O&M 637 GGSD P3-1 3 POPLAR	3/30/2004 11565 1108	1085 MHL140003 COL140002	US 3100 SPL140026 8 VCP D/S 1273 SPF110020 8 VCP	120 118 256 257				0	0.00 1 20.00			5 0.65 48 96 2.00			Clear deposit
1 5_O&M 638 49 14 9562 Arlene Ave.	5/17/2004 9535 953	538 MHM100033 MHL100003	DS 3272 SPM100036 8 VCP	260 284				0	0.00	1 1		5 0.66			Cut roots
3 5_08M 638 GGSD 52 1659 GARNET 1 5_08M 639 16 15 12671 Susan Cir.	3/4/2004 10745 1074	0744 MHM110030 MHM110029	U/S 981 SPF110001 8 VCP US 2662 SPM110018 8 VCP	213 254 160 139				0 0	0.00	1 1		1 2 2.00			Cut roots
3 5_08M 639 GGSD 52 1663 LENORE 1 5_08M 640 22 26 Alley		830 MHF110038 MHF110039 I 1082 MHM130039 MHM130001	U/S 1629 SPF110033 8 VCP	350 347 361 280				0 0	0.00 1			1 2 2.00		DA	Clear deposit
3 5_O&M 640 GGSD P2 4 CERULEAN	9/19/2007 7413 883	835 MHF110042 MHF110019	U/S 1657 SPF110043 8 VCP	350 348				0 0	0.00 1 1 20.00 0.00 69 7			76 159 2.09		1 2	Ciedi deposit
1 5_08M 641 12 3 McKeen St. 3 5_08M 641 GGSD P2 4 CERULEAN 1 5_08M 642 15 17 13140 Benton	9/19/2007 8836 883	835 MHF110043 MHF110042	DS 2352 SPO130020 6 VCP U/S 1633 SPF110036 8 VCP	301 302 350 352				0 0	0.00 68			5 0.58 1 68 136 2.00			Cut roots, Repair lateral
1 5_O&M 642 15 17 13140 Benton 3 5_O&M 642 GGSD P2 3 CERULEAN			DS 2840 SPO130041 8 VCP D/S 1634 SPF110037 8 VCP	640 656 299 297				0 0	0.00 58	2		5 0.65 1 58 116 2.00			Cut roots, Repair lateral
1 5 O8M 643 7A 3 11391 Midwick			US 3790 SPP100017 8 VCP D/S 1635 SPF110038 8 VCP	110 112 350 348				0 0		2 1		4 0.70 16 32 2.00			Cut roots
3 5,08M 643 GGSD P2 3 CERULEAN 1 5,08M 644 40 27 8124 Larson Ave. 3 5,08M 644 GGSD 52 1671 ANTHONY	4/15/2004 7054 705	055 MHJ130020 MHJ130021	DS 794 SPJ130015 8 VCP U/S 1759 SPF120037 8 VCP	60 123				0 0	0.00		1	10 32 2.00 4 0.72 1 2 2.00			Cut roots DAE from lateral
1 5_O&M 645 40 28 8101 Larson Ave.	4/15/2004 7055 705	056 MHJ130021 MHJ130022	DS 795 SPJ130016 8 VCP	282 349 60 68				0 0			1	4 0.53			DAE from lateral Cut roots
3 5_08M 645 GGSD P3-2 2 AMETHYST 1 5_08M 646 39 5 8051 Bestel	4/13/2004 7085 708	084 MHJ140033 MHJ140032	D/S 1265 SPF120008 8 VCP US 820 SPJ140029 8 VCP	350 348 340 338				0 0	0.00 69	1 2		4 0.00			Cut roots
3 5_08M 646 GGSD P3-2 2 AMETHYST 1 5_08M 647 35 4 12591 Adelle St.			D/S 1266 SPF120009 8 VCP US 3394 SPK110030 8 VCP	287 285 300 302				0 0	0.00 56 0.00	1 2		56 112 2.00 4 0.61			Cut roots
3 5_08M 647 GGSD P4 A- 10 ANTHONY 1 5_08M 648 35 6 12882 Adelle St.	10/28/2007 7421 865	657 MHF120015 MHF120012	U/S 1696 SPF120006 10 VCP	261 260				0 0	0.00 5			5 10 2.00			
3 5_O&M 648 GGSD P3-1 2 TAYLOR	10/27/2007 7424 742	425 MHF120016 MHF120017 I	DS 3399 SPK110035 8 VCP D/S 1268 SPF120011 8 VCP	350 353 350 348				0 0	0.00	2		4 0.60 66 132 2.00			Cut roots
3 5_O&M 649 GGSD P3-1 1 TAYLOR			DS 3363 SPK120007 8 VCP D/S 1269 SPF120012 8 VCP	272 270 350 313				0 0	0.00	2		61 122 2.00		1	Cut roots MSA = Deposits
1 5_O&M 650 35 16 Alley By Emerson x Cr.		623 MHK130024 COK130001		4 240 237				0	0.00		1	25 4 0.61			Clear obstacles
3 5_0&M 650 GGSD 2 10 ANTHONY Alley By Emerson		421 MHF120019 MHF120015		258 259		\prod		0 0	0.00 1		1	2 6 3.00			MHF120032 corrected to MHF120015
1 5_O&M 651 35 17 Cr.		094 MHK130024 MHK130026		120 130				0	0.00	2		4 0.60			Cut roots
3 5_O&M 651 GGSD 2 11 TAYLOR Gloria Awe.		426 MHF120019 MHF120018		252 252		++++	+++++++++++++++++++++++++++++++++++++++	0 0	0.00 3	+++++++++++++++++++++++++++++++++++++++		3 6 2.00	 	+++	
1 5_0&M 652 39 19 Easement 3 5_0&M 652 GGSD 2 9 ANTHONY			DS 995 SPK140013 8 VCP D/S 1698 SPF120014 10 VCP	280 281 130 80		++++	+++++++++++++++++++++++++++++++++++++++	0	0.00	2		4 0.71		+++	Cut roots 80.4' DAE, Heavy Deposits
			US 762 SPK140032 8 VCP	130 80 300 211				0 0	0.00		1	4 0.61			Cut roots MHF120023 corrected to
3 5_O&M 653 GGSD 2 2 Y POPLAR 1 5_O&M 654 30 14 8681 Trask			U/S 1277 SPF120019 8 VCP US 996 SPK150001 8 VCP	180 178 240 245		++++	+++++++++++++++++++++++++++++++++++++++	0 0	0.00	1		9 17 1.89		+++	MHF120023 corrected to MHF120021 Cut roots, Repair lateral
3 5_08M 654 GGSD 2 8 SYLVANST		0 MHF120024 MHF120027		149 147				0 0	0.00 3			3 6 2.00			Cut toxio, repair aterai
1 5_0&M 655 32 3 9103 Bestel Ave.	3/31/2004 11537 1162		DS 2705 SPL140013 8 VCP	246 252				0	0.00	2		4 0.71			Cut roots
3 5_08M 655 GGSD 2 6 Y PARK		720 MHF120025 MHF120021		254 126			+++++++++++++++++++++++++++++++++++++++	0 0	0.00 3	+++++++++++++++++++++++++++++++++++++++		3 6 2.00	 	1	Reverse inspection needed. MSA = DAE
3 5_0&M 656 GGSD 2 7 SYLVAN ST	10/28/2007 0 0	0 MHF120025 MHF120026	D/S 1279 SPF120022 8 VCP	191 68				0 0	0.00 4			4 8 2.00		1	mon - DAE

	General	Pipe	St	tructural Delect Coding	Operational and Maintenance	Construction Features	eous Aband doned
0 0 D No. 0 D		Camera (f) (f)	£	offormec offormec offormage in Reg offormage	Struct Inal Def	Intruding Seal	scellan Uction f Survey d Aban
Part Institute of the state of	Existing MH ID Previous MH ID	(in) (in) Comme	Crack Fracture Broken C F B	Hole Joint 출장 중을 들장 중	15 15 15 15 15 15 15 15		Consit M M dentifie
Phase control of the	CTV Date Start End Start End	Direction Direction Size Size GIS C	5 L C M S H L C M S H SV VV	SV VV S M L S M L A V H P S LF RP S	AE AE Other AE J C B L J C B	Other D N W C Z % C R C D F D FL BI BD D L U R LD RD SRH SRB SRL .	Z SA CU MC F 2 2 5 Comments Recommendations
1 5_O&M 657 46 15 9932 Catherine Ave. 5	5/7/2004 9493 9503 MHM100011 MHM1000	10 US 3580 SPM100014 8 VCP 165	151		0 0.00	4 0.61	Cut roots
3 5_O&M 657 GGSD 2 5 SYLVAN ST 10	0/29/2007 0 0 MHF120026 MHF1200		188		0 0 0.00 2	2 4 2.00	
3 5_O&M 658 GGSD 52 1670 OWEN 1/	5/7/2004 9496 9497 MHM100015 MHM1000 1/11/2006 8816 8817 MHF120031 MHF1200	04 D/S 1621 SPF120030 8 VCP 350	273 348		0 0 0.00 1 1 1	4 0.59	Cut roots
KNOTT	5/12/2004 9544 9545 MHM100037 MHM1000		228		0 0.00	4 0.72	Cut roots
	1/9/2007 8208 8209 MHG060001 MHG0600 5/10/2004 9488 9510 MHM110015 MHM1100		336		0 0 0.00 1	1 2 2.00	Cut roots
3 5_O&M 660 PPT 49 KNOTT EASEMENT 11	11/6/2007 8193 8194 MHG070001 MHG0700	02 D/S 1778 SPG070002 12 VCP 25	43		0 0 0.00 1	1 2 2.00	
	3/16/2004 10765 10766 MHM130030 MHM1300 11/5/2007 7133 8199 MHG070003 MHG0700		340 78		0 0.00	4 0.60	2 Tap Cut roots
9738-5 Galway	17/5/2007 7133 8199 MHG070003 MHG0700 4/7/2004 10772 10774 MHM130034 MHM1300		116		0 0 0.00	1 1 4 4.00	Clean grease
3 5_0&M 662 GGSD 41 1456 Y CHAPMAN 8/	3/25/2005 8214 8213 MHG080003 MHG0800	02 U/S 962 SPG080002 8 VCP 269	268		0 0 0.00 51	51 102 2.00	
	3/17/2004 10769 10770 MHM140002 MHM1400 0/12/2005 8218 8219 MHG080010 MHG0800		319 332		0 0.00 1	4 0.61 6 10 1.67	Cut roots
	5/4/2004 12004 10780 MHM140021 MHM1400 10/6/2005 8227 8226 MHG080019 MHG0800		194		0 0.00 1 1 1	4 0.60	Cut roots
1 5_O&M 665 20 16 x 9742 Dakota Ave. 3/	3/11/2004 12009 12027 MHM140027 MHM1400	26 US 2719 SPM140010 8 VCP 3 210	220		0 0.00 1 5.00 1	4 0.71	Clear deposit, Cut roots
1 5_O&M 666 43 19 9632 Central Ave. 4/	10/6/2005 8227 8228 MHG080019 MHG0800 4/22/2004 10771 12052 MHM140004 MHM1400	05 DS 2832 SPM140045 8 VCP 265	306 283		0 0 0.00	1 1 1.00	1 Check flow capacity
	10/6/2005 8228 8229 MHG080020 MHG0800		306		0 0 0.00 68 1	1 70 139 1.99	
	4/7/2004 MHM150006-A MHM1500 10/6/2005 8300 8301 MHG080022 MHG0800		89 193		0 0.00	4 0.70	1 1 CU Check flow capacity
1 5_O&M 668 36 5 9730 Trask Ave. 4	4/7/2004 12080 12084 MHM150001 MHM1500 10/5/2005 8302 8305 MHG080024 MHG0800	02 DS 2867 SPM150017 18 VCP 300	302 251		0 0.00	4 0.71	1 Check flow capacity
12781 Groveview	10/5/2005 8302 8305 MHG080024 MHG0800 2/20/2004 11323 11079 MHN120019 CON1200		132		0 0,00	4 061	Cut roots
3 5_08M 669 GGSD 45 1526 CANTER 10	0/11/2005 8303 8304 MHG080025 MHG0800	26 D/S 1098 SPG080023 8 VCP 192	191		0 0 0.00	1 1 1.00	
3 5_O&M 670 GGSD 44 1522 SANTA RITA 10	3/1/2004 11290 11291 MHN130025 MHN1400 10/5/2005 8305 8310 MHG080027 MHG0800	32 D/S 1100 SPG080025 8 VCP 252	248		0 0 0.00	4 0.60	Cut roots
	3/2/2004 11314 11313 MHN140031 MHN1400		415		0 0.00	4 0.70 1	Cut roots, Repair lateral
	10/5/2005 8306 8227 MHG080028 MHG0800 3/8/2004 11175 11176 MHO130047 MHO1400		300		0 0 0.00 6 1	7 10 1.43	1 Check flow capacity
	0/13/2005 8310 8311 MHG080032 MHG0800		253		0 0 0.00 13	1 14 31 2.21	
MIXE	2/20/2004 MHP120027 MHP1200		332		0 0.00	1 20 4 0.68	Clear obstacles
3 5_08M 673 GGSD D 1 1509 SANTA CATALINA 10	10/4/2005 8313 8312 MHG080035 MHG0800	34 U/S 1107 SPG080032 8 VCP 366	363		0 0 0.00	1 1 1.00	
	5/31/2012 7737 7740 MHG110043 MHG1100			oc	0000 0 0 0.00 7	5131	4' Heavy (40 %) DAZ. Inspection Completed Clean DAZ
	2/20/2004 11741 11740 MHP120030 MHP1200 10/4/2005 8317 8315 MHG080037 MHG0800		123 255		0 0.00	1 3 7 2.33	1 Check flow capacity
5 5_O&M 674 PPT May 27 May 28 PICKETT AVENUE 5/	5/21/2012 8787 8788 MHF100014 MHF1000	15 D/S 1239 SPF100017 8 VCP 350					70.8' Heavy (30 %) DAZ. Inspection Completed Clean DAZ
11145 Garden	5/21/2012 8787 8788 MHF100014 MHF1000 4/16/2004 12314 11893 MHP13004 MHP1300		211.2		0.000 0 0.00 43	4123	2 Inspection Completed Clean DAZ 1 Check flow capacity
	10/4/2005 8319 8320 MHG080038 MHG0800		252		0 0 0.00 4	4 8 2.00	1 Shoot not expenty
	5/8/2012 8296 8297 MHG080007 MHG0800	08 D/S 1092 SPG080018 8 VCP 294	295.9	oc	0000 0 0 0.00 55	1 1 1 4132 57 114 2.00	Infiltration Dripper
	4/8/2004 7086 7628 MHJ120002 COJ1200 0/12/2005 8320 8321 MHG080039 MHF0800		101		0 0.00 1 30.00	3 0.53	1 F Clear deposit
Man 1 Man 1			300		0 0 000		87.4' From D/S MH Heavy (25 %)
	5/22/2012 7393 7395 MHF100002 MHF1000		276	OC OC	0000 0 0 0.00 52	4121	2 DAZ. Inspection Completed Clean DAZ
1 5_08M 677 40 12 13082 Jefferson St. 4/ 3 5_08M 677 PPT 47 27 CHAPMAN 10	4/15/2004 7681 7680 MHJ130009 MHJ1300 0/15/2007 0 0 MHG090002 MHG0900		215 177		0 0.00 1 1 1	3 0.66	Cut roots
5 5_O&M 677 PPT May 22 May 23 WINTON STREET 5/							143.5' Heavy (30 %) DAZ.
12591 Agnes	5/17/2012 7879 7880 MHE090040 MHE0900 3/18/2004 8382 8383 MHK110010 MHK1100		283.1	OC	0000 0 0 0.00 34	412E	2 Inspection Completed Clean DAZ
	3/18/2004 8382 8383 MHK110010 MHK1100 0/15/2007 8211 8210 MHG090002 MHG0900		253		0 0.00 1 10.00	7 14 2.00	Clear deposit Repeat inspection, DVD 47 - Section 28
May May Folder Folder					0 - 200 /		Inspection Completed: 35% DAE
5 5_0&M 678 PPT 2 16 2 20 KILLARNEY AVE 5/	5/30/2012 8924 7789 MHE110034 MHE1100	32 U/S 1348 SPE110006 8 VCP 153	156		0000 177 177 177 177 177 177 177 177 177	4128	2 @ 106.3' Clean DAE
1 5_O&M 679 44 20 8972 Acacia Ave. 4/	4/27/2004 8373 14301 MHK120009 COL1200		124		0 0.00	3 0.65	1 IPi pe Cut roots
3 5_08M 679 GGSD 50 1593 WILD GOOSE 11	11/2/2005 8269 8287 MHG090006 MHG0900	04 U/S 1330 SPG090025 8 VCP 158	155		0 0 0.00	9 9 1.00	
5 5_08M 679 PPT 2 17 Folder 2 18 RAYMOND CIR 5/	5/30/2012 8923 8924 MHE110033 MHE1100	34 D/S 1349 SPE110007 8 VCP 152	152.2	oc	3	4122	2 Inspection Completed.2' 25% DSZ Clean DSZ after 2'
	4/5/2004 8429 8427 MHK120031 MHK1200 11/8/2005 8271 8270 MHG090008 MHG0900		250 367		0 0.00	3 0.64 1	Repair lateral
Map 1 BLACKMER			307		0		255.5' Heavy (30 %) DAZ.
5 5_O&M 680 PPT May 17 STREET 5/	5/17/2012 7839 7842 MHE080026 MHE0800		260		0000 0 0 0.00 3	4122	Inspection Completed Clean DAZ
3 5_0&M 681 GGSD 49 1588 CHAPMAN 11	3/29/2004 11556 11600 MHK130013 MHK1300 11/7/2005 8277 8276 MHG090016 MHG0900	14 DS 2798 SPK130019 8 VCP 245 15 U/S 1064 SPG090016 8 VCP 366	244 363		0 0.00 1 5.00 1 21 1	3 0.66	Clear deposit
5 5_08M 681 PPT 2-1-3 11 FLOWER STREET 7/	7/16/2012 11318 11320 MHN140037 MHN1500	05 D/S 2915 SPN140023 8 VCP 425	416.9	od	0000 0 0 0.00	1 20 4100 1 4 4.00	1
1 5_O&M 682 33 21 13390 Yockey St. 4	4/1/2004 11614 11615 MHK140031 MHK1400 11/1/2005 7332 8765 MHG090022 MHG0900	32 DS 2790 SPK140021 8 PVC 226	232		0 0.00 1 10.00	3 0.53 75 150 2.00	Clear deposit
MAP			204		0	7, 3, 2, 3, 4, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1,	171.7' MSA (MCU). No Reversal
	9/6/2012 7510 7509 MHS170021 MHS1700 8/12/2004 10730 10731 MHM120008 MHM1200		171.7 266		0000 0 0 0.00	4100 1 4 4.00	1 1 Video Cut roots
	11/1/2005 7333 7332 MHG090023 MHG0900		204		0 0 0.00 60	60 120 2.00	
	3/12/2012 6800 6799 MHP190008 MHP1900				0000 0 0 0.00	412D 29 60 2.07	
1 5_O&M 684 22 12 9941 Belfast Dr. 3/	8/12/2004 10759 10760 MHM130024 MHM1300 7/15/2005 8285 8284 MHG090040 MHG0900	25 DS 2332 SPM130010 6 VCP 145	148		0 0.00	412D 29 60 2.07 3 0.66 1 1	Repair lateral
MAP					0 0 0.00 10	10 20 2.00	1 MSA = Heavy DAE
5 5_0&M 684 PPT 3-B4-2 8 BIXLER DR 10	10/2/2012 12962 12963 MHP080002 MHO0800	02 D/S 6245 SPP080026 8 VCP 346	305		0000 0 0 0.00 1 1	4100 1 4 4.00	

		1	General			1	Structural Defec	et Coding	Bu log		Operational and Maintenance		8 0	Construction Features	ures and.	Po Do
No. No.	3c. No.			amera ar ID.	£ £			ormed apsed Pip ace ace age	s Struct Rati	act Index			Alaint Ratii Fects Fect Score	Intention Cool	tion Feat	Abandone
ing ing No. No. No. rection No. resal Tape	Watched rospi	E	xisting MH ID Previous MH ID	ing Sewe (in)	Comment (f)	Crack Fracture C F	Broken Hole B H	Joint J D X C D D X	Poir Sag Structura Structura	Deposits D	Roots (R)	Infiltration Obstacles		Intruding Seal Line Material ≥ L IS N	Construc	dentified
Priori Conti	Street Name 9738-5 Galway	CCTV Date S	tart End Start End	Direc Exist Previ	GIS (SIS)	LCMSHLCMS	H SV VV SV VV S	M L S M L A V H P S LF	RP S PACI	AGS B % L % Z % B	L J C B L J C B L J C B	J C G D R W C Z %		D L U R LD RD SRH SRB SRL Z SA CI	Reas Total	Comments Recommendations
1 5_O&M 685 36 19 3 5_O&M 685 GGSD 40 1410	St/Shop.Cntr. Y BELGRAVE			3 US 2676 SPM130019 8 VCP 0 U/S 1328 SPG090023 8 VCP	190 189 350 348				0 0	0.00 1 10.00 0.00 68 1			3 0.53 69 139 2.01			Clear deposit Some parts Heavy DAE
5 5_O&M 685 PPT Map 1 May 85 1 5_O&M 686 22 24	ACACIA AVE 9934 Belfast Dr.		325 7326 MHG120015 MHG120016	6 D/S 1691 SPG120025 8 VCP 0 US 2346 SPM130028 6 VCP	268 266.3 335 210				0000 0 0	0.00 51			352H 51 102 2.00		TRI	Repair lateral
3 5_O&M 686 GGSD 40 1411	BELGRAVE			2 U/S 1320 SPG090057 8 VCP	350 347				0 0	0.00			1 2 2.00			(vepan tatera
5 5_O&M 686 PPT May 74 1 5_O&M 687 20 21	OLIVE STREET 13450 Cork St.			0 D/S 1376 SPE120016 8 VCP 8 US 2721 SPM140012 8 VCP	350 352.8 260 258				0000 0 0	0.00 69			332L 69 138 2.00 3 0.55			Cut roots
3 5_O&M 687 GGSD 50 1599 May	LAMPLIGHTER			5 D/S 1119 SPG100007 8 VCP	149 148				0 0	0.00 1			1 2 2.00			
5 5_O&M 687 PPT 2 11 1 1 5_O&M 688 12 18			755 7754 MHE120013 MHE120012	2 U/S 1367 SPE120009 8 VCP 1 DS 2918 SPN120020 8 VCP	350 353.4 270 83				0000 0 0	0.00 69			332L 69 138 2.00		DA	Clear deposit
3 5_O&M 688 GGSD 50 1615 MAP	PICKETT CHAPMAN	11/14/2005 83	330 8329 MHG100009 MHG100008	8 U/S 1124 SPG100012 8 VCP	350 349				0 0	0.00 1 30.00 0.00 3			3 0.45	1	2	Credit depusit
5 5_O&M 688 PPT 1 16 16 1 5_O&M 689 11 4 11	AVENUE 12781 Groveview 5 St.		295 8296 MHG080006 MHG080007 323 11324 MHN120019 MHN120020	7 D/S 1091 SPG080017 8 VCP 0 DS 2812 SPN120022 8 VCP	314 309 227 229				0000 0 0	0.00 51 7			332J 58 116 2.00 3 0.66 1	2	ТВІ	Repair lateral
3 5_O&M 689 GGSD 50 1615	PICKETT	11/14/2005 83	331 8330 MHG100010 MHG100009	9 U/S 1125 SPG100013 8 VCP	350 349				0 0	0.00 6			6 12 2.00			
5 5_O&M 689 PPT 4-B2-1 8 1 5_O&M 690 14 6	13162 Brookhurst	3/1/2004 10	0707 11297 MHN130034 MHN130038	1 U/S 658 SPK160022 8 VCP 5 DS 3083 SPN130042 6 VCP	207 207.2 360 19				0000 0 0	0.00	2 3		3312 5 11 2.20 3 0.53 1			Repair lateral
3 5_O&M 690 PPT 49 18	LAMPSON	11/5/2007 82	242 8243 MHG110001 MHG110002	2 D/S 977 SPG110018 8 VCP	362 369				0 0	0.00 1			1 2 2.00 1			262.2' MSA (TBI) & 17.8' MSA
5 5_O&M 690 PPT 3-6 7 3-6 1 5_O&M 691 10 16			760 11761 MHP110009 MHP110010	0 D/S 4634 SPP110036 6 Tile 7 DS 2772 SPO130028 8 VCP	331 280 298 225				0000 0 0	0.00			3300 3 9 3.00 3	2		From D/S MH. 113.2 Unmapped MH. Inspection Couldn't Completed Cut roots
	20 LAMPSON	11/5/2007 82	243 8244 MHG110002 MHG110003	7 DS 2772 SPO130028 8 VCP 3 D/S 978 SPG110019 8 VCP	363 370				0 0		1		3 0.66	1		MSA = DAE (20%)
5 5_O&M 691 PPT May 38			784 8785 MHF100012 MHF100013		350 349.3				0000 0 0	0.00 70			322L 70 140 2.00			
1 5_O&M 692 13 10 3 5_O&M 692 PPT 49 21	10402 Imperial Ave. LAMPSON		1192 11194 MHO140004 MHO140008 244 8245 MHG110003 MHG110004	6 DS 2287 SPO140042 8 VCP 4 D/S 1036 SPG110020 8 VCP	260 258 363 365				0 0	0.00 1 20.00 0.00 2			3 0.51 2 4 2.00			Clear deposit
5 5_O&M 692 PPT May 40	TOPAZ STREET		400 7399 MHF100006 MHF100007		256 249.5				0000 0 0	0.00 48		1	322H 49 99 2.02			
1 5_O&M 693 7A 2 3 5_O&M 693 PPT 48 12	12371 Walnut LAMPSON			0 US 4644 SPP100037 6 VCP 5 D/S 1312 SPG110053 8 VCP	220 218 363 105				0 0		1 1		3 0.84 1 1 1.00			Cut roots
5 5_O&M 693 PPT May 21	WINTON STREET	5/17/2012 78	878 7879 MHE090039 MHE090040	0 D/S 1534 SPE090050 8 VCP	350 352.2				0000 0 0	0.00 68			312L 68 136 2.00			
1 5_O&M 694 21 17 3 5_O&M 694 PPT 49 34	Grove Blvd. LAMPLIGHTER	3/15/2004 11 11/9/2007 83	738 11732 MHP130013 MHP130009 332 7729 MHG110005 MHG110009	9 DS 4448 SPP130030 12 VCP 9 D/S 1127 SPG110029 8 VCP	270 279 170 173				0 0	0.00			2 0.56 1 1 2 2.00			Repair lateral
5 5_O&M 694 PPT 2 9	LONGDEN STREET	5/29/2012 88	842 8841 MHE120009 MHE120008	B U/S 1638 SPE120002 8 VCP	350 353.6				0000 0 0	0.00 69			312L 69 138 2.00			
1 5_O&M 695 37 2 3 5_O&M 695 PPT 41 32	12701 Monroe St.	4/8/2004 77		3 DS 737 SPJ110004 8 VCP	260 259 362 368				0	0.00	1		2 0.56			Cut roots Pipe ID SPG110037 corrected to SPG110036
Map 1	LUARELTONAVEN		780 8652 MHE090019 MHE090034		325 323.1					0.00			1 2 2.00			37011036
5 5_O&M 695 PPT May 43 1 5_O&M 696 37 6	12860 Jefferson St.		087 7086 MHJ120003 MHJ120002		298 298				0000 0 0	0.00 63		1	2 0.56			Cut roots
3 5_O&M 696 PPT 43 2	Y CERULEAN	9/18/2007 77	739 7737 MHG110015 MHG110043	3 D/S 1141 SPG110043 8 VCP	338 340				0 0	0.00 1			1 2 2.00			DAE 15% of the cross sectional area
5 5_O&M 696 PPT 3-B3-4 11 1 5_O&M 697 40 20		8/30/2012 13		U/S 7609 new 6 VCP 1 US 784 SPJ130006 8 VCP	355 359.5 220 220				0000 0 0	0.00 64	19 1		312K 84 149 1.77			Cut roots
3 5_O&M 697 PPT 43 9 May				9 D/S 1458 SPG110049 8 VCP	282 282				0 0	0.00 1			1 2 2.00			
5 5_O&M 697 PPT 2 14				5 D/S 1626 SPF110030 8 VCP	300 303.1				0000 0 0	0.00 60		1	312K 61 123 2.02			
1 5_O&M 698 38 7 3 5_O&M 698 PPT 43 10				0 US 802 SPJ140011 8 VCP 9 D/S 1460 SPG110051 8 VCP	260 252 367 367				0 0	0.00 1 0.00 1			2 0.56 1 2 2.00			Cut roots
5 5_0&M 698 PPT	KILLARNEY AVE 13432 Balos Dr.		826 8825 MHF110034 MHF110033		300 301.6 310 310				0000 0 0	0.00 59		1	312J 60 121 2.02			2.000
3 5_O&M 699 PPT 53 6 43 May May		1/10/2008 77	746 7745 MHG120004 MHG120003	2 US 815 SPJ140024 8 VCP 3 U/S 1462 SPG120018 8 VCP	289 293				0 0	0.00	1		2 0.56	2		Cut roots MSA = Deposit (20%)
Folder Folde				2 D/S 1404 SPE110029 8 VCP 6 DS SPJ140037 10 VCP	300 302 300 300				0000 0 0	0.00 47 0.00 1 50.00			312H 47 94 2.00 2 0.56	2		Inspection Completed Clean grease
3 5_O&M 700 PPT 43 32	Y CANTER			4 U/S 1463 SPG120019 8 VCP	256 256				0 0	0.00 1 50.00			1 2 2.00			DAE 50% of the cross sectional area
5 5_O&M 700 PPT Map 1 May 73	ANTHONY AVE		774 7900 MHE120030 MHE120029		286 287.8				0000 0 0	0.00 8 36			312G 44 88 2.00			
1 5_O&M 701 34 20 3 5_O&M 701 PPT 47 2	12551 Dale Ave. ACACIA	4/5/2004 84 10/9/2007 73	435 8369 MHK110027 COK110001 326 7407 MHG120016 MHF120002	1 US 3413 SPK110036 8 VCP 2 D/S 1704 SPF120028 10 VCP	118 119 273 260				0 0				2 0.58 1 2 2.00			Cut roots
5 5_O&M 701 PPT 4-B1-3 19	McFADDEN AVE	9/11/2012 68	877 7317 MHO230001 MHO230002	2 D/S 185 SPO230030 8 VCP	523 312.2				0000 0 0	0.00 28			312D 28 56 2.00 2 0.44			
1 5_08M 702 29 17 3 5_08M 702 PPT 45 10				4 DS 2967 SPK130011 8 VCP 4 D/S 1469 SPG120027 8 VCP	200 192 355 359				0 0	0.00 1 10.00			1 2 2.00			Clean grease
5 5_O&M 702 PPT May 31	PICKETT AVENUE	5/21/2012 87	789 8790 MHF100016 MHE100025	5 D/S 1241 SPF100019 8 VCP	349 347.9				0000 0 0	0.00			312A 14 28 2.00			
															pos sibl	
1 5_O8M 703 30 17	8531 Trask	3/30/2004 76	644 7666 MHK150006 MHK150007	7 DS 832 SPK150020 8 VCP	330 260				0	0.00 1 2.00			2 0.56		e sip hon	Clean grease
3 5_O&M 703 PPT 44 24 MAP				1 U/S 900 SPH060002 8 VCP	376 377				0 0	0.00 72	+++++++++		72 144 2.00			
5 5_08M 703 PPT 3-B3-4 10 1 5_08M 704 51 5 3 5_08M 704 PPT 44 23	TRASK AVENUE 9232 Jack Rd.	5/21/2004 96	604 9603 MHL090013 MHL090012	U/S 7610 new 6 VCP 2 US 3327 SPL090010 8 VCP 2 U/S 901 SPH060003 8 VCP	85 89.3 80 230				0000 0 0	0.00 1	17 1		311B 18 19 1.06 2 0.56			Cut roots
3 5_0&M 704 PPT 44 23 MAP 5 5_0&M 704 PPT 2-2-2 28	MONARCH DUDMAM DRIVE		126 8125 MHH060003 MHH060002 088 9087 MHK100011 MHK100010	Clay	325 327 120 118.1				0000 0 0	0.00 2	1 1 1		2 4 2.00 3112 3 5 1.67			
1 5_O&M 705 50 21	9421 Catherine Ave.	5/20/2004 95	599 9598 MHL100033 MHL100032	2 US 3322 SPL100014 8 VCP	169 169				0	0.00	1		2 0.56			Cut roots

	General	Pipe		Structural Detect Coding	Rating ects	Operational and Maintenance	Di B Construction Features	eous Features	pauop
(o) (o) (D) No.		Camera wer ID (ft)	(t)	sformec Dilapsec amage ing Fa	ags Struct rral Defi	efect in	Intruding Seal	scellan uction f	d Aban
P V V Ing. Ing. Ing. Ing. Ing. Ing. Ing. Ing.	on Existing MH ID Previous MH I	ing Sev (in) (in) Comme	£ Crack Fracture C F	Broken Hole Joint 집 경 경 집 급 집	Structu Structu	Deposits Roots (R) D Fine (F) Tap (T) Medium (M) Bal		Constr Ons for	dentifie
Phase Priori Phase Provided to the part of		Direc Exist Exist Direc Joint Arte GIS (L C M S H L C M S H	SV VV SV VV S M L S M L A V H P S LF RI	PACF Total	## AGS B % L % Z % B L J C B L J C B L J C B L		Reas Total	© Comments Recommendations
3 5_08M 705 PPT 45 12 HONOLD		060005 U/S 954 SPH060008 8 VCP	310 315	+++++++++++++++++++++++++++++++++++++++	0 0 0	0.00 29	29 58 2.00		
5 5_O8M 705 PPT May 36 RICHMON AVENUE Gilbert St./	tone		298 294.8		0000 0 0 0	0.00	3121 2 4 2.00		
1 5_08M 706 49 16 Haven Cir. 3 5_08M 706 PPT 45 14 MARKON	5/17/2004 9522 9518 MHL110062 MHL	110058 US 3224 SPL110001 8 VCP 060007 D/S 955 SPH060009 8 VCP	175 170 259 259		0 0	0.00 1 1 1 0.00 50	2 0.56		Cut roots
MAP									181.8' MSA (DEBRIS). No
5 5_08M 706 PPT 4-B2-2 12 EASEMEN 1 5_08M 707 49 20 12631 Ohn	9/19/2012 10458 10457 MHO160016 MHO er Wy. 5/18/2004 9573 9570 MHL110013 MHL	160015 U/S 2173 SPO160040 6 VCP 110011 US 3298 SPL110012 8 VCP	180 181.8 300 307		0000 0 0 0	0.00 1 1	3111 1 3 3.00 1 1 1 1		Reversal Video Cut roots
3 5_08M 707 PPT 45 15 MARKON	10/5/2007 8203 8198 MHH060007 MHH	070017 D/S 956 SPH060010 8 VCP	253 254		0 0 0	0.00 50	1 51 104 2.04		
5 5_08M 707 PPT 3-B2-6 8 ANZIO STI	EET 8/30/2012 12645 12647 MHT100021 MHT	100023 D/S 5362 SPT100022 8 VCP	30 327.3		0000 0 0 0	0.00	1 15 3100 1 4 4.00		
1 5_O&M 708 50 17 12551 Jero 3 5_O&M 708 PPT 43 22 PATTERS(ne Ln. 5/19/2004 9580 9579 MHL110020 MHL N 9/24/2007 8205 8207 MHH060009 MHH	110019 US 3306 SPL110021 8 VCP 060010 D/S 958 SPH060012 8 VCP	261 264 320 321		0 0 0	0.00 1 1	1 2 2.00		Cut roots
5 5_08M 708 PPT 4-B1-2 6 4-B1-2 8 MELRIC A	5 2005 0000 NUONONO NUO	210014 U/S 180 SPO210018 8 VCP	250 253		2000		200		68.8' MSA (OBJ). Inspection Completed
5 5_O&M 708 PPT 4-B1-2 6 4-B1-2 8 MELRIC A'	E 9/10/2012 7305 6868 MHOZ10016 MHO	210014 U/S 180 SPO210018 8 VCP	250 253		0000 0 0 0	0.00	1 15 3100 1 4 4.00 2	can	Completed
1 5_O&M 709 50 2 9282 Colleg			30 3		0 0	0.00	2 0.56	ped- off	Cut roots
MAP	OOD 10/6/2007 8121 7192 MHH070013 MHI0		400 402		0 0 0	0.00 1	1 2 2.00		
5 5_O&M 709 PPT 2-1-5 5 LEROY ST 9392 Stone	Haven	D/S 6862 NW 4 8 VCP	46 192.6		0000 0 0 0	0.00	3100 1 2 2.00	1	
1 5_08M 710 49 5 Cir. 3 5_08M 710 PPT 44 22 MONARCH		110062 DS 3341 SPL110036 8 VCP 060003 U/S 1677 SPH060004 10 VCP	290 290 325 323		0 0 0	0.00 1 1 1 0.00 2	2 0.56		Cut roots
5 5_08M 710 PPT 4-B1-4 5 FLOWERS	TREET 9/18/2012 10511 10510 MHN170012 MHN	170011 U/S 2254 SPN170011 8 VCP	70 84		0000		3100 4 5 000		8.1' MSA (DAE) No Reversal Video
	TREET 9/18/2012 10511 10510 MHN170012 MHN ara Ave. 3/18/2004 9369 9364 MHL110047 MHL		70 8.1		4000 0 0 0	0.00	3100 1 2 2.00	1	8.1' MSA (DAE) No Reversal Video Cut roots
	OOD 9/28/2007 8123 8198 MHH070015 MHH		143 142 412 415		0 0 0	0.00 1	2 U.58 81 162 2.00		Cut rous
5 5_0&M 711 PPT 4-B1-3 5 KERRY ST	REET 9/12/2012 6909 6910 MHM180007 MHM	190001 D/S 202 SPM190004 8 VCP	165 145.4		0000 0 0 0	0.00	3100 1 2 200		145.4' MSA (DAE). No Reversal Video
1 5_08M 712 43 22 12601 Mag			381 380		0 0	0.00	2 0.44		Cut roots
MAP	OOD 9/28/2007 8198 7134 MHH070017 MHH		447 452		0 0 0	0.00 88	88 176 2.00		
5 5_08M 712 PPT 2-1-2 10 HALEKUL	NI DR 7/10/2012 14564 14566	D/S 8326 new 8 VCP	40 209.4		0000 0 0 0	0.00	3100 1 3 3.00		
1 5_O&M 713 46 2 12712 Mag	olia	-County DS 3148 SPL120022 8 VCP	25 35					LR 45d	Replace pipe
	OOD 9/28/2007 7134 7133 MHH070019 MHG		368 367		0 0 0	0.00	2 0.58 1 1	eg	Replace pipe
5 5_O&M 713 PPT 4-B2-3 12 TRASK AV	ENUE 9/25/2012 14167 14165	D/S 7852 new 6 VCP	482 481.8		0000 0 0 0		3100 1 3 300 1		
	Linda 3/22/2004 12091 12092 MHL130019 MHL OOD 11/5/2007 7134 7132 MHH070019 MHH		252 253		0 0	0.00	2 0.45		Cut roots MSA = DAE (20%)
3 5_06M 714 PP1 49 22 ORANGEV	00D 11/5/2007 7134 7132 MHH070019 MHH	070018 07S 980 SPH070002 8 VCP	100 11		0 0 0	0.00 2	2 4 2.00		MSA = DAE (20%)
5 5_O8M 714 PPT Map 1 14 CHAPMAN	AVE 6/21/2012 7167 8364 MHI090026 MHI0	090926 U/S 2451 SPI090926 15 VCP	450 400.4		0000 0 0 0	0.00 79	2N00 79 158 2.00		
1 5 08M 715 45 17 9122 Garde	n Grove	2444 SDI 430033	10 -					LR 20d	Additional investigation
1 5_08M 715 45 17 Blvd. 3 5_08M 715 PPT 45 30 MARKON	4/30/2004 8484 8481 MHL130009 MHL 10/6/2007 8196 8189 MHH070020 MHH	130013 DS 3144 SPL130022 8 VCP 070001 D/S 1151 SPH070004 8 VCP	395 187		0 0 0	0.00	2 0.44 1 1 1	eg	MSA = DAE
5 5_0&M 715 PPT May 80 STANFOR	AVE 5/31/2012 7742 7743 MHF110012 MHG	110028 D/S 1459 SPG110050 8 VCP	367 373.9		0000 0 0 0	000	2M00 74 148 2 00		
								LR	
1 5_O8M 716 42 26 Ave.	iolia	130046 US 3215 SPL130028 8 VCP	300 76					U 30d	Destruction 1
1 5_O&M 716 42 26 Ave. 3 5_O&M 716 PPT 40 46 Y BELGRAV.		090003 D/S 932 SPH090006 8 VCP	300 76		0 0 0	0.00	1 3 3.00	eg	Replace pipe DAE 30% of the cross sectional area
June Map 2 BROOKHL	RST								
5 5_08M 716 PPT B1 57 STREET 1 5_08M 717 30 26 9162 Carl L	6/13/2012 9142 9143 MHM020026 MHM 1. 3/31/2004 11527 11526 MHL140023 MHL	020027 D/S 4269 SPM020002 8 VCP 140022 US 2700 SPL140008 8 VCP	350 358.4 160 161		0000 0 0 0	0.00 71 0.00	2M00 71 142 2.00 2 0.56		Cut roots
3 5_0&M 717 PPT 39 37 ANACOND	9/10/2007 8100 8101 MHH100002 MHH	100003 D/S 886 SPH100001 8 VCP	300 303		0 0 0	0.00	1 10 11 4 4.00		
5 5_O&M 717 PPT May 19 LAURELTG AVENUE	5/17/2012 7855 7854 MHD090019 MHE	090028 D/S 2131 SPE090039 8 VCP	366 364.3		0000 0 0	0.00 70 1	2M11 71 141 1.99 2 0.56		
1 5_08M 718 47 27 12052 Cole 3 5_08M 718 PPT 49 17 INDUSTRY	St. 5/12/2004 9552 9551 MHM090026 MHM 11/5/2007 8157 8177 MHH110013 MHH	090025 US 3284 SPM090026 8 VCP 110014 D/S 1732 SPH110013 18 VCP	160 151 370 58		0 0 0		2 0.56	+	Cut roots MSA = DAE (20%)
May Folder LONGDEN STREET 2 10			350, 353,0		0000		21400		
5 5_O&M 718 PPT 2 10 STREET 1 5_O&M 719 47 10 12562 Jank	5/29/2012 8842 8843 MHE120009 MHE Dr. 5/11/2004 9512 9511 MHM110020 MHM	120010 D/S 1639 SPE120003 8 VCP 1110019 US 3433 SPM110036 8 VCP	350 353.8 210 209		0000 0 0 0	0.00 70 1	2M00 70 140 2.00		Cut roots
3 5_08M 719 PPT 41 29 Y INDUSTRY	9/18/2007 8172 8171 MHH110017 MHH	100012 U/S 938 SPH100012 8 VCP	385 415		0 0 0	0.00	1 30 31 4 4.00		OBZ 30% of the cross sectional area (toilet paper)
5 5_08M 719 PPT May 15 SANTA BA AVENUE	RBARA 5/17/2012 8884 8885 MHE080008 MHE	080009 D/S 1514 SPE080013 8 VCP	350 347.9		0000 0 0 0	0.00	2L00 69 138 2.00		
1 5_O&M 720 19 6 9741 Stanf			200 208		0 0	0.00	2 0.58		Cut roots
3 5.08M 720 PPT 48 52 Y LAMPSON	10/24/2007 9174 9175 MULIAA0040 1810	110049 D/S 941 SPH110017 8 VCP	330 330				1 60 61 4 4.00		Inspection stopped just short of D/S MH. 327 ft obstacle (blocking 60%) material, 327 ft obstacle
May Folder					0 0 0		1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1		Interia, 327 It UUStable
5 5_08M 720 PPT 2 5 ACACIA A' 1 5_08M 721 42 4 12931 Abb		120011 D/S 1655 SPF120038 8 VCP 1120026 US 2745 SPM120026 8 VCP	305 353.1 255 255		0000 0 0 0	0.00 69 1	2L00 69 138 2.00 2 0.45		Cut roots
3 5_08M 721 PPT 48 38 GARDEN 0 BLVD			54 56		0 0 0	0.00	2 8 4.00		500.000
5 5 08M 721 PPT 2 2 ACACIA A	E 610/2012 7052 7054 MID-202015	120013 D/S 1582 SPD120005 8 VCP	348 355.3		0000		3100 00 410 000 4		
5 5_O&M 721 PPT 2 2 ACACIA A	E 5/29/2012 7953 7954 MHD120012 MHD	120013 D/3 1302 3PD120005 8 VCP	J=0 JJJJ.J		UUUU 0 0 0	69	2L00 69 140 2.03 1	I P	
1 5_08M 722 33 24 9500 Kellop		1130051 US 2349 SPM130047 6 VCP	255 7		0 0	0.00	2 0.44	20d eg	Additional investigation
3 5_O&M 722 PPT 48 40 GARDEN 0 BLVD	ROVE	130003 D/S 1671 SPH130003 10 VCP	190 204		0 0 0	0.00	1 20 21 4 4.00		
5 5_O&M 722 PPT 2 1 ACACIA A	E 5/29/2012 7953 8662 MHD120012 MHD	120002 D/S 1667 SPD120022 8 VCP	350 348.7		0000 0 0 0		21.00 60 126 2.00		
1 5_08M 723 24 10 9681 Russ		140024 DS 2683 SPM140007 8 VCP	260 261		0 0	0.00	2.00 68 136 2.00		Cut roots
3 5_08M 723 PPT 49 10 Y WESTERN MAP CHAPMAN	11/2/2007 8077 7131 MHI080002 COIG		114 113		0 0 0	0.00	1 100 101 4 4.00 1		MSA = Plugged at cleanout. No severe deficiency.
5 5_0&M 723 PPT 1 20 AVENUE	5/7/2012 8215 8216 MHG080004 MHG	080005 D/S 964 SPG080004 8 VCP	325 323.1		0000 0 0	0.00 64	2K00 64 128 2.00		

	0			Output Defeat O. For		1	O			
	General	Pipe		Structural Detect Coding	Rating ect Sco	xep	Operational and Maintenance	Score	Construction Features	doned
lo. lo No. lo No		Camers (ft) (ft)	(t)	eformec ollapsec amage amage	ags Struct rral Def	efect In		Maint Ma Maint Maint Maint Maint Maint Maint Maint Maint Maint Maint Ma	Intruding Seal special Intruding Seal	d Aban
Part	Existing MH ID Previous MH ID	ing Sev (in) (in) fial cours Se Comme	E Crack Fracture C F	Broken Hole Joint A S S A L S	Structi	Deposits D AE AE Other	Roots (R) Fine (F) Tap (T) Medium (M) Ball (Infiltration Obstacles Vermin 5 0 W W D Tap (Lateral	Line Material	O God and the Company of the Company
A COUNTY SPECIAL SPECI	CCTV Date Start End Start End	Direc Existi Previ	L C M S H L C M S H	SV VV SV VV S M L S M L A V H P S LF R	PACF Total	AGS B % L % Z % B	L J C B L J C B L J C B L	J C G D R W C Z % C R 4 L L L L S W 8 FD FL BI B	30 0 E 0 K E0 K0 3K1 3K0 3KE Z 3K 60 MC F E	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
1 5_08M 724 24 15 13371 Erin Rd. WESTERN 3 5_08M 724 PPT 48 29 Y EASEMENT	3/17/2004 12016 12017 MHM140034 MHM140035 10/31/2007 7199 7198 MH090002 MH090001		330 338 213 19	+++++++++++++++++++++++++++++++++++++++	0 0	0.00		2 0.56		Cut roots Rocks at 18.90 ft
5 5_08M 724 PPT 1 21 AVENUE	5/7/2012 8214 8215 MHG080003 MHG080004		325 323.7		0000 0 0 0	0.00		2K00 64 128 2 00		No.s a 10.50 ft
1 5_08M 725 24 28 9432 Sousa 3 5_08M 725 PPT 48 27 Y WESTERN	3/18/2004 12078 12079 MHM140015 MHM140016 10/31/2007 7199 7197 MH090002 MH100001	DS 2516 SPM140039 8 VCP	359 358 147 140		0 (0.00 1		2 0.56 3 6 2.00		Clean grease
Map 1	10/31/2007 7139 7137 WHITOGOOD WHITTOGOOD	0/3 10/0 GF109007 0 VCF	140		0 0	0.00 3		3 0 2.00		
	5/31/2012 7422 7428 MHF120032 MHF120020		300 304.5		0000 0 0	0.00 61		2K00 61 122 2.00		
1 5_08M 726 3 11 12291 Nutwood : WESTERN	202004		205 208	+++++++++++++++++++++++++++++++++++++++	0 (0.00 1		2 0.56		Cut roots Pipe SPH090013 corrected to
3 5_08M 726 PPT 48 37 EASEMENT Map 1 TUNSTALL	10/31/2007 7204 7205 MHI090007 MHI090008	D/S 1076 SPI090013 8 VCP	300 298	+++++++++++++++++++++++++++++++++++++++	0 0 0	0.00	54	54 216 4.00		SPI090013
5 5_O&M 726 PPT May 60 STREET	5/25/2012 7815 7816 MHE110006 MHE110007		314 311.6		0000 0 0 0	0.00 61		2K00 61 122 2.00		
1 5_O&M 727 11 2 12330 Nutwood			35 34		0 (0.00 1		2 0.56		Clean grease Pipe SPH090014 corrected to
3 5_O8M 727 PPT 48 34 WESTERN	10/31/2007 7206 7205 MHI090009 MHI090008	U/S 1077 SPI090014 8 VCP	50 56	+++++++++++++++++++++++++++++++++++++++	0 0 0	0.00	2	2 8 4.00		SPI090014
5 5_O&M 727 PPT May 26 PICKETT AVEN 112422 Groveview	E 5/21/2012 8787 7399 MHF100014 MHF100006	U/S 1651 SPF100030 8 VCP	315 312		0000 0 0	0.00 60		2K00 60 120 2.00		
1 5_O&M 728 8 5 St. St. 3 5_O&M 728 PPT 48 21 CHAPMAN	2/17/2004 10701 10700 MHN100044 MHN100043 10/30/2007 8073 8074 MH090030 MH090031		193 122 370 401		0 0	0.00 1		2 0.56		Clean grease
MAP 2 July-										
12551 Kengsingt	6/25/2012 10127 10128 MHL080006 MHL080007		280 279.6	+++++++++++++++++++++++++++++++++++++++	0000 0 0	0.00 1 55	3	2J13 59 115 1.95		
1 5_0&M 729 5 15 Ln. 3 5_0&M 729 PPT 40 17 Y DR	2/10/2004 11257 11256 MHN110005 MHN110004 R 9/11/2007 7137 7123 MHI120003 COI120001		180 195 30 27	+++++++++++++++++++++++++++++++++++++++	0 0	0.00 1	+++++++++++	2 0.56		MSA = Pipe size. Inspection stopped just short of U/S MH.
May Folder				 	0 0 0		 	1 2 2.00		independent or and IVII t.
5 5_O8M 729 PPT 2 3 ACACIA AVE	5/29/2012 7954 7955 MHD120013 MHD120014		265 266.1	+++++++++++++++++++++++++++++++++++++++	0000 0 0	0.00 52	+++++++++++++++++++++++++++++++++++++++	2100 52 104 2.00		
1 5_0&M 730 8 8 8 Ave. 3 5_0&M 730 PPT 20 17 BLOSSOM	2/17/2004 10683 10684 MHN110020 MHN110021 6/25/2007 8012 7986 MHK090005 MHL090002		345 240 356 353		0 0 0	0.00 1	1	1 2 2.00 3		Cut roots
5 5_O&M 730 PPT May 61 BELGRAVE AVENUE	5/29/2012 8744 8852 MHF090034 MHF090036	D/S 1659 SPF090051 8 VCP	260 258.2		0000 0 0 0	000		200 51 102 200		
1 5_0&M 731 44 23 St.	4/27/2004 10695 10694 MHN110031 MHN110030		95 92		0.00	0.00		2 0.44	1	Replace pipe
3 5_O&M 731 PPT 21 11 53 11 Y AMY	6/28/2007 8029 8030 MHK090024 MHK090025		295 284		0 0 0	0.00		3 45 48 12 4.00	2	Obstacles at 9 ft Clean debris at 9 ft or spot repair
May Folder	5/29/2012 7755 8843 MHE120013 MHE120010	U/S 1408 SPE120024 8 VCP	350 261		0000 0 0	000		200 50 100 200		
0 0_00000 00 00 00 00 00 00 00 00 00 00	3/25/2012 1755 5045 11112 125515 11112 125515	50 1450 G. E.12024 G. 1451	330 231		0000 0 0	0.00		2.60 30 100 2.00		
	t. 3/15/2004 13393 11125 MHN120006 MHN120004		330 9		0 (0.00		2 0.56	1 1 1 9	3 Additional investigation
3 5_08M 732 PPT 21 17 BARR	6/29/2007 8692 8691 MHK090036 MHK090035	U/S 1811 SPK090043 8 VCP	95 192		0 0 0	0.00	1	1 2 2.00		
5 5_0&M 732 PPT May 14 SANTA BARBAF AVENUE	A 5/17/2012 7785 8884 MHE080007 MHE080008	D/S 1402 SPE080032 8 VCP	275 273		0000 0 0	0.00 49		2H00 49 98 2.00		
1 5_08M 733 45 14 Garden Grove BI 3 5_08M 733 PPT 20 11 PENTAGON	d. 4/30/2004 MHN130008 MHN130010 6/25/2007 9086 9085 MHK100007 MHK100006	50 0 00	19 19 19 17 18 18 19 19 19 19 19 19 19 19 19 19 19 19 19		0 0	0.00	1	2 0.56	1	-
Map 1 LAMPLIGHTER										
5 5_0&M 733 PPT May 84 STREET 3 5_0&M 734 PPT 21 25 LOUISE	5/31/2012 7736 7740 MHG110014 MHG110016 6/29/2007 8678 8679 MHK100020 MHK100021		256 258.1 245 244		0000 0 0 0	0.00 48	3	2H00 48 96 2.00 3 3 1.00		
Map 1 LAMPLIGHTER										
5 5_O&M 734 PPT May 83 STREET 1 5_O&M 735 15 8 13230 Hope	5/31/2012 7740 7741 MHG110016 MHG110027 3/4/2004 11293 11308 MHN140004 MHN140025	DS 2892 SPN140004 8 VCP	258 260.7 253 320 315		0000 0 0 0	0.00 48 0.00 1		2H00 48 96 2.00 2 0.58		Cut roots
3 5_O&M 735 PPT 21 27 LOUISE	6/29/2007 8680 8681 MHK100022 MHK100023	D/S 1987 SPK100027 8 VCP	250 251		0 0 0	0.00	1 2	3 7 2.33		
5 5_08M 735 PPT Map 1 CERUIEAN AVENUE 1 5_08M 736 15 6 9890 Central Ave	5/25/2012 7814 7821 MHE110005 MHE110009	U/S 1536 SPE110060 8 VCP	213 255.4		0000 0 0	0.00 47		2H00 47 94 2.00		
1 5_08M /36 15 6 9890 Central Ave 3 5_08M 736 PPT 22 7 ENAULT	3/3/2004 10713 10712 MHN140009 MHN140008 7/2/2007 8682 8683 MHK100024 MHK100025	US 2639 SPN140027 8 VCP D/S 1989 SPK100029 8 VCP	390 392 410 406		0 0 0	0.00 1	1	2 0.44 1 1 1.00 1		Cut roots
5 5_O&M 736 PPT 4-B1-2 12 WARD STREET	9/10/2012 7306 7308 MHO210017 MHO220005	D/S 395 SPO220018 8 VCP	272 275.8		0000 0 0	0.00		2H00 47 94 2.00		134.1' Unmapped MH
	3/10/2012					0.00		47 34 2.00		5
1 5_O&M 737 10 17 10731 Pearl	2/23/2004 12268 12269 MHO120021 MHO120024	DS 4926 SPO120018 12 VCP	11 4		0 (0.00		2 0.56	1 1 20	od Additional investigation
3 5_O8M 737 PPT 19 35 HAGA	6/23/2007 9110 9108 MHK100033 MHK100031	U/S 3251 SPK100036 8 VCP	339 344	+++++++++++++++++++++++++++++++++++++++	0 0 0	0.00	 	1 10 11 4 4.00 1		
5 5_O&M 737 PPT Map 1 15 CHAPMAN AVE			179 229.4		0000 0 0	0.00 45		2H00 45 90 2.00		Contract
1 5_O&M 738 10 15 10592 Westlake 3 5_O&M 738 PPT 19 38 HAGA	2/23/2004 0 0 MHO130019 MHO130052 6/23/2007 9110 9109 MHK100033 MHK100032		490 504 380 366		0 0		2	2 0.56 2 8 4.00		Cut roots
5 5_0&M 738 PPT May 18 LAURELTON AVENUE	5/17/2012 8641 7855 MHD090020 MHD090019	D/S 1951 SPD090026 8 VCP	350 349		0000 0 0	0.00		2H00 45 90 2.00		
1 5_O&M 739 13 3 13211 Nelson St		US 2354 SPO130023 8 VCP	150 149		0 (0.00 1		2 0.56		Cut roots
MAP 2 July-					0 0 0			1 3 3.00		
	6/19/2012 10325 10361		198 204.2		0000 0 0 0	0.00 40		2G00 40 80 2.00		
1 5_0&M 740 16 7 13401 Westlake 3 5_0&M 740 PPT 51 MAGNOLIA	St. 3/3/2004 11109 11110 MHO140038 MHO140039 12/28/2007 7986 8704 MHL090002 COL090001	DS 2360 SPC140025 8 VCP U/S 672 SPL090038 8 VCP	20 12 1111 125 1111 125 126 127 127 127 127 127 127 127 127 127 127		0 0 0	0.00		2 0.56 1 5 6 4 4.00	1 1 1	ok MSA = Rocks (5%)
June BROOKHURST 5 5_O&M 740 PPT B1 58 STREET	6/13/2012 9143 9144 MHM020027 MHM030033	D/S 4270 SPM020003 8 VCP	200 201.3		0000 0 0 0	000		2G00 40 80 2.00		
1 5_O&M 741 18 3 13242 Cypress S	- 3/5/2004 11193 11194 MHO140005 MHO140006	DS 2288 SPO140043 8 VCP	225 233		0 0			2 0.56		Cut roots
	7/13/2007 9069 9068 MHL100043 MHL090029		300 305		0 0 0	0.00	2	2 4 2.00 1		+ +
5 5_08M 741 PPT Map 1 AMY AVENUE	5/29/2012 8859 8747 MHF090045 MHF090046		350 345.9	+++++++++++++++++++++++++++++++++++++++	0000 0 0	0.00 40		2G00 40 80 2.00		
1 5_08M 742 16 8 10422 Luders Av 3 5_08M 742 PPT 23 18 LAMPSON	3/3/2004 11199 11200 MHO140011 MHO140012 7/7/2007 9589 9111 MHL110029 MHL110030		380 375 280 210		0 0 0	0.00 1		2 0.56		Cut roots
5 5_O&M 742 PPT May 37 OWEN STREET	5/21/2012 8800 8799 MHF100025 MHF100024	U/S 1352 SPE100037 9 V/CP	213 253 0		0000 0 0	0.00		3500 00 70 000		
1 5_O&M 743 18 13 10590 Trask	3/8/2004 11111 11115 MHO150009 MHO150010	DS 2851 SPO150004 15 VCP	213 253.9 265 265		0000 0 0 0			2F00 36 72 2.00 2 0.58		Clean grease
3 5_08M 743 PPT 1 9 LINNERT June VALLEY VIEW	3/22/2007 10606 10607 MHL150027 MHL160003	D/S 2605 SPL160004 8 VCP	325 328	+++++++++++++++++++++++++++++++++++++++	0 0 0	0.00	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	1 1 1.00		+
5 5_O8M 743 PPT	6/8/2012 8670 8669 MHE120033 MHE120034	D/S 2120 SPE120030 10 VCP	390 343.8		0000 0 0	0.00 36		2F00 36 72 2.00		

				General				Structural Defect Co.	fina	1 1 1 5 1		Operational and Maintenance			Construction Features	8 7	
The content will be content	9 0			Gendial	Pipe			Siluctural Delect Co.	d Pipe	t Rating fects	идех	Operational and maintenance		Rating Score	Construction Features	neous Feature y Aband	1
The content will be content	No. AVD No. NSpec. P	Location	Eviet	ting MH ID Previous MH ID	f Camer swer ID ewer ID	eent gth (ft)	Crack Fracture	Broken Hole	Deforme Collapse Surface Damage	Sags Sags A Struc Aural De	To Deposits	Roots (R)	Infiltration Obstacles	Nemin X Main Tan (I steral)	Intruding Seal	Miscella truction or Surve	100
Column C	wity with tractor writed to the No. D No. D No. Decisal IT ersal IT O Watch	Cocation	LAISE	INTERVIOUS WITTE	sting Se (in) e (in)	gth (ff)		ВН	J D X	S Struc	D AE AE Other	Fine (F) Tap (T) Medium (M) B	all (B) I OB Other	A Defection of the control of the co	L IS	M M M M M M M M M M M M M M M M M M M	į l
A	1 5,08M 744 2 23	Street Name CCT 12352 Oakwood 2/5	V Date Start	rt End Start End 53 11857 14014 14018	DS 3789 SPP100016 8 VCP	9 5 0 L 135 133	C M S H L C M S		A C M C N	S P A T T T T T T T T T T T T T T T T T T			LJCGDRWCZ%	CK E F C FUFL BIBD	D L U R LD RD SRH SRB SRL	Z SA CU MC F Z G	, comments
No. Column Colu		LINNERT 3/22	2/2007 10607	07 11032 MHL160003 MHL160015	D/S 2606 SPL160005 8 VCP					0 0	0.00	1					
The content of the	5 5_O&M 744 PPT May 66	ADAMS STREET 5/30	0/2012 8927	7 8928 MHE110037 MHE110038	B D/S 1353 SPE110011 8 VCP	238 223.7				0000 0 0	0.00 34			2E00 34 68 2.00			
The column The																LL 20d	
March Marc		11022 Acacia 2/19 ALDGATE 8/9	9/2004 11734 1/2007 9719	34 11737 MHP120023 MHP120039 9 9718 MHM050006 MHM050005	US 4300 SPP120028 8 VCP 5 U/S 4578 SPM050006 8 VCP	300 15 205 202				0 0	0.00	1		2 0.58	1	1 eg	Replace pipe
March Marc	Map 1																
March Marc	1 5_O&M 746 10 6 5	Stanford Ave. 2/20	0/2004 11739	39 11741 MHP120028 MHP120030	DS 4301 SPP120029 8 VCP	128 130				0000 0 0	0.00 31	1		2 0.44			Cut roots
March Marc			0/2007 9721	1 9720 MHM050009 MHM050008	3 U/S 4579 SPM050007 8 VCP	214 217				0 0	0.00	1		1 3 3.00 2			
Note	5 5_O&M 746 PPT May 76	EASEMENT 5/31	1/2012 8726	6 8727 MHF120027 MHF120028	3 D/S 1702 SPF120024 10 VCP	150 152 270 272				0000 0 0	0.00 30			2E00 30 60 2.00			Cut roots
A		GARDENAIRE 8/10	0/2004 1114	50 10256 MHM050011 MHM050017	7 D/S 4537 SPM050023 8 VCP					0 0	1.00	2				1	
Note Section	5 5_O&M 747 PPT 4-B2-2 4	WARD STREET 9/21	1/2012 7308	8 7309 MHO220005 MHO220006	3 D/S 397 SPO220020 8 VCP	181 171.1				0000 0 0	0.00 28			2D00 28 56 2.00			
Mary	1 5_O&M 748 45 29 F	Pvt. 5/5				40				0	0.00			2 0.83	1		ok
The content of the	3 5_0&M 748 PPT 34 6	CAROLEEN 8/14	4/2007 10253	53 9670 MHM050014 COM050006	S U/S 4540 SPM050026 8 VCP	135 137				0 0	1.00		1 30	31 4 4.00			
March Marc		11420 Garden				141 137.7				0000 0 0	0.00 27			2D00 27 54 2.00			
Total Tota		Grove Blvd. 4/16	6/2004 10874 8/2007 1004	74 11886 MHP130031 MHP130030 11 10042 MHM050038 MHL050049	DS 4443 SPP130021 10 VCP D/S 4182 SPL050037 8 VCP					0 0	1.00	1 1		1 0.41			Cut roots
Total Tota	Map 1					141 427.0				0000 -				2000 07 54 0 57			
Note 1	1 5_O&M 750 38 16 1	13392 Coast St. 4/13								0000 0 0	0.00 27	1		2000 27 54 2.00			Cut roots
Note	3 5_O&M 750 PPT 36 2	ALLEY 8/23 CHAPMAN				295 296				0 0	1.00	1		1 1 1.00			
	5 5_O&M 750 PPT 1 17	AVENUE 5/8								0000 0 0	0.00 27			2E00 27 54 2.00			-
1		SKYLARK 8/29	9/2007 9627	7 9629 MHM070009 MHM070011	I D/S 5046 SPM070012 8 VCP					0 0	0.00	1		1 3 3.00			
Variable						94 136.6				0000 0 0	0.00 25			2D00 25 50 2.00			
1											0.00	2					-
	5 5_O&M 752 PPT 1 26	EMERALD STREET 5/7/	/2012 8778	8 8779 MHF080047 MHF080048	B D/S 1707 SPF080047 10 VCP	290 289.6				0000 0 0	0.00 25			2D00 25 50 2.00			
1						178 174				0	0.00			1 1 0.41			-
1 1 1 2 2 3 3 3 3 3 3 3 3	3 5_08M /53 PPI 35 19	HIBISCUS 8/17	7/2007 10002	12 10065 MHM070029 MHM070030	0 D/S 3841 SPM070063 8 VCP	210 210				0 0		1		1 2 2.00 1			
										0000 0 0	0.00 24	1		2D00 24 48 2.00			Cut roots
1 1 1 1 1 1 1 1 1 1												2					
		BALLAST AVE 9/10	0/2012 7222	2 7221 MHO230005 MHO230004	U/S 11 SPO230004 8 VCP	131 129.4				0000 0 0	0.00			2C00 20 40 2.00			
			3/2004 10704	04 10703 MHN130029 MHN130038 79 10078 MHM070042 MHM070041	3 US 2635 SPN130035 6 VCP					0 0	0.00	1 1					Cut roots
2	Map 1	SPRINGDALE															
2 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1										0000 0 0	0.00 16			2B00 16 32 2.00			
		COCKATOO				380 3//				0	0.00			1 1 1.00			Looks like rocks starting at 69 ft (40% blocked). Inspection stooped
State Stat	3 5_O&M 756 PPT 48 9 Y E	EASEMENT 10/1				105 93				0 0	1.00			0 0 0.00		1	12 ft short of U/S MH. Clean pipe or replace
State Stat	5 5_0&M 756 PPT 1 24 / 1 5_0&M 757 10 5	AVENUE 5/7 Stanford Ave. 2/20	7/2012 8780 0/2004 11027	0 8781 MHF080049 MHF080050 27 11739 MHP120027 MHP120028	0 D/S 1709 SPF080049 10 VCP 3 DS 4434 SPP120040 8 VCP	289 288.3 200 202				0000 0 0	0.00 15	1		2B00 15 30 2.00 0.00 0.00			Cut roots
State Stat	13 5 O&M 757 PPT 48 8	WILDGOOSE				130 126				0 0	0.00	1		1 2 2.00 5			
1 California 1	5 5_MAM 75/ PPI 1 18 S	SIKEEI 5/7	/2012 8213	5 8211 MHG080002 MHG090003	0/3 960 SPG090009 8 VCP	6/ 56.5				0000 0 0	2.00 11		+++++++	ZAUU 11 22 2.00		CI	+ + -
2 Sand 19 APT 1				MHJ150007 MHJ150009		8 8			<u> </u>	0	0.00	<u> </u>		0 0.00		100 %	Check flow capacity
Second Personal Per	3 5_O&M 758 PPT 48 11			73 9669 MHM080012 COM080001	U/S 4647 SPM080013 8 VCP	130 141				0 0	0.00		1	1 4 4.00			
1 S. OLIM 70 PT 8 S PT	5 5_O&M 758 PPT May 71	ANTHONY AVE 5/30	0/2012 7765	5 7766	D/S 6785 SPE120018 10 VCP	183 82.4				0000 0 0	0.00			2A00 11 22 2.00			
\$ 5,00M 70 PPT \$ 6 B \$ 1 \$ 0,000 No. 170 PPT \$ 6 B \$ 1 \$ 0,000 No. 170																MS C- 4°C	
2 S, OAM 79 PF 1 48 6			7/2004 8373	3 8365 MHK120009 COK120001	US 3344 SPK120001 8 VCP	100 37				0	0.00			0 0.00		1 IPi	Additional investigation
S S S S S S S S S S	3 5_O&M 759 PPT 48 6	COCKATOO EASEMENT 10/1	7/2007 10273	73 10272 MHM080012 MHM080011	U/S 5506 SPM080012 10 VCP	253 255				0 0	0.00 1			1 2 2.00			
S.O.M. 76 PF A5 A5 A5 A5 A5 A5 A5 A		ADAH STREET 6/14	4/2012 9764	4 9763 MHK050008 MHK050007	7 U/S 5556 SPK050007 8 VCP	135 223.3				0000 0 0	0.00			2A00 11 22 2.00			
3 S.OAM 760 PPT 8 51 45 U PAMINGO 12272007 1075 1075 Media 1 1 2 200 U PAMINGO 12272007 1075 1075 Media 1 1 2 2 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	Ι	8882 Garden Grove														CU 90	
5 5, OAM 760 PPT Mey 32 DUMMASTREET 5/21/2012 739 8/791 MHF100007 DIS 1662 SPF100031 8 VCP 332 328.4						10 3 110 112				0 0	0.00	1		1 2 2.00		1 %	Check flow capacity
Solid Fig. Sol	5 5 08M 760 PPT May 32	DUDMAN STREET	1/2012 7300	9 8791 MHE100007 MHE100017	D/S 1652 SPF100031 8 VCP	332 328.4				0000	100			2A00 11 22 3.00			
1 5,08M 761 42 12 Blvd. 4/19/2004 8401 8388 MHK130003 COK130002 US 3376 SPK130005 B VCP 100 149 1 0 149 1 0 149 1		8803 Garden Grove								3000 0 0			 	11 22 2.00		deb	
5 5_08M 761 PPT Map 1 55 CHAPMAN AVENUE 5/25/2012 8906 14581 UIS 8341 new 8 VCP 68 59.3 UIS 8341 new 8	1 5 O8M 761 42 12	Blvd. 4/19	9/2004 8401 7/2007 10058	1 8368 MHK130003 COK130002 55 10057 MHM080027 MHM080029	2 US 3376 SPK130005 8 VCP 9 D/S 5511 SPM080039 10 VCP					0 0	0.00		++++++	1 3 3.00		1 ris	Clear deposit
9735 Garden Grove 8 1 5_08.M 762 32 13 98745 Garden Grove 8 1 5_08.M 762 32 13 98745 Garden Grove 8 1 5_08.M 762 32 13 98745 Garden Grove 8 1 5_08.M 762 32 13 98745 Garden Grove 8 1 5_08.M 762 32 13 98745 Garden Grove 8 1 5_08.M 762 32 13 98745 Garden Grove 8 1 5_08.M 762 32 13 98745 Garden Grove 8 1 5_08.M 762 32 13 98745 Garden Grove 8 1 5_08.M 762 32 13 98745 Garden Grove 8 1 5_08.M 762 32 13 98745 Garden Grove 8 1 5_08.M 762 32 13 98745 Garden Grove 8 1 5_08.M 762 32 13 98745 Garden Grove 8 1 5_08.M 762 32 13 98745 Garden Grove 8 1 5_08.M 762 32 13 98745 Garden Grove 8 1 5_08.M 762 32 13 98745 Garden Grove 8 1 5_08.M 762 32 13 98745 Garden Grove 8 1 5_08.M 762 32 13 98745 Garden Grove 8 1 5_08.M 762 32 13 98745 Garden Grove 8 1 5_08.M 762 32 13 98745 Garden Grove 1 5_08.M 762 3	Map 1	CHAPMAN								0000							
1 5,08M 752 32 13 Blvd. 4/1/2004 M+M130005 DS SPM130004 10 VCP 43 43 43 Additional investigation	5 5_06M /61 PPI May 55	AVENUE 5/25	b/2012 8906	0 14581	U/S 8341 New 8 VCP	68 59.3				0000 0 0	0.00 10		+++++++	ZAUU 10 20 2.00			+
1 5,08M 752 32 13 Blvd. 4/1/2004 M+M130005 DS SPM130004 10 VCP 43 43 43 Additional investigation																pos sibl e	
3 5 0AM 775 PPT 48 5 V SKY1 ABK 40/27/007 10055 MHM090000 DS 5512 SPM09004 10 V/CP 320 235 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	1 5_O&M 762 32 13	9735 Garden Grove Blvd. 4/1	/2004	MHM130005 MHM130006	S DS SPM130004 10 VCP	43 43				0	0.00			0 0.00		1 sip	
[2] 0, 0, 0, 0, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1,	3 5_08M 762 PPT 48 5 Y	SKYLARK 10/1	7/2007 1005	57 10058 MHM080029 MHL080001	D/S 5512 SPM080041 10 VCP	330 325				0 0	0.00			0 0 0.00			DAE 40% of the cross sectional area

	No. Tape No. OVD No.	Existing MH ID	General Previous MH ID Previous MH ID	Pipe Pipe Pipe Pipe Pipe Pipe Pipe Pipe	fith (ft)	Crack Fracture Broken	tructural Defect Coding Hole Joint	Deformed Collapsed Pipe Surface Damage Lining Failure Point Repair Sags	ctural Defects ctural Defect Soot	Deposits		and Maintenance Roots (R)	Infiltration Obstacles Ve	Sinck Maint Rating	Man Defect Score	Construction Features Intruding Seal Line Material	Miscellanous Or Survey Aband. Fiel Abandoned	
Phase Priority Ranking Contractor Tape No.	DVD No. Inspection Reversal T Reversal I Reversal II	Street Name CCTV Date Start End	Start End Q	Existing S Previous 5 Size (in) Material	Joint Length (ff)		H J O S N L S M L A	V H P S LF RP S	Total Structural	D AE AE Oth AGS B % L % Z	her	Roots (R) pp (T)	OB Other G D R W C Z % C	PACP Qui	Total O&M O &M Defa	L U R LD RD SRH SRB SRL	Z SA CU MC L Z SA	Recommendations
5 5_O&M 762 PPT M	June Map 1 7	VALLEY VIEW EASEMENT 6/8/2012 7901 7775	MHE120032 MHE120031 U/S	2122 SPE120038 10 VCP	100 106.5			00	00 0 0 0.00	10				2A00 10	20 2.00		CO	
1 5_O&M 763 28	6	DDUUNI IDST	MHM130007 MHM130008 DS		144 144				0 0.00						0 0.00		ete d full ins p	Additional investigation
	34 23 June Map 1 8	VALLEY VIEW		5038 SPM080029 8 VCP	298 292			00	0 0 0.00	10		1		2A00 10	3 3.00 2			
		0740 Conden Conn															pos sibl e	
1 5_08M 764 32 3 5_08M 764 PPT N	Map 1			3197 SPM100006 8 VCP	5 5 50 48				0 0.00			1		1	0 0.00 4 4.00 1		1 sup hon	Additional investigation
5 5_08M 764 PPT I	May 52	HUNTLEY AVENUE 5/25/2012 7795 7796	MHE100050 MHE100051 D/S	1414 SPE100033 8 VCP	255 250.8			00	00 0 0 0.00	10				2A00 10	20 2.00		ce me	
1 5_O&M 765 20 3 5_O&M 765 GGSD N	MAP	MALLARD 10/5/2004 10537 10580		2452 SPM150021 8 VCP	80 8 318 316				0 0.00	1			1 5	7			1 In line	Clear obstacles
5 5_O&M 765 PPT	1 28	EMERALD STREET 5/7/2012 8776 8777 12501 Groveview	MHF080045 MHF080046 D/S	1705 SPF080045 10 VCP	290 289.3			00	00 0 0 0.00	10				2A00 10	20 2.00		MM C- CIP	
1 5_O&M 766 8 3 5_O&M 766 GGSD N 5 5_O&M 766 PPT N	9 8 12 24 796 Map 1 May 78	St. 2/17/2004 10685 10684 TEAL 10/6/2004 10539 10538	3 MHM150012 MHM150011 U/S	2619 SPN110028 8 VCP 2029 SPM150007 8 VCP	70 74 256 256 230 228.7				0 0.00		1			2900 9			CIP ipe	Additional investigation
1 5 O&M 767 30	may 70	10361 Garden			230 226.1				00 0 0 0.00	9				2900 g	18 2.00		ca mer a no	
3 5_O&M 767 GGSD		Y WOODBURY 10/13/2004 10541 10525	MHN130003 MHN130009 DS 5 MHM150015 MHN150040 U/S	2586 SPN150034 8 VCP	320 321				0 0 0.00	16			2	2 18	0 0.00 34 1.89		1 1 1111	Additional investigation
5 5_0&M 767 PPT 1	Map 1 May 48	SAINT MARK STREET 5/22/2012 7868 8651	MHE090032 MHE090033 D/S	1524 SPE090044 8 VCP	350 350.2			00	00 0 0 0.00	5				2500 5	10 2.00		ca mer a	
1 5_08M 768 7A 3 5_08M 768 GGSD	MAP	CORK 10/13/2004 10544 10543		2035 SPM150013 8 VCP	410 4 210 208				0 0.00 0 0 0.00			2			0 0.00 8 4.00		no fit	Additional investigation
1 5_O&M 769 7	2-2-1 13	GARDEN GROVE 7/3/2012 13413 13412 10641 Stanford Ave. 2/16/2004 12309 12308	3 MHO120003 MHO120002 US		125 121.3 306 296			00	00 0 0 0.00	4				2400 4	0 0.00		2 MS C- 6*	Additional investigation
3 5_0&M 769 GGSD 5 5_0&M 769 PPT	MAP	WESTERN		2198 SPM160006 8 VCP 1018 SPH060001 8 Tile	250 259 108 79.3			00	0 0 0.00	3	3		7	1 231A 13				
																	ce me nt on	
1 5_O&M 770 21 3 5_O&M 770 GGSD				2281 SPO150022 8 VCP 2201 SPM160009 8 VCP	350 352 281 283				0 0.00		3	2		5	0 0.00 11 2.20 1		2 om	Clear obstacles
5 5_O&M 770 PPT I	Map 1 May 51			1505 SPE100019 8 VCP 5116 SPP100040 6 VCP	300 297.4 125 119			00	00 0 0 0.00	3				2300 3	6 2.00 0 0.00		1 OB	Clear obstacles
3 5_O&M 771 PPT	2 5		MHM170027 MHM170028 D/S	2222 SPM170021 8 VCP	318 319				0 0 0.00		1			1	1 1.00			
5 5_O&M 771 PPT 4-	MAP 4-B1-2 21	BROOKHURST STREET 9/7/2012 6889 6890	MHN180038 MHN180039 D/S	322 SPN180027 10 VCP	382 352.8			00	00 0 0 0.00	3				2300 3	6 2.00		ca mer	
1 5_O&M 772 10 3 5_O&M 772 PPT	June	11302 Acacia St. 2/20/2004 11016 11015 DONEGAL 3/28/2007 6922 6924	MHP120013 MHP120012 US MHM190013 MHM190015 D/S	5133 SPP120011 6 VCP 215 SPM190017 8 VCP	225 4 263 266				0 0.00 0 0 0.00	1				1	0 0.00		1 no fit	Additional investigation
5 5_08M 772 PPT	Map 2 B1 77	JOYZELLE DRIVE 6/15/2012 10108 10113	MHL060002 MHL060023A D/S	5171 SPL060902A 15 VCP	53 57.3			00	00 0 0 0.00	2				2200 2	4 2.00		ca mer	
1 5_O&M 773 10 3 5_O&M 773 PPT	14 29 21	11060 Garden Grove Blvd. 2/23/2004 Y ELENAOR 7/31/2007 9834 9833	MHP130009 MHP120021 US MHN050005 MHN050004 U/S	SPP120025 6 VCP 3759 SPN050034 8 VCP	5 5 310 313				0 0.00			1		1	0 0.00 3 3.00 2		a no fit	Additional investigation
	MAP 4-B1-4 19	RHONDA STREET 9/12/2012 6797 6796 BETTES 7/30/2007 9836 10345		61 SPP190004 8 VCP 5005 SPN050053 8 VCP	103 107.1 280 284			00	00 0 0 0.00	2				2200 2				
3 5_0&M 774 PPT 5 5_0&M 774 PPT N N 3 5_0&M 775 PPT		WESTERN AVE 6/14/2012 7128 7127	COI080002 COI080001 D/S	780 SPI080006 8 VCP	118 110.6			00	0 0 0.00	2	1			2200 2	4 2.00		Pipe ID wasn't exist	
6 6 08M 776 PPT 4	MAP	PURDY STREET 9/7/2012 7615 7614	MHK150028 MHK150027 U/S		276 268				0 0 0.00	2		1		2200 2			268' MSA (MORTAR). No Ri Video. Close to Ending MH	eversal
3 5_O&M 776 PPT	30 22 MAP	STRATFORD 8/1/2007 9696 9697	MHN050035 MHN050036 D/S	4563 SPN050018 8 VCP	295 301				0 0 0.00			1			4 4.00 1			
5 5_O&M 776 PPT 4- 3 5_O&M 777 PPT	MAP		MHN050044 MHN050043 D/S	4889 SPN050049 8 VCP	330 12			00	00 0 0 0.00	2				2200 2	4 2.00 0 0.00		1 MSA = Debris	
	MAP 4-B1-3 2 MAP	RHONDA STREET 9/12/2012 6798 6800						00	00 0 0 0.00	2				2200 2				
5 5_O&M 778 PPT 4- 3 5_O&M 779 PPT	4-B1-3 16 33 24			189 SPO230034 8 VCP 4150 SPN060050 8 VCP				00	0 0 0 0.00	2	1	2 3		2200 2			RMJ (10% blocked)	

		. No.	No.	(3)		General Ez de Le Control de Le	r ID	Pipe	(t)		\$	Structural Defe	act Coding	ormed apsed Pipe	race nage	ng Faillure nt Repair s Struct Rating	al Defects	ect Index			Operational a	and Maintenance	9			Maint Rating	rfect Score		Construction Fe	latures	S	tion Features iuvey Aband. Abandoned			
Phase Priority Ranking	Contractor Tape No.	DVD No. Inspection No. Reversal Tape	Reversal DVD Reversal Inspe	Location Location Street Name	Existing MH ID CCTV Date Start End	Previous MH ID 50 Start End 50 Start End 50 Start 50 Star	Existing Sewel	Material Material Joint Length (f) GIS Comment	CCTV Length (С	racture Broken F B M S H SV VV		Joint J O S M L S M L	D X	Surf	F RP S S PACP Quick S	Total Structura Total Structura		Deposits D	Other	ne (F) Tap	Roots (R) p (T) Medium	n (M) Ball (B)	(ostacles Vermin OB V Other Z % C F	PACP Quick N Total O&M De	Total O&M Del	Tap (Lateral) T FD FL BI BD D	Line L	Intruding Mate IS RD SRH SRB	g Seal 99 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	Total Construc Reasons for Si GIS Identified.	Comments	Rec	ecommendations
5 5_O&M 779		MAP 3-B4-2 15		GARDEN GROVE BLVD	9/24/2012 12458 12459	D/S	S 7261 new 1	2 VCP 11	160							000	00 0 0 0.	.00								2200 2	4 2.00		2						
5 5_O&M 780 3 5_O&M 781	PPT	Map 2 B1 81 31 30		ORANGEWOOD AVE HILL		MHK070037 MHK070038 D/S MHN070014 MHN070015 D/S			5 428.1 5 216								00 0 0 0.	.00			1					2200 2	4 2.00 1 1.00		2		2	Ir	nspection Completed		
5 5_O&M 781 3 5_O&M 782	PPT 4	4-B2-1 23 33 28		PURDY STREET PURCELL		MHK150029 MHK150028 U/S MHN070019 MHN070018 U/S			1 270.8 2 203							000	00 0 0 0.	.00	1		47	2				211H 48	49 1.02 8 4.00								
5 5_O&M 782 3 5_O&M 783		MAP 3-B3-4 16 33 29		JANET STREET HANNA		MHR100018 MHR100002 D/S MHN070021 MHN070020 U/S			9 329.1 0 123							000	00 0 0 0.	.00		1	2		2			2112 3	4 1.33 6 3.00						83.7' Unmarked MH		
5 5_O&M 783 3 5_O&M 784		MAP 3-B3-6 6 33 27	53 15	DOWNIE ST Y GERALDINE		MHS130015 MHT130005 U/S MHN070021 MHN070023 D/S			5 255.1 6 275							000	00 0 0 0.	.00			2		1 1		1 5	2112 3	6 2.00 10 3.33				2	cl	Pipe ID was 4825. We Che changed it RBJ 60.4 ft (60% blocked)		and cut
3 5_O&M 785	PPT	MAP 4-B2-1 20 33 30		PURDY STREET SEACREST	8/13/2007 9884 9883	MHK150030 MHK160020 D/S MHN070023 MHN070022 U/S	S 6125 SPN070022 8	3 VCP 20	3 222.4 0 202							000	00 0 0 0.	.00	1		1 1					2111 2	3 1.50 1 1.00								
3 5_O&M 786 5 5_O&M 786	PPT	31 34 MAP 3-B5 37		ROSELEE WEST STREET	9/4/2012 11636 12900	MHN070040 MHN070041 D/S MHR120050 MHR120051 D/S	S 5862 SPR120058 2	4 VCP 36	340 360.4							000	0 0 0.	.00			1				1 10	2100 1	1 1.00	1							
3 5_O&M 787	PPT	30 15 MAP		Y DORIS NEWHOPE	8/1/2007 9849 9848	MHN080002 MHN080001 U/S	S 4144 SPN080002 8	B VCP 20	203								0 0 0.	.00		3	2		2			7	14 2.00	2							
5 5_O&M 787 3 5_O&M 788		4-B1-5 3 40 30		STREET	9/26/2012 6772 6773 9/12/2007 9851 9850	MHN080005 MHN080004 U/S		2 VCP 10 3 VCP 12	10 2 125							000	00 0 0 0.	.00		1	1					2100 1	2 2.00								
5 5_O&M 788 3 5_O&M 789		MAP 3-B3-5 19 32 40		KATELLA AVE STEPHANIE		MHK050051 MHL050058 D/S MHN080009 MHN080008 U/S			17.4							000	00 0 0 0.	.00		1	1	1				2100 1	2 2.00 3 1.50								
5 5_O&M 789 3 5_O&M 790	PPT PPT	Map 1 May 65 32 41		SAPPHIRE STREET RAMONA		MHF090009 MHF090051 D/S MHN080011 MHN080012 D/S			21.8							000	00 0 0 0.	.00		1	2		2			2100 1	2 2.00 10 2.50								
5 5_O&M 790 3 5_O&M 791		MAP 4-B2-3 17 30 11		WARD STREET		MHO220018 MHO220028 D/S MHN080013 MHN090007 D/S			1 122.6 4 202							000	00 0 0 0.	.00	1							2100 1	2 2.00 0 0.00				1	l l l	//SA = Debris		
5 5_O&M 791 3 5_O&M 792	PPT 3	MAP 3-B3-4 25		NEWHOPE STREET SEACREST	8/29/2012 10867 13176	MHQ140024 MHQ140040 D/S MHN080015 MHN080014 U/S	S 4805 SPQ140025 8	B VCP 17:	5 160.8 5 284							000	00 0 0 0.	.00		1	1					2100 1	2 2.00								
		MAP 4-B3 11		YOCKEY STREET			S 7887 new 8		9 173.8							000	0 0 0									2100 1			1			1	Possibly flow blocked by ro	elie	
3 5_O&M 793	PPT	52 31		Y SEACREST	12/28/2007 9859 9858	MHN080017 MHN080016 U/S	S 5872 SPN080016 8	3 VCP 95	74								0 0 0.	.00							1	1	4 4.00				1	H	digh water level. Reverse nspection needed.		at 74.43 ft.
5 5_O&M 793 3 5_O&M 794		MAP 4-B2-1 7 31 27		MAYS STREET MORRIE		MHK160021 MHK160020 U/S MHN080021 MHN080023 D/S			2 180.2 2 222							000	00 0 0 0.	.00	1			1				2100 1	2 2.00 3 3.00								
5 5_O&M 794 3 5_O&M 795		MAP 3-B3-6 11 32 2		LARAMORE LN EDGEWOOD SANTA		MHQ160010 MHQ160011 D/S MHN080031 MHN080030 U/S			5 255.7 0 322							000	00 0 0 0.	.00	1				1			2100 1	2 2.00 3 3.00								
5 5_O&M 795 3 5_O&M 796		Map 1 May 13		GERTRUDES AVENUE EDGEWOOD		MHD080022 MHD080021 D/S MHN080035 MHN080037 D/S			3 370							000	00 0 0 0.	.00		1						2100 1	2 2.00					R	Repeat inspection, DVD 46 Section 28	-	
5 5_O&M 796 3 5_O&M 797	PPT :	MAP 2-2-2 2 46 27		DUDMAM DRIVE MELODY CIR	7/16/2012 9088 9089	MHK100011 MHK100012 D/S MHN080037 MHN080036 U/S	S 3550 SPK100011 8	Clay 3 Tile 17								000	0 0 0	.00		2	2 10		4			1A00 12		1				· ·	SECTION 20		
	PPT :	MAP 2-2-2 5 52 32		DUDMAM DRIVE EDGEWOOD	7/16/2012 9088 9104	MHK100011 MHK100009 U/S MHN080037 MHN080038 D/S	S 3548 SPK100009 8	Clay B Tile 24	235.1							000	0 0 0 0.	.00		4	4 5					1900 9									
		MAR			9/12/2012 6986 6998		S 7903 new 8		0 100.1							000	0 0 0	00			4	2	1			1400 4									
5 5_O&M 798 3 5_O&M 799		32 9 MAP		MELODY PARK SAFFORD	8/8/2007 9975 9976	MHN080039 MHN080040 D/S	S 5380 SPN080039 8	B VCP 25	3 258								0 0 0.	.00		2							4 2.00								
5 5_O&M 799 3 5_O&M 800	PPT 3	3-B3-3 12 46 34		STREET	8/27/2012 11472 11474 10/16/2007 9976 9977	MHQ140029 MHQ140031 D/S MHN080040 MHN080041 D/S	S 3825 SPQ140010 8 S 5381 SPN080040 8	3 VCP 25 3 VCP 28	5 255.4 3 284								00 0 0 0.				3 1	1	2			1300 3	3 1.00 11 2.75								
5 5_O&M 800 3 5_O&M 801	PPT 4	MAP 4-B2-2 25 32 8	46 35	HEWITT PLACE Y MELODY PARK	9/12/2012 6997 6985 8/8/2007 9978 9977	MHK160019 MHK160004 D/S MHN080042 MHN080041 U/S	S 328 SPK160020 8 S 5382 SPN080041 8	3 VCP 25 3 VCP 24	254.4							000	00 0 0 0.	.00			2		1 1			1200 ₂	2 1.00 9 4.50				1	R	RBB at 147.1 ft	Root treat a	and cut
5 5_O&M 801 3 5_O&M 802	PPT 4	MAP 4-B2-2 30				MHL150044 MHK150018 D/S			326.2								00 0 0 0.				2					1200 2									
5 5_O&M 802	PPT 4	MAP 4-B2-2 29		YOCKEY STREET	9/12/2012 6986 6983	MHN080044 MHN080045 D/S MHK160005 MHK150018 U/S	S 266 SPK160001 8	3 VCP 33	334.6							000	0 0 0.	.00			2					1200 2									
3 5_O&M 803 5 5_O&M 803	PPT 4	MAP 4-B2-1 19		MALLARD AVENUE	9/7/2012 7604 7607	MHN080045 MHM080003 D/S MHK150032 MHK150031 U/S	S 653 SPK150034 8	B VCP 33	3 337.7							000	0 0 0.	.00			2		2			1200 ₂	7 2.33								
3 5_O&M 804 5 5_O&M 804 3 5_O&M 805	PPT :	37 21 MAP 3-B5 18		EDGEWOOD NELSON STREET	9/6/2012 11836 13390		S 6808 SPO120028 8	B VCP 27	21.2								0 0 0.	.00			2		2		1 5	1100 1	8 2.00								<u> </u>
	PPT :	2-2-3 3		MORRIE ALLEY PRIVATE COMMUNITY MOVIUS	7/17/2012 7647 7646	MHN090030 MHN090029 U/S MHK140024 MHK140023 U/S MHN090032 MHN090031 U/S	S 1001 SPK140015 6	Clay 5 Tile 11	322 5 125.2 6 369							000	0 0 0.	.00					1		1 5	1100 1	8 4.00 2 2.00 2 2.00	2 1							
5 5_O&M 806		MAP 2-2-2 6		MAGNOLIA STREET	7/20/2012 9379 COUNT Y LINE	MHL130047 MHL130048 D/S	S 3216 SPL130029 8	Clay Tile 27	5 284.5								0 0 0.					1				1100 1		1					лSA = High water level. Re	averse	
	PPT	MAP		Y BROOKHAVEN		MHN090047 MHN090048 D/S			3 247								0 0 0.	.00			3						3 1.00	1			1	I M	MSA = High water level. Renspection needed.	ovel 58	
5 5_O&M 807 3 5_O&M 808		3-B3-5 10 23 43		NEWHOPE BIXBY		COQ140006 MHQ140043 D/S MHN090047 MHN100014 D/S			39.9							000	00 0 0 0.						1			1100 1	2 2.00		1			P	Pipe SPN090041 corrected SPN100054	to	
5 5_O&M 808 3 5_O&M 809	PPT 3	MAP 3-B3-5 13		TRASK AVENUE	8/31/2012 13177 13173	MHQ150035 MHQ140045 D/S MHN100014 MHN090004 U/S	S 5627 SPQ150035 1	2 VCP 24	233.8							000	00 0 0 0.	.00								1100 1	2 2.00	1							
	PPT	MAP 3-B5 35		NEWHOPE STREET BROWNING	9/4/2012 13178 13181	MHQ140041 COQ140008 U/S MHQ140047 MHN100020 D/S	S 5697 SPQ140046 6	6 VCP 15	17.1 195							000	0 0 0. 00 0 0 0. 0 0 0.	.00			1		1		1 20	1100 1			1			U	J/S MH is CO		

		Seneral		Structural Defect Coding	1 5 1 1 5 1	Operation	al and Maintenance		Construction Features	m v	
	. 9 6	Pipe		2	allure spair spair spair spects	.,		- Rating	snoeu	Feature by Aban	реиори
No.	ON CONTROL CON	Previous MH ID I I I I I I I I I I I I I I I I I I	£ Crack Fracture	Broken Hole Joint D	Surface Surface Damage Damage Point Re Point Re Sags XX Strux CA S	Denneite	Roots (R) Infiltr	ation Obstacles Vermin Σ Σ Σ Σ Σ Σ Tap (Lateral)	Intruding Seal	truction or Surve	A Abs
infy infractor i	O Watch	erial (ft) (ft) (gt) (gt) (gt) (gt) (gt) (gt) (gt) (g	C F	B H J D	X X X X X X X X X X X X X X X X X X X	D Fine (F) AE AE Other	Tap (T) Medium (M) Ball (B)	0B V 0 0 0 0 T	L IS M	al Cons	dentir
Pric Cor Tapo DVG Rar Rev	α α α Street Name CCTV Date Start End	Start End O O O O O O O O O	S L C M S H L C M S	H SV VV SV VV S M L S M L A V	H P S LE RP S A L L	AGS B % L % Z % B L J C E	BLJCBLJCGD	RWCZ%CRZ PPPOFDFLBIBDE	L U R LD RD SRH SRB SRL Z SA CU MO	Reg Tota	Ø Comments Recommendations
5 5_O&M 810 PPT 3-B3-1 28	7TH STREET 8/1/2012 11012 11011	MHP120010 MHP120009 U/S 5129 SPP120008 6 Tile 526	402.2		0000 0 0 0.00			1100 1 2 2.00	1 1		402.2' MSA (JOM). No Reversal Video)
MAP	MAGNOLIA OCSD		325		0 0 0.00			1 5 6 4 4.00 1 3	2		MSA = Debris (70%)
5 5_O&M 811 PPT 2-1-1 8 3 5_O&M 812 PPT 46 38	STREET 7/6/2012 13623 MH TERRY 10/16/2007 9453 9404 I	D/S 7142	161		0000 0 0 0.00		1	1100 1 2 2.00	1 1		5' MSA (LR). No Reversal Video
5 5_O&M 812 PPT May 53	07.4404.070557	MARKAGO A MARKAG	191.3								
5 5_O&M 812 PPT May 53 3 5_O&M 813 PPT 46 42	BONSER	MHE100044 MHE100045 D/S 1506 SPE100020 8 VCP 196 MHN100049 MHN100048 U/S 3566 SPN100049 8 VCP 95	 		0000 0 0 0.00		1	1 3 300			
MAP											
5 5_O&M 813 PPT 3-B3-6 8 3 5_O&M 814 GGSD 24 800			278.9 159		0000 0 0 0.00	19		1100 1 1 1.00 19 38 2.00			
MAP 2 July-											
5 5_O&M 814 PPT 2 11	BIXBY AVE 6/25/2012 9523 9524 1	MHM100021 MHM100022 D/S 3228 SPM100024 8 VCP 310	312.3		0000 0 0 0.00	1		1100 1 1 1.00			Pipe SPN160025 corrected to
											SPN160901. U/S MHN160019 corrected to MHN160901. D/S MHN160020 corrected to
3 5_O&M 815 PPT 50	BROOKHURST 11/12/2007 11368 11367	MHN160901 MHN160900 D/S 3071 SPN160901 15 VCP 360	366		0 0 0.00			1 10 11 4 4.00			MHN160900.
5 5_O&M 815 PPT 4-B2-2 39			328.6	<u> </u>	0000 0 0 0.00		<u> </u>	1100 1 1 1.00			
3 5_O&M 816 PPT 50 6	ALLEY FAST OF		246		0 0 0.00			0 0 0.00	1	Ш	MSA = DAGS. Clean DAGS
3 5_O&M 817 PPT 6 32 3 5_O&M 818 GGSD 14 233			356 267		0 0 0.00	2	++++++++++	2 6 3.00 1		++	
											DAGS at 68 ft (20% blocked at top). High water level (water line
3 5_O&M 819 PPT 7 14		MHN180017 MHN190001 D/S 144 SPN180007 8 VCP 301			0 0 0.00	100		100 200 2.00 2			up to 80%). Capacity deficiency Clean pipe (DAGS) or spot repair at 68 ft
3 5_O&M 820 GGSD 15 247 3 5_O&M 821 GGSD 15 248	Y LYNDON 3/29/2004 7279 7280	MHN180021 MHN180022 D/S 148 SPN180011 8 VCP 312	291 314		0 0 0.00	3	2	4 8 2.00 3 3 1.00		$\pm \Box$	
3 5_O&M 822 PPT 33 7 3 5_O&M 823 PPT 29 6		MHO060004 MHO060003 U/S 5217 SPO060008 8 VCP 200 MHO060021 MHO060022 D/S 3749 SPO060025 8 VCP 312	204 314		0 0 0.00		1	1 2 2.00 1 3 6 2.00		H	
3 5_O&M 824 PPT 27 2	VERNA 7/19/2007 10624 10627 I	MHO070002 MHO070005 D/S 5571 SPO070002 8 VCP 250	253		0 0 0.00			1 20 21 4 4.00			
3 5_O&M 825 PPT 26 20		MHO070007 MHO070006 U/S 5575 SPO070006 8 VCP 275	349		0 0 0.00	1		1 1 1.00			
3 5_O&M 826 PPT 26 19 3 5_O&M 827 PPT 26 4	EASEMENT 7/18/2007 10630 10629 I	MHO070008 MHO070007 U/S 5576 SPO070007 8 VCP 351 MHO070013 MHO070012 U/S 3718 SPO070011 8 VCP 280	256		0 0 0.00			1 5 6 4 4.00			
3 5_O&M 828 PPT 26 32			326		0 0 0.00	1		1 1 1.00			Root treat and cut . Spot repair at
3 5_O&M 829 PPT 26 31 3 5_O&M 830 PPT 28 39			252 287	1	1 5 5.00 0 0 0.00	2	1	3 6 2.00			RBJ 247.6 ft 249 ft. HSV
3 5_0&M 831 PPT 26 25		MHO080012 MHO080013 D/S 4109 SPO080012 8 VCP 288			0 0 0.00	2		2 4 2.00 1 1			Debris at 116.3 ft. Reverse
3 5_O&M 832 PPT 26 27 3 5_O&M 833 PPT 27 26			116 305		0 0 0.00			0 0 0.00	1		inspection needed.
3 5_O&M 834 PPT 22 28	ALLEN 7/5/2007 12332 12333 I	MHO090003 MHO090004 D/S 4937 SPO090002 6 VCP 300	303		0 0 0.00	1		1 1 1.00 1			
3 5_O&M 835 PPT 25 25 3 5_O&M 836 PPT 22 26	MARIAN 7/5/2007 12339 12326 I	MHO090022 MHO090021 U/S 5435 SPO090022 6 VCP 300	302		0 0 0.00	1	1	1 2 2.00 2			
3 5_0&M 837 PPT 22 24 3 5_0&M 838 PPT 22 25		MHO090024 MHO090023 U/S 4955 SPO090010 8 VCP 380 MHO090025 MHO090022 U/S 4954 SPO090009 6 VCP 310	402 287			1	1 1	2 4 2.00 5			
3 5_O&M 839 PPT 22 23 3 5_O&M 840 PPT 22 20	ELLEN 7/5/2007 12342 12341 I		427		0 0 0.00	1		1 1 1.00 3			
3 5_0&M 840 PP1 22 20 3 5_0&M 841 PPT 24 22			291		0 0 0.00		1 1	2 5 2.50 6 1 1 4 4.00 2			
3 5_08M 842 PPT 24 38			301		0 0 0.00		2	2 8 4.00 2			RMJ at 47.9 ft (60%) and 116.9 ft (20%) Root treat and cut
3 5_O&M 843 PPT 24 39 3 5_O&M 844 PPT 24 40	DIANE 7/12/2007 12356 12357 I	MHO100011 MHO100012 D/S 4949 SPO100012 8 VCP 300	302		0 0 0.00	2		2 2 1.00 1			
3 5_O&M 845 PPT 9 32 3 5_O&M 846 PPT 13 17			272 264		0 0 0.00		1 1	2 6 3.00 1			RBJ (30% blocked)
3 5_O&M 847 PPT 11 11		MHO170001 MHO170002 D/S 2305 SPO170029 12 VCP 353	360		0 0 0.00	1 1		1 20 23 7 2.33			Obstacles (rock) at 255.4 ft (20% blocked)
3 5_0&M 848 PPT 11 21 3 5_0&M 849 PPT 11 9			332				1	1 2 2.00			
3 5_O&M 850 PPT 11 10 3 5_O&M 851 PPT 6 10	Y WESTMINSTER 5/15/2007 0 0 I	MHO170010 MHO170001 D/S 2312 SPO170044 12 VCP 330			0 0 0.00		1 1	1 3 3.00 1			
3 5_O&M 852 PPT 9 14	TAFT EASEMENT 5/3/2007 6952 6953 I	MHO170027 MHO170028 D/S 242 SPO170027 8 VCP 301	300		0 0 0.00			2 4 2.00		Ш	
3 5_O&M 853 PPT 6 22 3 5_O&M 854 PPT 7 16	ORREY 4/25/2007 7254 7253 I	MHO180010 MHO180009 U/S 130 SPO180026 8 VCP 385	390			3 3		3 6 2.00 3			
3 5_O&M 855 GGSD 10 198 3 5_O&M 856 GGSD 7 137			280 348			1 1	1	2 4 2.00 1		$+ \Box$	
3 5_O&M 857 GGSD 8 143 3 5_O&M 858 GGSD 9 178	YAWL 1/7/2004 6865 6864 I	MHO210011 MHO210010 U/S 124 SPO210010 8 VCP 329	360		0 0 0.00		1 4	26 46 1.77		H	
3 5_O&M 859 GGSD 8 139	STARBOARD 1/6/2004 6858 6857		109		0 0 0.00		1 1 1 1	1 3 3.00		++	MHO220004 corrected to MHO210004
3 5_O&M 860 GGSD 36 1165	Y WARD 5/6/2005 7316 7318 I	MHO220028 MHO230003 D/S 159 SPO220028 8 VCP 260	258		0 0 0.00	4		4 8 2.00			
3 5_O&M 862 GGSD 19 399	Y WARD 5/13/2004 6879 6880 I	MHO230012 MHO230013 D/S 165 SPO230024 8 VCP 93				6		30 56 1.87 2 8 14 1.75			
3 5_O&M 863 GGSD 19 399 3 5_O&M 864 GGSD 5 107	SENNIT 12/4/2003 7226 7227 I	MHO230015 MHO230016 D/S 15 SPO230008 8 VCP 389						4 20 36 1.80 1 3 3.00		++	+
3 5_O&M 865 GGSD 5 114 3 5_O&M 866 GGSD 5 111			267 347			1 15		16 16 1.00 13 16 1.23		H	
3 5_O&M 867 GGSD 5 114	SPAR 12/5/2003 6882 6881 I	MHO230021 MHO230017 U/S 167 SPO230026 8 VCP 260	283		0 0 0.00	2 8		11 13 1.18			
3 5_O&M 868 PPT 11 35 3 5_O&M 869 PPT 13 26	WENTWORTH 5/31/2007 11934 11938	MHP150022 MHP150026 D/S 5308 SPP150022 8 VCP 60	400 58		0 0 0.00		1	1 1 1.00 5		Ш	
3 5_O&M 870 PPT 14 38 3 5_O&M 871 PPT 13 1			363 390				1 2	2 6 3.00 3		$H \overline{I}$	_
3 5_O&M 872 PPT 17 16	WOODBURY 6/16/2007 11941 11940	MHP150032 MHP150031 U/S 5311 SPP150028 8 VCP 305	302		0 0 0.00	2	1 1	4 9 2.25 5			
3 5_O&M 874 PPT 11 30	GLENHAVEN 5/16/2007 10945 10946	MHP150042 MHP150043 D/S 4005 SPP150039 8 VCP 335	336		0 0 0.00		1 2	1 1 1.00 3 3 8 2.67 3			
3 5_O&M 875 PPT 10 48 3 5_O&M 876 PPT 10 50	MILLS 5/14/2007 10956 10955	MHP150053 MHP150052 U/S 4015 SPP150049 8 VCP 225	230 229				1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	1 2 2.00		++	+
3 5_O&M 877 PPT 10 23 3 5_O&M 878 PPT 52 19		MHP160027 MHP160025 U/S 5954 SPP160026 8 VCP 215			0 0 0.00	1				Н	
3 5_O&M 879 PPT 52 24			21					0 0 0.00	1		MSA = Debris Clean pipe 165 ft MSA due to rocks. Video is
3 5_O&M 880 PPT 15 8	Y WESTMINSTER 6/9/2007 11501 11502 I	MHQ170014 MHQ170015 D/S 4326 SPQ170007 10 VCP 175	172		0 0 0.00			0 0 0.00			165 ft MSA due to rocks. Video is bad, not clear. Reverse inspection needed. Clean debris
3 5_O&M 880 PPT 15 8 3 5_O&M 881 PPT 24 16 3 5_O&M 882 PPT 16 20	TRASK 7/10/2007 7433 7434	MHR140018 MHR140019 D/S 420 SPR140020 10 VCP 386	370					10 20 2.00 3			
5 5_50m 50L FF1 10 20	6/14/2007 1323 1326		119		0 0 0.00	·		1 2 2.00			

				General				Structural Def	ect Coding	1 - 1 1 5 1	1	Operational and Mair	ntenance			Construction Features	8	.
		Ö.		Contra	Pipe			Stratiana Son	allure and Po	spair 1 Rating sfects	хөри	Operational and main	THO TO		t Rating Score	Surface of the surfac	neous	ndoned
	Vo.	spec. h		disting MH ID Previous MH ID	Camer ID swer ID	ent (f) (f)	O	Broken Hole	eforme ollapse urface amage	ags k Struc ural De	Pefect II	Barra ((D)	Infiltration Obstacles	k Main Defect Defect	(Lateral) Line	truding Seal	ed Aba
rractor	a No.	o Watche Ins o Watche Ins o Watche Ins	Б	asting MH ID Previous MH ID	ting Se ting Se vious	Comm.	Crack Fracture C F	B H	J D X O S	Mr Struct	Deposits D AE AE Other	Fine (F) Tap (T)	Medium (M) Ball (I		A Defection and A Defection of A Defection and	(Lateral) Line T L	Material W SS N O O	Kentifi
3 5_O&M 883 PPT	18 40	Street Name HARBOR	CCTV Date St	art End Start End	U/S 572 SPR160023 8 VCP	9 9 5 L 195 227	C M S H L C M S	H SV VV SV VV S	M L S M L A V H P S LF	RP S A L L L	g AGS B % L % Z % I	B L J C B L J C	B L J C B L J	CGDRWCZ%	C R C FD FI	L BI BD D L U R LD RD SRH	SRB SRL Z SA CU MC	© Comments Recommendations
3 5_O&M 884 PPT	17 35	GLORIA	6/18/2007 67	23 6759 MHS140025 MHS140026	5 D/S 613 SPS140055 8 VCP	233 213				0 0	0.00	1	1		1 1 1.00			
3 5_O&M 885 PPT 3 5_O&M 886 PPT	17 27 34 1			727 6726 MHS140032 MHS140031 752 6753 MHS140048 MHS140048		285 284 172 175				0 0	0.00	1	2		1 1 1.00 2 10 5.00			RBB at 87 ft Root treat and cut.
3 5_O&M 887 PPT 3 5_O&M 888 PPT	52 16 23	LAUREL Y HARPER		57 6758 MHS140053 MHS140054 97 7496 MHS160024 MHS160023	I D/S 603 SPS140048 8 VCP B U/S 473 SPS160020 8 VCP	309 322 395 397				0 0	0.00		2 1 1		3 11 3.67 1 4 4.00	1		
3 5_O&M 889 PPT 2 5 O&M 907	15 31		6/11/2007 74	53 7452 MHT150007 MHT150006		327 327 201 333.0				0 0	0.00		1		1 4 4.00			
2 5_O&M 908	R006 3 G043 14	Y BLUE SPRUCE AV	10/5/2005 12	400 12401 MHT110020 MHT110023	B D/S 3976 SPT110021 8 VCP	130 274.8				0 0	109 109 5.00 76 5.00				218 436 165 406			DAZ = SHELLING/SILT
2 5_O&M 909	G043 15	Y BLUE SPRUCE AV	10/5/2005 12	467 12421 MHT110023 MHT110025	5 D/S 4590 SPT110039 8 VCP	285 284.0				0 0	90 68 5.00	2			160 386			HIGH FLOW, CONTINUOUS
2 5_O&M 910	M021 9	Y STANFORD AV		366 11652 MHR120005 MHR120006		400 349.3				0 0	86 86 5.00 3 5.00	1			176 351			DEPOSITS ATTACHED. GREASE & ENCRUSTATION CONTINUOUS DAGS & DAZ
2 5_O&M 911 2 5_O&M 912	G053 2 G056 3	Y ELMWOOD ST Y EASEMENT			D/S 4818 SPP140014 8 VCP	245 260.0 430 433.0				0 0	17 87 5.00 68 75 5.00				104 295 1 144 287			
2 5_O&M 913	S005 2	VOLKWOOD ST	10/14/2005	MHS110009 MHS110011	0 VCF	367 367.3				0 0	67 5.00	105			172 239			CONTINUOUS DEPOSITS ATTACHED ENCRUSTATION
2 5_O&M 914 2 5_O&M 915	R028 4 R028 2	Y STANFORD AV Y WEST ST			D/S 5686 SPR120021 10 VCP D/S 5738 SPR110038 10 VCP	325 318.2 190 331.4				0 0	58 56 5.00 1 5.00 109 5.00 3 45.00		1		116 234 112 224			HIGH FLOW
2 5_O&M 916	R055 4	PALOMA AV			1 D/S 3849 SPQ140028 8 VCP	325 327.2				0 0	59 42	1 13	1		117 221	1		CONTINUOUS DAGS AND DAE CONTINUOUS DEPOSITS
2 5_O&M 917 2 5_O&M 918	S006 4 R004 6	VOLKWOOD ST Y CHAPMAN AV			D/S 7455 SPL090024 18 VCP	330 330.2 337 336.7				0 0	106 5.00 52 57 5.00		2		108 220 109 218			ATTACHED ENCRUSTATION HIGH FLOW
2 5_O&M 919	G058 2				U/S 6535 SPT100048 8 VCP	210 211.4				0 0	69 33 5.00				4 106 208			CONTINUOUS DEPOSITS
2 5_O&M 920 2 5_O&M 922	R055 2 R064 1	Y GLEN COVE DR Y FLAGSTONE AV		439 10864 MHQ140011 MHQ140013 233 13240 MHR140010 MHR140036	3 D/S 3847 SPQ140026 8 VCP 5 D/S 6393 SPR140043 8 VCP	285 288.3 400 401.1	+++++			0 0	5 96 5.00 57 5.00	1 1			103 204 72 201	+++++++		ATTACHED ENCRUSTATION
2 5_O&M 923	G054 1	Y LAMPSON AV	12/6/2005 11	669 11670 MHR100002 MHR100003	3 D/S 5687 SPR100035 10 VCP	493 495.2				0 0	98				98 196			68.8' TO 264' CAMERA
2 5_O&M 924 2 5_O&M 925	M024 3 G054 2	CHAPMAN AV Y LAMPSON AV		031 13032 MHR090033 MHR090034 670 11671 MHR100003 MHR100004	I D/S 6225 SPR090006 15 VCP I D/S 5688 SPR100036 10 VCP	268 264.0 445 460.1	+++++	++++	+++++++++++++++++++++++++++++++++++++++	0 0	92				49 196 93 188	+++++++	49	UNDERWATER
2 5_O&M 926		019 11 Y 8TH ST	9/13/2005 11	418 11419 MHP110034 MHP110035	5 D/S 5272 SPP110020 6 VCP	325 120.8				0 0	45 44 5.00 2 30.00				93 188	2	2	95.9' & 300.1' MSA=TBI, NO INSPECTION 95.9' TO 300.1'
2 5_O&M 927	M016 10	Y MERRILL ST			D/S 6081 SPR110028 8 VCP	200 200.2				0 0	2 49 5.00	1 9 3			64 118		2	MMC=MLC (LINING CHANGE) CONTINUOUS DEPOSITS
2 5_O&M 928 2 5_O&M 929	S005 6 G003 13	LAMPSON AV Y DALE ST			7 D/S 6387 SPS100005 8 VCP 1 U/S 1896 SPJ060001 8 VCP	280 281.1 60 399.2	+++++			0 0	88 5.00 51 28 5.00				88 176 79 158	+++++++		ATTACHED ENCRUSTATION
2 5_O&M 930 2 5_O&M 931	M024 12 R023 10	Y CHAPMAN AV Y SALLY ST	10/28/2005 12	977 12984 MHQ090058 MHQ090059	0 D/S 6346 SPQ090028 18 VCP 7 D/S 6046 SPR110024 8 VCP	400 399.1 250 240.1				0 0	77 5.00 77 5.00				77 154 77 154			HIGH FLOW
2 5_O&M 932	G042 12	Y SPINNAKER ST	10/4/2005 12	389 12390 MHT110009 MHT110010	D/S 5450 SPT110008 8 VCP	370 318.3				0 0	2 57 5.00 2 20.00	2 21	1		85 148			
2 5_O&M 933 2 5_O&M 934	R004 1 G054 8	Y CHAPMAN AV Y HASTER ST			B D/S 7467 SPL090022 18 VCP D/S 3927 SPT100044 8 VCP	371 377.1 290 294.4				0 0	74 36 32 5.00 1 30.00				74 148 71 146		1 2	HIGH FLOW 294.4' MSA = ?
2 5_O&M 935	M021 3	EASEMENT		169 14368 MHR110035A MHR110021		690 450.2				0 0	69				71 146		2	
2 5_O&M 936 2 5_O&M 938	G020 7 G055 7	Y LA GRAND AV Y NINTH ST			3 D/S 5559 SPK050011 8 VCP 2 D/S 6581 SPP110006 8 VCP	215 220.2 240 240.0				0 0	70 5.00 2 5.00 47 23 5.00				72 144 2 72 142			
2 5_O&M 939 2 5_O&M 940	R020 9 R023 9	Y BUARO ST Y EMRYS AV			9 D/S 5639 SPR100020 10 VCP 3 D/S 6045 SPR110023 8 VCP	319 318.3 267 265.0				0 0	1 67 5.00 59 5.00	1 14	1 2		70 140 75 138			
2 5_O&M 941	G042 13	Y SPINNAKER ST			D/S 5451 SPT110009 8 VCP	245 295.6				0 0	3 1 5.00 41 5.00	2	1		48 136			CONTINUOUS DEPOSITS
2 5_O&M 942 2 5_O&M 943	R061 3 R004 3	Y PALOMA AV Y CHAPMAN AV		900 11901 MHP140004 MHP140005 882 13881 MHL090004 MHL090005	5 D/S 4967 SPP140003 12 VCP 5 D/S 7465 SPL090007 18 VCP	340 350.5 371 219.0				0 0	68 5.00 43 23 5.00				68 136 66 132			ATTACHED ENCRUSTATION
2 5_O&M 944	R063 4	Y TRASK AV		911 11918 MHP150003 MHP150006		175 168.0				0 0	42 5.00				54 132		1 12	168' MSA = POSSIBLE OFFSET JOINT
2 5_O&M 945 2 5_O&M 947	G054 4 G058 1	Y LAMPSON AV SALERNO ST			2 D/S 8142 SPR100048 10 VCP B D/S 5244 SPT100006 8 VCP	314 318.7 215 233.0				0 0	63				1 64 127			
2 5_O&M 948	R016 7	Y WEST ST		109 13110 MHQ060014 MHQ060015		330 225.0				0 0	53 5.00		1 1		1 56 114			
2 5_O&M 949	G057 4				B D/S 3928 SPT100045 8 VCP	275 274.5				0 0	54				55 110	1		100' & 126.3' MSA = ?, NO
2 5_O&M 950 2 5_O&M 951	G055 4 G R069 2	055 5 Y NINTH ST Y EASEMENT			B D/S 6058 SPP100004 10 VCP B D/S 5255 SPT100017 8 VCP	170 170.0 365 363.2				0 0	24 25 5.00 54 5.00				8 58 108 54 108	1 1	2	INSPECTION 100' TO 126.3'
2 5_O&M 952 2 5_O&M 953	M001 15 R062 10		8/4/2005	0 0 MHK060032 MHK060041	D/S 4228 SPK060001 8 VCP U/S 3898 SPQ150025 12 VCP	260 270.4 395 396.2				0 0	44 5.00 2 5.00		3		49 101 50 99			
2 5_O&M 954	M011 5	ROBERT LN	8/25/2005 13	143 13144 MHQ080045 MHQ080046	5 D/S 5855 SPQ080055 8 VCP	155 166.6				0 0	46	,			46 92			
2 5_O&M 955 2 5_O&M 956	R047 2 M001 7	BOWLES AV	8/4/2005 10	B53 10854 MHK060024 MHK060025	0 D/S 6515 SPR130009 8 VCP 5 D/S 5340 SPK060011 8 VCP	400 398.7 235 237.2				0 0	16 2 10.00 4 5.00 45	2 20 2	3 2		40 01			
2 5_O&M 957 2 5_O&M 958	R008 12 R051 5	Y HOMEWAY DR Y LAMPSON AV			B D/S 4993 SPL050059 8 VCP D/S 5664 SPS100033 8 VCP	170 170.1 305 305.3				0 0					6 48 90 34 90		11	CONTINUOUS DAGS
2 5_O&M 959 2 5_O&M 960	R037 7 G003 4	GREENTREE AV Y JOYZELLE DR	9/28/2005 12	718 12124 MHS100027 MHS100028	B D/S 6039 SPS100056 8 VCP 7 D/S 1888 SPK060028 8 VCP	200 198.5 120 125.8				0 0	43 5.00				1 44 87 43 86			
2 5_O&M 961	R055 3	Y MARAUDER CR	11/8/2005 11	439 11422 MHQ140011 COQ140002	2 U/S 3711 SPQ140004 8 VCP	160 154.6				0 0	40 3 5.00				43 86			CONTINUOUS DAGS AND DAE
2 5_O&M 962 2 5_O&M 963	G036 1 R062 4	Y EPSILON ST Y TRASK AV			2 D/S 6064 SPQ100007 8 VCP B D/S 5359 SPP150003 12 VCP	275 268.2 360 349.8	+++++		+++++++++++++++++++++++++++++++++++++++	0 0	16 21 5.00 2 15.00 42 5.00	1 1 1 1			42 85	++++++		CONTINUOUS DEPOSITS ATTACHED ENCRUSTATION
2 5_O&M 964	R039 10	Y ANZIO ST	9/30/2005 12	634 12635 MHT090023 MHT090024	D/S 5261 SPT090008 8 VCP	222 222.0				0 0	39 5.00 1 5.00				40 80			
2 5_O&M 965 2 5_O&M 966	G042 8 R040 6	Y SPINNAKER ST HASTER ST	10/3/2005 12	681 12682 MHT090042 MHT090043	7 D/S 5447 SPT110005 8 VCP B D/S 6364 SPT090039 8 VCP	250 265.9 235 238.5				0 0	38	1	2		38 76			CONTINUOUS DAGS
2 5_O&M 967 2 5_O&M 968	R062 12 G056 4	Y TRASK AV Y EASEMENT			2 D/S 3896 SPQ150023 12 VCP D/S 5749 SPR120001 12 VCP	285 278.8 120 111.3		$+++\mp$		0 0		$++++\mp$			38 76 1 38 75	+++++		
2 5_O&M 969	R042 5	Y EASEMENT	10/24/2005 12	452 12453 MHS120037 MHS120038 MHK050005-	3 D/S 4980 SPS120045 10 VCP	190 195.2				0 0	37				37 74			OBZ= OBN (CONSTRUCTION
2 5_O&M 970 2 5_O&M 971	G018 5 R019 4	Y ELMER LN CHAPMAN AV		'62 9761 A MHK050005	U/S 5554 SPK050005 8 VCP D/S 6229 SPR090023 12 VCP	440 119.4 440 376.6	+++++		+++++++++++++++++++++++++++++++++++++++	0 0	34 5.00	1		1 25	36 73 17 68	+++++++	17	DEBRIS)
2 5_O&M 972	R068 4	Y HARBOR BLVD ORANGEWOOD	12/9/2005 13:	239 13240 MHR140035 MHR140036	6 D/S 6398 SPR140038 10 VCP	162 157.9				0 0					34 68			
2 5_O&M 973 2 5_O&M 974	M005 2 R039 2	Y AV		827 10832 MHL070034 MHL070042 676 12677 MHT090016 MHT090017	A D/S 4843 SPL070037 8 VCP 7 D/S 4030 SPT090029 8 VCP	326 61.0 250 249.2	+++++		+++++++++++++++++++++++++++++++++++++++	0 0	19 13 5.00 1 5.00 16 16 5.00 1 10.00		+++++		33 66 33 66	+++++++		
2 5_O&M 975	G054 3	Y LAMPSON AV GARDEN GROVE	12/6/2005 11	671 11672 MHR100004 MHQ100001	D/S 5689 SPR100037 10 VCP	75 64.9				0 0	12				1 23 65		10	HIGH WATER LEVEL
2 5_O&M 976 2 5_O&M 977	R033 2 G058 3	Y BLVD EASEMENT			2 D/S 6540 SPQ120002 10 VCP 0 D/S 4981 SPS120046 10 VCP	220 220.6 100 95.1	+++++			0 0	2 28 5.00	3			2 35 65 2 32 62			
2 5_O&M 978 2 5_O&M 979	R041 10 G042 10	Y GREENTREE AV SPINNAKER ST	10/4/2005 12	615 12616 MHT100011 MHT100012	2 D/S 5245 SPT100007 8 VCP B D/S 5448 SPT110006 8 VCP	100 100.6 165 164.2				0 0	1 30 5.00	24			31 62			
2 5_O&M 979 2 5_O&M 980	M019 12				D/S 5910 SPR110010 8 VCP	165 164.2 245 245.0				0 0	3 11 5.00 28 5.00	1 1	1		2 40 60 30 60		2	MMC= MLC (LINING CHANGE)
2 5_O&M 981	R019 7	Y CHAPMAN AV	0/00/2000	030 13031 MHR090032 MHR090033		294 305.6	+++++++			0 0	22 5.00				26 60		4	HIGH FLOW, 192.6' NEW MH (MHR090032A)
2 5_O&M 982 2 5_O&M 983	S006 8 G043 2		10/5/2005 12		D/S 5546 SPT110011 8 VCP	324 323.8 385 389.1				0 0	3 10 5.00 7 5.00	1 57	1		58 58 25 54			CONTINUOUS ROOT FINE JOINT
2 5_O&M 984 2 5_O&M 985	G020 12 R063 1	Y MAC MURRAY ST Y TRASK AV			0 D/S 5345 SPK060016 8 VCP 3 D/S 3897 SPQ150024 12 VCP	227 225.8 115 117.3	+++++			0 0		1 1	+++++		26 51 2 26 50	+++++		
2 5_O&M 986 2 5_O&M 987	M001 4 G013 7	Y BOWLES AV Y MARYLEE DR	8/4/2005 10	327 10849 MHK060017 MHK060020	0 D/S 5938 SPK060040 8 VCP 7 D/S 1913 SPK080038 8 VCP	175 202.8 295 295.6				0 0					23 49			
2 5_O&M 988	R017 10				9 D/S 6106 SPQ080030 10 VCP	194 190.2				0 0					12 48		12	

				Conorel				Steventured D	telest Coding			Operational and M	lainten en en			Construction Foot		18121	
		d		General	Pipe			Structural Di	lefect Coding	liure Dair Rating ects ect Sco	×	Operational and Ma	faintenance		Rating	Construction Feati	ures S	-eatures	doned
	o o o	D No.			Camera wer ID.	t (t)			eformec ollapse urface amage	ning Fa bint Rey ags Struct ral Def	efect In				Maint Defects Defect (Intruding Seal	Surve	d Aban
Bull Bull Bull Bull Bull Bull Bull Bull	No. Ction N	Natche Res Pocation Pocation	E	isting MH ID Previous MH ID	ing Sev ing Sev (in) (in)	Comme h (ft)	Crack Fracture	Broken Hole B H	Joint G O S G	Mr Ouick Struct	Deposits D	Roots Fine (F) Tap (T)	s (R) Medium (M) Ball (B)	Infiltration Obstacles Ven	nin No	(Lateral) Line T L	Material ≅ IS M	Constr ons for	dentitie
Phas Rank Contr	Tape DVD Inspe	Street Name	CCTV Date S	art End Start End	Direc Existi Previe Size	GIS C	C M S H L C M	s H SV VV SV VV	S M L S M L A V H P S	Tetal Total	AGS B % L % Z %	B L J C B L J	C B L J C B L J	C G D R W C Z % C	PACF Total Total	L BI BD D L U R LD RI	SRH SRB SRL Z SA CU MO	Reas	© Comments Recommendations
2 5_O&M 989 2 5_O&M 990	R038 1 R069 1	Y EASEMENT			P D/S 5256 SPT090003 8 VCP D/S 5254 SPT100016 8 VCP	200 200.4 365 367.1				0 0	21 24 5.00	2	1		24 48 24 48				
2 5_O&M 991 2 5_O&M 992	G043 13 R028 8	Y ARLETTA CR Y 9TH ST			B D/S 3979 SPT110024 8 VCP 7 D/S 6577 SPQ110025 10 VCP	350 349.6 330 337.5				0 0	3 8 5.00	3 21	13		35 46 17 46				HIGH FLOW
2 5_O&M 993	S006 10	FOREST DR		094 12757 MHS120041 MHS120040		80 79.7				000	23 5.00		10		23 46				CONTINUOUS DEPOSITS ATTACHED ENCRUSTATION
2 5_O&M 994	R042 4	Y EASEMENT	10/24/2005 12	451 12452 MHS120036 MHS120037		160 157.7				0 0	2 1 5.00 13 5.0	00			16 45				
2 5_O&M 995 2 5_O&M 996	R038 8 R041 15				D/S 6538 SPT090042 8 VCP D/S 5252 SPT100014 8 VCP	120 126.2 150 137.5				0 0	21 22	1		1	23 44 22 44				
2 5_O&M 998	R032 2	GARDEN GROVE Y BLVD	9/23/2005	MHR120030 MHR120031		105 104.7				0 0	10 9 5.00			4	23 42				
2 5_O&M 999 2 5_O&M 1000	G013 1 R002 3	Y MACALPINE RD Y CELLIINI AV		07 8059 MHK080034 MHK080035 128 10129 MHL080007 MHL080008	5 D/S 2411 SPK080054 8 VCP 1 D/S 5182 SPL080008 8 VCP	313 318.0 190 189.2				0 0	14 5.00 2 20.00	3 6 3	1		25 41 21 40				
2 5_O&M 1001 2 5_O&M 1002	R057 1 R046 4	NINA PL PALM ST		462 11464 MHQ130016 MHQ140004 766 12767 MHR140001 MHR140002	4 D/S 3821 SPQ130018 8 VCP 2 D/S 6475 SPR140002 8 VCP	570 575.6 145 142.1				0 0	40		2 8		10 38				
2 5_O&M 1003	G012 13	MACKAY ST	7/27/2005 8/	56 8057 MHK080031 MHK080032	D/S 1907 SPK080032 8 VCP	380 383.7				0 0	19	5 32			19 38 37 37				
2 5_O&M 1004 2 5_O&M 1005	G044 2 G002 1	AUDREYCR Y MOSSLER ST		75 8574 MHJ070013 MHJ070012	5 D/S 4094 SPT110029 8 VCP 2 U/S 2073 SPJ070013 8 VCP	350 351.9 111 112.9				0 0	1 14 5.00 1 20.0	1 25 00 1	1 1		29 35 17 35				112.9' CLEANOUT MAINLINE
2 5_O&M 1006 2 5_O&M 1007	R068 2 G058 4	Y HARBOR BLVD 4 EASEMENT			5 U/S 6394 SPR130025 10 VCP 6 D/S 4982 SPS120047 10 VCP	40 41.5 60 52.1				0 0	5 10 5.00			4	19 34				PIPES
2 5_O&M 1007 2 5_O&M 1008	G043 5	TWINLEAF CR	10/5/2005 12	454 12456 MHS120039 MHS120046 396 12397 MHT110016 MHT110017	D/S 3972 SPT110017 8 VCP	198 199.2				0 0	16	1 25	1	1	17 33 27 31				
2 5_O&M 1009	S006 6 R024 12	ASPENWOOD AV			D/S 6375 SPS120017 8 VCP	200 199.9		\Box		0 0	15	\Box			15 30				CONTINUOUS DEPOSITS ATTACHED ENCRUSTATION
2 5_O&M 1010 2 5_O&M 1011	G013 4	Y KATHY LN Y MACALPINE RD	7/28/2005 80	61 8062 MHK080037 MHK080038		140 140.7 282 282.7	 			0 0	13 5.00 1 5.00 7 5 5.00		1	 	14 28 13 27	 			<u>+ </u>
2 5_O&M 1012 2 5_O&M 1013	G034 4 M005 12	Y ROBERT LN Y VONS DR			4 U/S 6420 SPQ090050 8 VCP U/S 5948 SPL060046 8 VCP	165 167.4 81 80.7	++++++++++++++++++++++++++++++++++++			0 0	4 8 5.00 1 25.00 13 5.00				13 26 13 26			$+ \Box$	MHL060031 IS CLEANOUT
2 5_O&M 1014	G043 4	HEATHER CR		394 12395 MHT110014 MHT110015 MHR130002	D/S 5550 SPT110015 8 VCP	195 196.0				0 0	3 3	1 18			22 25				CONTINUOUS ROOT FINE JOINT
2 5_O&M 1015	G049 5	GRANITE PL GARDEN GROVE	10/26/2005 13	249 14061 MHS130009 A	D/S 6525 SPR130014 8 VCP	390 377.8				0 0	6	2 1 8			17 25			\Box	
2 5_O&M 1016	R032 4	Y BLVD	9/23/2005	MHR120032 MHR120033	3 D/S SPR120033 10 VCP	58 57.9				0 0	12	++++++++++++++++++++++++++++++++++++		1	13 25			++	396.2' MMC PVC TO VCP, 401.9'
																			MMC VCP TO PVC, CONTINUOUS DEPOSIT
2 5_O&M 1017	G045 4 R042 6	Y EASEMENT GARDEN GROVE		355 12656 MHT100037 MHT100038		430 419.9 487 385.0				0 0	11	+++++		++++++	11 22	+++++	2	++	ATTACHED GREASE
2 5_O&M 1018 2 5_O&M 1019	R042 6 G044 3	Y BLVD Y ANETTA CR			U/S 4972 SPS120027 10 VCP U/S 4471 SPT110031 8 VCP	487 385.0 130 133.1				0 0	2	6	1 1 1		11 22 11 21				
2 5_O&M 1020 2 5_O&M 1021	R039 11 G008 8	Y ANZIO ST TWANA DR			D/S 5262 SPT090009 8 VCP D/S 2084 SPK080042 8 VCP	395 390.1 360 364.0				0 0	8 5.00 7 2 5.0	10	1		9 21 9 20				
2 5_O&M 1022	R017 7	WEST ST	8/26/2005 13	065 13066 MHQ080047 MHQ080048	B D/S 6105 SPQ080029 10 VCP	135 138.2				0 0					5 20		5		
2 5_O&M 1023 2 5_O&M 1024	G012 11 G044 1	MARYLEE DR AUDREY CR		55 8058 MHK080029 MHK080033 420 12367 MHT110024 COT110004	3 D/S 1906 SPK080031 8 VCP 1 U/S 4093 SPT110028 8 VCP	300 304.2 130 133.3				0 0	1 1	1 10	2		14 19 7 19				
2 5_O&M 1025 2 5_O&M 1026	R024 6 G012 5	Y STRATHMORE DR MACDUFF ST		728 11729 MHQ110019 MHQ110020 03 8004 MHK080026 MHK080027	0 D/S 6330 SPQ110053 8 VCP 7 D/S 1860 SPK080028 8 VCP	360 356.2 266 284.4				0 0	1 5.00	2 12	1 1		16 19 12 18				
2 5_O&M 1027	S004 3	FALLINGLEAF CR	10/13/2005 12	585 12686 MHS120017 MHS120018	3 D/S 6369 SPS120011 8 VCP	120 173.7				0 0		2 16			18 18				CONTINUOUS ROOT FINE JOINT
2 5_O&M 1028 2 5_O&M 1030	G005 10 G021 9	VICILIA ST JACALENE LN		193 13192 MHQ070040 MHQ070038	3 D/S 1862 SPK070024 8 VCP 3 U/S 5969 SPQ070045 8 VCP	328 328.9 230 234.3				0 0	3 3 5.0	2 9			14 17 7 16				
2 5_O&M 1031	G050 2 G	050 3 PALM ST	10/27/2005	MHR130002- MHR130003 A A	D/S SPR130002-A 8 VCP	282 282.2				0 0	3				6 16	1	1 1 1		280.2' MSA SURVEY ABANDONED
2 5_O&M 1032 2 5_O&M 1033	R040 3 R060 5	Y NEWHOPE ST			7 D/S 3915 SPT100031 8 VCP 2 D/S 5281 SPQ130020 6 VCP	215 207.9 270 278.7				0 0	8 8	- 			8 16 8 16				2 CONTINUOUS DAGS
2 5_O&M 1034 2 5_O&M 1035	G020 13 R040 8	MAC MURRAY ST DAWN AV			D/S 5346 SPK060017 8 VCP D/S 5360 SPT100020 8 VCP	275 287.6 262 250.8				0 0	6 1 10.0	00			7 15 9 15				CONTINUOUS ROOT FINE JOINT
2 5_O&M 1036	G004 11	MOEN ST	7/15/2005 85	44 8545 MHJ080010 MHJ080011	D/S 2044 SPJ080011 8 VCP	195 198.1				0 0		1 1 11	3		13 14				
2 5_O&M 1037 2 5_O&M 1038	G005 4 G001 5	NEARING DR ORANGEWOOD		83 8539 MHJ070021 MHJ080006 67 8715 MHJ070005 COJ070001	D/S 2401 SPJ070022 8 VCP U/S 2065 SPJ070005 8 VCP	150 299.3 30 222.8				0 0	5 1	1			7 14				
2 5_O&M 1039	G014 6	CHAPMAN AV	7/29/2005 8	19 8520 MHK090042 MHK090043	3 D/S 2005 SPK090027 8 VCP	300 302.3				0 0	4 1 10.0	00 2 6 2			6 14	1			
2 5_O&M 1040 2 5_O&M 1041	G044 5 R056 4	ADRIAN CR SAFFORD ST			! U/S 4474 SPT110034 8 VCP ! D/S 3816 SPQ130013 6 VCP	130 131.4 340 343.7				0 0	1	12	1 1		13 14 9 14				CONTINUOUS ROOT FINE JOINT
2 5_O&M 1042 2 5_O&M 1043	R040 12 G009 13	SALERNO ST SANDY DR	10/3/2005 12	538 12639 MHT090027 MHT090028	3 D/S 5265 SPT090012 8 VCP	105 106.1 120 118.9				0 0		7	1 1		9 14				CONTINUOUS ROOT FINE JOINT
2 5_O&M 1043 2 5_O&M 1044	G012 8	MARYLEE DR		05 8055 MHK080028 MHK080029	9 D/S 2409 SPK080052 8 VCP	285 303.8				0 0	1 2 20.0	00 4	1		7 13				
2 5_O&M 1045	G034 11	STRATHMORE DR	9/2/2005 12	303 12826 MHQ100009 A	U/S 5754 SPQ100037 8 VCP	300 86.4		++++		0 0	1 1 10.0	00 3 1	1		7 13				DAZ= DNF 228.3" NEW MH FOUND (NO
2 5_O&M 1046	G042 1	LAMPSON AV Y JETTY ST			2 D/S 3982 SPT100019 8 VCP 0 D/S 3973 SPT110018 8 VCP	430 437.1 155 256.9				0 0	3	5		2	10 13	+++++++	 	++	228.3 NEW MH FOUND (NO NUMBER)
2 5_O&M 1047 2 5_O&M 1048	G043 10 G044 6	ADRIAN CR	10/6/2005 12	424 12425 MHT110028 MHT110029	D/S 4475 SPT110035 8 VCP	350 350.4				0 0		2 2	1 1	1 10	8 13 6 13				
2 5_O&M 1049 2 5_O&M 1051	R047 3 R041 4	MARBLE CR Y SALERNO ST	10/4/2005 12	513 12614 MHT090002 MHT100008	2 D/S 6517 SPR130011 8 VCP 3 D/S 5243 SPT090002 8 VCP	400 398.9 245 234.9				0 0		12		1 1 1 1 1	13 13 7 13	+++++	+ + + + + + + + + + + + + + + + + + + +	++	+
2 5_O&M 1052 2 5_O&M 1053	G009 10 G013 6	ROCKVIEW DR MARYLEE DR	7/22/2005 8	63 8562 MHJ080030 MHJ080029	U/S 2060 SPJ080021 8 VCP B D/S 1909 SPK080034 8 VCP	145 120.8 280 282.7				0 0	2 1 35.0	00 1 4						H	
2 5_O&M 1054	G044 4	ANETTA CR	10/6/2005 12	422 12423 MHT110026 MHT110027	D/S 4472 SPT110032 8 VCP	350 350.1				0 0		2 2			8 12				LUQUET OV
2 5_O&M 1055 2 5_O&M 1056	G046 3 M016 8	Y HASTER ST LEDA LN	9/8/2005 12	161 12165 MHR100007 MHR110037	7 D/S 3925 SPT100042 8 VCP 7 U/S 5095 SPR110014 6 VCP	120 118.6 319 248.8				0 0		1			6 12 4 12	1	2	${f f f f f f f f f f f f f $	HIGH FLOW MSA=TBI
2 5_O&M 1057 2 5_O&M 1058	M022 6 R017 12	CHAPMAN AV WEST ST			0 U/S 6221 SPS090033 12 VCP 1 D/S 6108 SPQ080032 10 VCP	30 22.6 145 142.7				0 0				1 30	5 12 3 12			\Box	CONTINUOUS DAGS
2 5_O&M 1059	R019 2	Y CHAPMAN AV	8/30/2005	MHS090035 MHR090029	D/S SPS090020 12 VCP	55 54.5				0 0	6 5.00				6 12				
2 5_O&M 1060 2 5_O&M 1061	R023 8 G009 8	EMRYS AV SOMERS DR	7/22/2005 88	01 8593 MHJ080024 MHJ080025	5 D/S 6042 SPR110020 8 VCP 5 D/S 2417 SPJ080028 8 VCP	265 267.0 313 312.7				0 0		5 1	1		9 12 8 11			Ш	
2 5_O&M 1062 2 5_O&M 1063	G021 11 G050 7	EUDORA LN PALM ST			B U/S 6303 SPQ080001 8 VCP 2 D/S 6407 SPR130001 8 VCP	200 201.4 265 259.0		++++		0 0		4 1		+	8 11 5 11			$+ + \mp$	+
2 5_O&M 1064	R037 14	ALLEY	9/28/2005 12	343 12628 MHT090010 MHT090011	D/S 6537 SPT090041 8 VCP D/S 6534 SPT100047 8 VCP	200 199.7				0 0	3	1	1	1	6 11				
2 5_O&M 1065 2 5_O&M 1066	R039 12 S001 7	Y ANZIO ST CHOISSER RD	10/10/2005 12	110 12112 MHS110026 MHS110028	B D/S 5708 SPS110026 8 VCP	240 236.1 278 277.4				0 0		4	2	1	6 11 7 11				
2 5_O&M 1067	G014 7	DALE ST			7 D/S 1914 SPK080039 8 VCP			++++		0 0	1 1 5.0	00	++++	1	4 10		1	++	OBZ=OBP (EXTERNAL PIPE OR
2 5_O&M 1069 2 5_O&M 1070	G043 6 G043 11	SANDALWOOD CR JETTY ST		398 12399 MHT110018 MHT110019 399 12400 MHT110019 MHT110020	0 D/S 3974 SPT110019 8 VCP 0 D/S 3975 SPT110020 8 VCP	197 197.9 260 259.1	+++++		- 	0 0	3 3	+++++		1 10	4 10	+++++	1 1	++	CABLE)
2 5_O&M 1071	G055 8	GARDEN GROVE Y BLVD		374 10875 MHP130031 MHP130032		35 28.4				0 0	3			4	7 10		1	Ш	28.4' MSA = DSZ (LEAVES)
2 5_O&M 1072 2 5_O&M 1073	G058 9 R041 1	HASTER ST SALERNO ST			7 D/S 6097 SPS080004 10 VCP 5 U/S 5264 SPT090011 8 VCP	25 19.9 PRIVATE 130 130.1				0 0		7	1	2	6 10 8 10		+++++	++	
2 5_O&M 1074 2 5_O&M 1075	R065 3 S002 4	Y EASEMENT HEATHER AV	12/8/2005 12	334 12802 MHQ100045 MHQ100043	3 D/S 5478 SPQ100039 8 VCP 5 D/S 6380 SPS110001 8 VCP	155 145.7 110 159.4				0 0	3	1 1	1		5 10				
2 5_O&M 1076	G005 9	SALISH AV	7/18/2005 8/	08 8709 MHK070025 COK070003	3 U/S 2412 SPK070049 8 VCP	195 196.0				0 0	2	2 5	1						
2 5_O&M 1077 2 5_O&M 1078	G013 3 G042 2	MACALPINE RD LAUX CR	7/28/2005 80 10/4/2005 12	61 8060 MHK080037 MHK080036 374 12383 MHT110001 MHT110002	5 U/S 1911 SPK080036 8 VCP 2 D/S 3983 SPT110026 8 VCP	310 302.8 400 400.7	+++++	++++		0 0		4 1	+++++	1	7 9 5 11		1	+	+
2 5_O&M 1079	G044 11				B D/S 5440 SPT120005 8 VCP	400 402.2				0 0						1 2			

				Canaral				Structural Defe	at Coding		1	Operational and Maintenance			Canada vation Features	1971-	21 1
				General	Pipe			Structural Dete	ct Coding	Rating Sct Sco	×	Operational and Maintenance		Sating Core	Construction Features	eature:	paug
	e No.	(x) cp			er ID er ID.				lormed lapsed face mage	nt Rep 3s Struct al Defe	ed In			Maint Fefects efects lindex	Intruding Seal	cction F	Aban
ctor	tion Nc tal Tap tal Insp	Location	Exist	ting MH ID Previous MH ID	g Sew	(fi)	Crack Fracture	Broken Hole B H	Joint D X	itructur itructur	Deposits D	Roots (R) Fine (F) Tap (T) Medium (M)	Infiltration Obstacles Ball (B) I OB	Vermin V N N N N N N N N N N N N N N N N N N	ateral) Line Material L IS	M Mis	antified
Phase Priority Rankin	DVD N DVD N Inspec	Street Name	CCTV Date Start	t End Start End	Existin Existin Previo Size (ii	GIS Co	CMSHLCMS	H SV VV SV VV S	O S N L A V H P S L	F ACP Total S	AGS B % L % Z % E		B L J C G D R W C Z %	PACP Total C O&M E	BI BD D L U R LD RD SRH SRB SRL Z S	Total C Total C	S G G G G G G G G G G G G G G G G G G G
2 5_O&M 1080 2 5_O&M 1081	M001 10				3 D/S 5341 SPK060012 8 VCP 8 D/S 6519 SPR140008 8 VCP	190 200.7 400 399.7				0 0	3	1		4 9			
2 5_O&M 1082	R047 4 S001 1	LAUX AV 1	0/10/2005 1210	4 12105 MHS110020 MHS110021	D/S 5702 SPS110020 8 VCP	340 338.9				0 0		1 2 2		1 9 9 9 5 9			
2 5_O&M 1083 2 5_O&M 1084	G004 2 G012 4	DALE ST MACDUFF ST			D/S 1898 SPJ060003 8 VCP D/S 1859 SPK080027 8 VCP	269 272.5 298 285.7				0 0	1 5.00	1 2		4 8 6 8			1
2 5_O&M 1085	G013 5	MACKAY ST	7/28/2005 8057	7 8058 MHK080032 MHK080033	3 D/S 1908 SPK080033 8 VCP	146 140.8				0 0	3			4 8			
2 5_O&M 1086	G014 5	CHAPMAN AV	7/29/2005 8518	8 8519 MHK090041 MHK090042	2 D/S 2004 SPK090026 8 VCP	220 222.5				0 0	1	3		5 8	1		272.4' MSA= OBS, OBS=
2 5_O&M 1087	G040 2			2 12561 MHP090028 MHP090018		385 272.4				0 0		1 1	1 95	3 8			OBSTACLE BUILT INTO STRUCTURE
2 5_O&M 1088 2 5_O&M 1089	G050 12 M022 8			4 12765 MHR130004 MHR130005 7 13058 MHR090035 MHR090036		285 282.9 353 354.6				0 0	4	1		1 3 8	1		+
2 5_O&M 1090 2 5_O&M 1091	R056 2 S007 9	NINA PL	11/9/2005 1146	1 11460 MHQ130015 MHQ130014		120 119.9 205 212.2				0 0		1 1	1	3 8			
2 5_O&M 1092	R041 8	Y GREENTREE AV	10/4/2005 1261	8 12620 MHT100014 MHT100016	5 D/S 5248 SPT100010 8 VCP	275 292.8				0 0	4 5.00	1 2		1 4 8			
2 5_O&M 1093 2 5_O&M 1094	R045 10 S004 1	TWINTREE CR 1		2 12625 MHT100025 MHT100026 2 12683 MHS120014 MHS120015		170 169.8 200 200.4				0 0		2 3 1	2	2 8 6 8			+
2 5_O&M 1095	S004 2	FALLINGLEAF CR 1	0/13/2005 1268	5 12684 MHS120017 MHS120016	U/S 6368 SPS120010 8 VCP	160 115.4				0 0		2 2		4 8			
2 5_O&M 1096 2 5_O&M 1097	G003 5 G011 7	JOYZELLE DR YORKSHIRE AV		7 8036 MHK060007 MHK060008 2 10823 MHK070003 MHL070016	6 U/S 1889 SPK060029 8 VCP 6 U/S 4838 SPK070003 8 VCP	168 170.2 280 282.6				0 0	3 1 5.00			1 4 7	1		+
2 5_O&M 1098 2 5_O&M 1099	G012 9 G019 3			6 10297 MHK070013 MHK070014 6 8602 MHK050039 MHK050037		195 203.2				0 0	4 500	1 3 1		5 7			
2 5_O&M 1100	G029 12			3 13009 MHT080007 MHS080007		212 198.0 305 301.9	+++++		 	0 0	1 1 5.00			4 7			DSZ= DEPOSITS INGRESS OTHER
2 5_O&M 1101	G033 6			7 12816 MHQ090008 MHQ090007		198 201.9	+++++			0 0	2 1 10.00	 		3 7			DAZ=DSC (DEPOSIT SETTLED COMPACT)
2 5_O&M 1102	G041 6	OTIS AV	9/23/2005 1273	5 12859 MHS090024 COS090001	U/S 6546 SPS090010 8 VCP	115 118.2	 			0 0	2 1 10.00	 		3 7			DAZ=DNF (DEPOSITS INGRESSES FINE)
2 5_O&M 1103			10/4/2005 1238	2 12383 MHT100002 MHT110002 MHS130003	D/S 5443 SPT110001 8 VCP	265 266.6				0 0	2			3 5 7			
2 5_O&M 1104 2 5_O&M 1105	G050 1 R023 6	QUARTZ PL 1		0 14062 MHS130010 A	D/S 6526 SPR130015 8 VCP	390 376.8 300 299.1				0 0	2 1 5.00			3 7			
2 5_O&M 1107	R048 1	STUART DR	11/1/2005 1089	9 10900 MHQ130019 MHQ130020	D/S 4364 SPQ130022 8 VCP	165 170.1				0 0		7		7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7		2	
2 5_O&M 1108 2 5_O&M 1109	R062 1 G003 1	Y TRASK AV 1		8 11469 MHQ150007 MHQ150008 8035 MHK060004 MHK060005		320 327.7 373 376.4				0 0	1 500	1 1	1	2 4 7 3 6			
2 5_O&M 1110	G007 4	MAC ST	7/20/2005 7997	7 7996 MHK070021 MHK070020	U/S 1852 SPK070019 8 VCP	85 86.7				0 0	3			3 6			
2 5_O&M 1112 2 5_O&M 1113	G012 7 G013 2	MACDUFF ST MACALPINE RD	7/28/2005 8059		D/S 1910 SPK080035 8 VCP	282 283.5 315 323.2				0 0	2 5.00			2 6			+
2 5_O&M 1114 2 5_O&M 1115	G043 8 R027 1			3 12395 MHT110013 MHT110015 5 11676 MHR110028 MHR110029	5 D/S 5549 SPT110014 8 VCP D/S 5737 SPR110037 10 VCP	255 257.0 317 313.2				0 0	2	1		3 6			
2 5_O&M 1116	S006 3	CHAPARRAL DR 1	0/18/2005 1275	3 13757 MHS120028 MHS120029	D/S 5657 SPS120037 8 VCP	190 179.7				0 0	3	3 1		3 6 4 6			
2 5_O&M 1117 2 5_O&M 1118	R041 3 G035 8	SALERNO ST REXFORD RD			P D/S 5266 SPT090013 8 VCP	263 263.3 325 331.6				0 0	2	1	1	3 6			
2 5_O&M 1119	G040 3	9TH ST	9/14/2005 1256	2 12563 MHP090028 MHP090029	D/S 6584 SPP090001 10 VCP	385 389.2				0 0	1 1 20.00			2 5			
2 5_O&M 1120 2 5_O&M 1121	G056 5 M018 9	Y EASEMENT SAFFORD ST	9/12/2005 1249-	3 12746 MHS120001 MHR120025 4 12495 MHQ120027 MHQ120028	3 D/S 4019 SPQ120018 6 VCP	125 46.4 260 263.3				0 0		1 4		1 2 5 5 5 5		1	46.4' MSA=HIGH WATER LEVEL
2 5_O&M 1122 2 5_O&M 1123	M019 4 M024 8	STANFORD AV CHAPMAN AV		6 12468 MHQ120015 MHQ120014 6 13112 MHQ090054 MHQ090055	U/S 5480 SPQ120001 6 VCP D/S 6351 SPQ090061 18 VCP	106 106.2 480 480.0				0 0		1	1	1 2 5		1	
2 5_O&M 1124	R023 3	Y JANET LN	9/7/2005 0	0 MHR110002 COR110002	2 U/S 6040 SPR110018 8 VCP	120 119.8				0 0	1 5.00	1		2 5			
2 5_O&M 1125 2 5_O&M 1126	R023 4 R023 5			9 11640 MHR110002 MHR110003 0 MHR110004 COR110001		300 299.0 118 116.0				0 0		5 5		5 5 5		2	+
2 5_O&M 1127 2 5_O&M 1128	R038 3 S004 5			0 12631 MHT090013 MHT090014	D/S 5258 SPT090005 8 VCP 3 D/S 6367 SPS120009 8 VCP	200 201.2 255 256.7				0 0		1	1	2 5 3 5			
2 5_O&M 1129	R046 8	Y RAINBOW ST 1	0/28/2005 1277	8 12780 MHR130012 MHR140008	B D/S 6518 SPR130012 8 VCP	295 296.9				0 0	1	2 1		1 4 5			
2 5_O&M 1130 2 5_O&M 1131	R046 9 R059 4			0 12781 MHR140008 MHR140008 7 11006 MHP140025 COP140001		170 170.7 120 125.4				0 0	1	1		3 5 1			+
																	2.1' & 30' MSA=ALIGNMENT DOWN, 2.1' to 30' NO
2 5_O&M 1132 2 5_O&M 1133	G009 3 G009 4 G010 4	Y TWANA DR FILLMORE DR		0 8512 MHK080043 MHK080045 8 8595 MHJ080026 MHJ080027	5 D/S 1996 SPK080047 8 VCP D/S 2419 SPJ080030 8 VCP	37 9.1 317 320.4				0 0	2			2 4	2	2	INSPECTED DUE TO SIPHON
2 5_O&M 1135	G018 1			0 13569 MHK090033 MHK090043		38 3.0				0 0	1			2 4	1		3' MSA=LINE DOWN, DUE TO SIPHON
2 5_O&M 1136	G030 12	HARBOR BLVD	8/29/2005	MHS080002- B MHS090031	D/S SPS080006-B 15 VCP	179 178.6				0 0				1 4		1	178.6' MSA= DUE TO CAMERA UNDERWATER
2 5_O&M 1137 2 5_O&M 1138	G042 6 G042 11				5 D/S 5445 SPT110003 8 VCP D/S 5449 SPT110007 8 VCP	120 122.8 80 78.3				0 0	2			2 4			
2 5_O&M 1139	G043 9	JETTY ST	10/5/2005 1239	5 12397 MHT110015 MHT110017	D/S 3971 SPT110016 8 VCP	250 255.9				0 0		1 3		4 4			
2 5_O&M 1140 2 5_O&M 1141	G043 12 M011 11	ADRIAN ST	8/25/2005 1225	9 13003 MHT080005 MHT080007	5 U/S 3978 SPT110023 8 VCP 7 D/S 6555 SPT080005 8 VCP	130 133.6 285 284.4				0 0	1	2		3 4 1 4	1		<u> </u>
2 5_O&M 1142 2 5_O&M 1143	R003 2 R013 11	Y TIMOTHY LN	7/27/2005 1014:	2 10801 MHL080029 MHL080030	D/S 5943 SPL080040 8 VCP B D/S 6431 SPQ080016 8 VCP	320 317.4 350 347.6				0 0	2 10.00		1 5	2 4		+ T	
2 5_O&M 1144	R017 4	Y WEST ST		0 13212 MHQ070044 C0Q070003		200 204.1	+++++		 	0 0		 	1 5	1 4	 		OBZ= OBJ, NO C/O AT 204.1', MUST BE VIDEOED AGAIN
2 5_O&M 1145	R056 5	NEWELL ST	11/9/2005 1145	1 11450 MHQ130006 MHQ130005	5 U/S 3809 SPQ130007 6 VCP D/S 6579 SPQ110027 10 VCP	90 82.8				0 0			1 25				82.8' MSA= OBZ (BOTTLES)
2 5_O&M 1146 2 5_O&M 1147	R028 10 R041 12	GREENTREE AV	10/4/2005 1262	0 12619 MHT100016 MHT100015	U/S 5249 SPT100011 8 VCP	165 163.7 150 155.0				0 0		4		1 2 4			
2 5_O&M 1148	R042 2			MHS140001-	5 D/S 4489 SPS120042 8 VCP	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1				0 0		4		4 4			
2 5_O&M 1149 2 5_O&M 1150	R046 2 R061 4	Y FLAGSTONE PL 1 BARNETT WY 1	0/28/2005 1190	A MHR140001	D/S SPS140053-A 8 VCP D/S D/S 4968 SPP140004 12 VCP	12 11.7 400 406.5				0 0	2	+++++++	1	2 4		+++	
2 5_O&M 1151	G030 4 G043 7	CHAPMAN AV	8/29/2005 1311	6 13117 MHQ090046 MHQ090047	7 D/S 6273 SPQ090058 12 VCP	250 273.1 85 94.9				0 0	1 5.00			1 3			94.9' DAZ=DNF 25% DIRT
2 5_O&M 1152 2 5_O&M 1153	R021 4	SHETLAND RD			0 D/S 6336 SPQ100026 8 VCP	330 327.6				0 0		3		1 3 3 3			94.9 DAZ=DNF 25% DIR I
2 5_O&M 1154	R032 10	GARDEN GROVE BLVD GARDEN GROVE	9/23/2005 1283	6 12838 MHQ120050 MHQ120053	3 D/S 5744 SPQ120050 10 VCP	222 217.4				0 0	1 5.00			1 3			
2 5_O&M 1155	R035 3	BLVD GROVE	9/27/2005 1258	1 12480 MHQ120048 MHQ120005	5 D/S 5699 SPQ120035 10 VCP	442 434.1				0 0		1		1 3			4' MSA = TBI (TAP BREAK-IN
2 5_O&M 1156	R030 13 R040 1			7 11418 MHP110032 MHP110034		170 4.0	+++++++			0 0				1 3	1	+++	4' MSA = TBI (TAP BREAK-IN INTRUDING)
2 5_O&M 1157 2 5_O&M 1158	S007 5	OERTLY AV 1	0/21/2005 1242	9 12430 MHS120007 MHS120008	U/S 3913 SPT100029 8 VCP 3 D/S 4481 SPS120002 8 VCP	120 120.8 230 229.9				0 0		1		1 3 1 3			
	R043 10	ORANGEWOOD			U/S 5437 SPR120011 6 VCP	80 63.6				0 0		1		2 3	1		63.6' MSA = ALIGNMENT LEFT
2 5_O&M 1161 2 5_O&M 1162	G006 1 G006 9	AV		2 8031 MHK070047 MHK070046 3 8507 MHK080041 MHK080040	3 U/S 1885 SPK070028 8 VCP 0 U/S 2092 SPK080044 8 VCP	105 105.8 168 170.5	+++++			0 0	1 1	+++++++		1 2		+++	
2 5_O&M 1163	G010 3	FILLMORE ST	7/25/2005 8596	8597 MHJ080028 MHJ080034	D/S 2421 SPJ080032 8 VCP	135 135.4				0 0	1			1 2			
2 5_O&M 1165	G012 1 G017 9	ELMER LN	8/3/2005 7972	2 7974 MHK050029 MHK050032	B D/S 3887 SPK080011 8 VCP 2 D/S 1827 SPK050014 8 VCP	350 352.6 128 126.3				0 0		 		1 2 1 2	 		<u>++</u>
2 5_O&M 1166 2 5_O&M 1167	G019 8 G019 11				2 U/S 5551 SPK050002 8 VCP 1 D/S 1836 SPK050023 8 VCP	121 123.7 62 58.0				0 0	1 1			1 2			123.7' MSA=DEAD END, PLUG
2 5_O&M 1168	G029 4			8 12239 MHP080031 MHP080032	2 D/S 6308 SPP080001 8 VCP	10 2.0				0 0				1 2			2' MSA= CAMERA DOESN'T FIT 1' MSA= CAMERA BLOCKED,
2 5_O&M 1169	G030 11	HARBOR BLVD	8/29/2005	MHS080002- B A	U/S SPS080006-A 15 PVC	7 7.0	<u> </u>			0 0		<u> </u>		1 2	1 1		7" MSA= CAMERA BLOCKED, LINE RIGHT

				General	Pi	De Company			Structural D	Defect Coding	<u>0</u> 0	ating 8	_		Operationa	al and Maintenance			9.0		Construction Feature	S	atures	Peu
	Vo. VD No. spec. No.	(x) /pa	F.0	sting MH ID Previous MH ID	wer ID	ent (ft)	0	Footbase	Section 11sts	1-1-4	eformed ollapsed P urface amage ining Failur	ags A Struct Re ural Defect	befect Inde			D (D)	la Chartan	K Maint Ra	Defects Defect Sco		Line.	Intruding Seal	ruction Fee	ed Abando
hase riority tanking	ape No. VVD No. Ispection h spectial Talescensal Talescensal DV seversal In:	Location Street Name	EXIS	tting MH ID Previous MH ID	birection of cristing Servicus	oint Length	Crack	F F F F F F F F F F F F F F F F F F F		O S	D X	ACP Quio	3	AE Other		Tap (T) Medium (M) B		OB V O	otal O&M otal O&M Odal O&M	T T	Line L	Material IS	otal Const	2
2 5_O&M 1170 2 5_O&M 1171	G042 5 G045 1	HEATHER CR VOLKWOOD ST	10/7/2005	MHS100024 MHS100041		178 178		1 1 0 1 1 3	H 3V VV 3V VV		AVH F S LF	0 0		70 Z 70 E	5 E J C B	5 2 3 6 8 2 3 6 8	LJCGDRW	O Z N C K L	1 2 1 2	J FL BI BU U	J E O K ED KD	SKI SKE SKE Z SA C	O MC F	Comments Recommendators
2 5_O&M 1172 2 5_O&M 1173	M005 5 R006 1				B D/S 5299 SPL070021 8 VCP D/S 7421 SPL090027 18 VCP							0 0			2				1 2	1	1	1		6' MSA = LD DUE TO LINE DROP IN OCSD LINE
2 5_O&M 1174 2 5_O&M 1175	R019 6 R023 11			29 13030 MHR090031 MHR090032 14 11645 MHR110007 MHR110008	2 D/S 6223 SPR090004 12 VCP B D/S 6047 SPR110025 8 VCP	215 267 200 198	9					0 0			2				1 2 2 2		1		2	HIGH FLOW, 57.1' NEW MH (MHR090031A)
2 5_O&M 1176 2 5_O&M 1177	R025 4 R033 1	GARDEN GROVE	9/12/2005 1215	59 11662 MHR120014 MHR120015 MHR120035 MHR120036	5 D/S 6468 SPR120040 8 VCP 5 D/S SPR120036 10 VCP	285 280 294 294	1 2					0 0			2				2 2	1	1			
2 5_O&M 1178 2 5_O&M 1179	R038 6 R039 8	ALLEY	9/30/2005 1266	32 12663 MHT100044 MHT100045	D/S 4033 SPT090032 8 VCP D/S 3923 SPT100040 8 VCP	260 263	0					0 0	1 1	55.00					1 2 1 2					
2 5_O&M 1180 2 5_O&M 1181 2 5_O&M 1182	R039 5 S006 7 R041 5	ASPENWOOD AV 1	0/18/2005	MHS120024 MHS120029	2 D/S 3920 SPT100036 8 VCP D/S SPS120057 8 VCP U/S 4768 SPT100001 8 VCP	196 198	8					0 0			2 2				2 2 2 1 2 1 2					
2 5_O&M 1183 2 5_O&M 1184	R041 7 Y	GREENTREE AV GREENTREE AV	10/4/2005 1261 10/4/2005 1261	16 12618 MHT100012 MHT100014 17 12618 MHT100013 MHT100014	D/S 5246 SPT100008 8 VCP D/S 5247 SPT100009 8 VCP	260 258 100 103	3					0 0	1						1 2					
2 5_O&M 1185 2 5_O&M 1186 2 5_O&M 1187	R042 1 R059 2	Y EUCLID ST 1	1/21/2005 1182	28 11829 MHP140026 MHP140027	8 U/S 4488 SPS120041 8 VCP 7 D/S 5393 SPP140043 8 VCP 6 D/S 5454 SPP150006 8 VCP	12 8.						0 0	1		2				1 2					MHP140027 IS BURIED MH
2 5_O&M 1189 2 5_O&M 1190	G058 5 G059 2	EASEMENT 1 CHAPMAN AV 1	2/13/2005 1274 2/13/2005 1298	15 11629 MHR110040 MHR110039 36 12987 MHP090031 MHP090032	9 U/S 6032 SPR110016 8 VCP 2 D/S 6281 SPP090003 18 VCP	50 76 42 40)					0 0						2 2	2 2 2 2 2					
2 5_O&M 1191 2 5_O&M 1192		Y WEST ST	9/21/2005 1163	38 11637 MHR120003 MHR120002	b D/S 5364 SPT100024 8 VCP U/S 5682 SPR120015 10 VCP	286 285	1					0 0						2 2	2 2 2 2 2					
2 5_O&M 1193 2 5_O&M 1194 2 5_O&M 1195	\$002 8 \$004 6 R024 13	ASPENWOOD AV 1	0/13/2005 1268	36 12687 MHS120018 MHS120019	3 D/S 6383 SPS110004 8 VCP D/S 6370 SPS120012 8 VCP U/S 6284 SPQ110038 8 VCP	136 138	9					0 0			1 1				1 1 1					
2 5_O&M 1196 2 5_O&M 1197	R038 7 R042 3	ALLEY :	9/29/2005 1284 0/24/2005 1245	15 12846 MHT090020 COT090001 50 12451 MHS120035 MHS120036	U/S 4032 SPT090031 8 VCP 5 D/S 4978 SPS120043 10 VCP	185 188 200 200	2 6					0 0			1 1				1 1 1					
2 5_O&M 1198 2 5_O&M 1199 2 5_O&M 1200	M001 6 R025 2 R040 9	MORGAN LN	9/12/2005 1171	11 11712 MHQ110002 MHQ110003	D/S 5337	240 236	8					0 0			1 1				1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1					
2 5_O&M 1201 2 5_O&M 1202	M016 2 R024 5	EMRYS AV STRATHMORE DR	9/8/2005 1216 9/9/2005 1172	66 12167 MHR110032 MHR110033 27 11728 MHQ110018 MHQ110019	B D/S 5909 SPR110009 8 VCP D/S 6329 SPQ110052 8 VCP	300 30° 360 360	7					0 0			1 1				1 1					
2 5_O&M 1203 2 5_O&M 1204 2 5_O&M 1205	M024 6 M022 10 S006 12	CHAPMAN AV 1	0/26/2005 1305	59 13060 MHR090037 MHR080022	1 D/S 6268 SPQ090037 12 VCP 2 D/S 6234 SPR090027 15 VCP 3 D/S 6377 SPS120019 8 VCP	35 34)					0 0						1	1 1					
2 5_O&M 1206 2 5_O&M 1207		Y CHAPMAN AV 1	0/28/2005 1305	55 13056 MHR080001 MHQ090054	D/S 6347 SPQ090033 18 VCP D/S 5083 SPT100003 12 VCP	81 80						0 0						1 1	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1					
2 5_O&M 1208 2 5_O&M 1209	R041 16 S004 13				D/S 6470 SPT100046 8 VCP D/S 5260 SPT090007 8 VCP							0 0						1 1	1 1 1					
2 5_O&M 1210 2 5_O&M 1211	R032 8 M022 11	BLVD :	0/26/2005 1306		D/S 6266 SPR080010 15 VCP		0					0 0						1 1	1 1					
2 5_O&M 1212 2 5_O&M 1213	R037 2	GARDEN GROVE BLVD	9/27/2005 1258	30 12581 MHQ120047 MHQ120048		293 292						0 0						1	1 1					
2 5_O&M 1214 2 5_O&M 1215 2 5_O&M 1216	R066 1 M022 7 R013 5	CHAPMAN AV 1	0/26/2005 1303	32 13057 MHR090034 MHR090035	8 D/S 6396 SPR130027 10 VCP 6 D/S 6276 SPR090033 15 VCP 9 D/S 5771 SPQ080037 8 VCP	353 353	8					0 0						1 1	1 1 1					V=VERMIN RAT
2 5_0&M 1217 2 5_0&M 1217 2 5_0&M 1218	G059 1 M022 9	CHAPMAN AV 1	2/13/2005 1298	35 12986 MHQ090060 MHP090031	D/S 6280 SPQ090009 18 VCP D/S 6233 SPR090026 15 VCP	400 402	1					0 0						1 1	1 1 1					V=VERWIIN RAT
4 6_No_Defect 247	5 2239 7 2279	Y PERDIDO :	7/19/2006 9179	9 9178 MHM010019 MHM010017	7 U/S 4391 SPM010003 8 VCP	378 656	4					0 0							0 0				0	Multiple reaches were evaluated with one inspection. Lengths are different.
4 6_No_Defect 248	5 2239 7 2279	Y PERDIDO	7/19/2006 9180	0 9179 MHM010019 MHM010017	7 U/S 4392 SPM010004 8 VCP	284 655	4					0 0							0 0				0	Multiple reaches were evaluated with one inspection. Lengths are different.
4 6_No_Defect 249	4 2215	Y YARDLEY	6/30/2006	MHM000013 MHM000015	5 D/S SPM00007 8 VCP	530 530	0					0 0							0 0				0	Multiple reaches were evaluated with one inspection. 49' to 174' not clear. Must revideo
4 6_No_Defect 250	4 2215	Y YARDLEY	2/00/0000	MHM000013 MHM000015	5 D/S SPM00008 8 VCP	530 530																		Multiple reaches were evaluated with one inspection. 49' to 174' not clear. Must revideo
4 0_N0_Delect 230	P P	I TARDEET	5/30/2006	IVI IVIOGOTS WI IVIOGOTS	37 WOOOOO 8 VCP	330 531	0												0 0					Multiple reaches were evaluated with one inspection. High Water
4 6_No_Defect 251	COUN TY 3C 10	Y GILBERT 1	0/12/2007 934	1 9342 MHL020004 MHL030040	D/S 4057 SPL020004 8 VCP	124 523	7					0 0							0 0				0	Level. Video is blurry. Unable to see any defect. Must Revideo.
	MIXE D P COUN																							No Defect
4 6_No_Defect 252	TY1 11 N	Y HARVEST	11/5/2007 9299	9 9292 MHM990030 MHM990023	3 D/S 3453 SPM990031 8 VCP	330 323	5					0 0							0 0				0	
4 6_No_Defect 253	COUN	Y BANTA	11/3/2007 897	1 8970 MHM040013 MHM040012	2 U/S 4410 SPM040036 8 VCP	290 286	8					0 0							0 0					No Defect
4 6_No_Defect 254	17 2485	Y GILBERT	1/25/2007 9288	5 9284 MHL000003 MHL000002	U/S 3439 SPL000005 8 VCP	260 268	2					0 0							0 0				0	No Defect. There is a MH @ 29.8'. GIS does not show this MH No Defect. This inspection does not
4 6_No_Defect 255	18 2	DIXIE	5/3/2007 9220	8 9233 MHM030006 MHM030016	6 U/S 3603 SPM030019 8 VCP	375 233	9					0 0							0 0				0	have DVD. We used Inspection Report
4 6_No_Defect 256	P COUN TY 3B 4	Y SPAIN ST 1	0/17/2007 894	1 8940 MHM030044 MHM020039	U/S 3654 SPM020043 6 VCP	90 14	8					0 0							0 0				0	Multiple reaches were evaluated with one inspection. No Defect
4 6_No_Defect 257	P COUN TY 3B 4	Y SPAIN ST 1	0/17/2007 893	8 8941 MHM030044 MHM020039	9 U/S 4256 SPM020044 6 VCP	30 14	8												0 0					Multiple reaches were evaluated with one inspection. No Defect
4 6_No_Defect 259	PCOUN			4 9118 MHM990025 COM990001		110 119						0 0							0 0					No Defect
	MIXE MIXE DP DP				1 2 100																			Defects documented November 2007. Pipe replaced in 2008.
4 6_No_Defect 260	COUN TY 1 4 TY 1 5 Y	8042 Garden Grove			3 U/S 3642 SPM030029 8 VCP		6 2	6		1 1		16 3	2	1	23	3	1		30 43 1.43				1 0	Priority adjusted to No Defect.
	43 12 36 16 36 15	12701 Monroe St.			DS SPJ 8 VCP 5 US 736 SPJ110003 8 VCP 7 US 825 SPJ110016 8 VCP							0 0	0.00						0 0.00 0 0.00 0 0.00				++	
1 6_No_Defect 777	37 3	8358 Stanford Ave.	4/8/2004 7706	6 7709 MHJ120023 MHJ120024	DS 739 SPJ120015 8 VCP	270 27							0.00						0 0.00					
1 6_No_Defect 778	36 17	8451 Stanford Ave.	4/7/2004 765	1 7705 MHJ120021 MHJ120022	DS 826 SPJ120022 8 VCP	259 26						(0.00						0 0.00					

	1				General				Struc	tural Defect Coding			p 8		Operational a	nd Maintenance				Construction Features	s	89. pi p
				6	9	Pipe					pd ed Pipe	ailure	ra Rating					it Rating	Score		snoou	y Aban
		o.	OVD No	Existing MH ID	Previous MH ID	Sewer II	nent nent (ft)	Crack	Fracture Broken H	Hole Joint	Deform	Surface Damag Lining F Point R Sags	ctural D	Deposits		Roots (R)	Infiltration Obstacle	s Vermin S	Tap	(Lateral) Line	Intruding Seal SS	or Survivior
onity onity	ntractor De No.	D No.	versal L	D Watc	1000	sting Solutions	S Comming the comming of the comming	С		H J O S		WL	CP Qui	D AE AE Other	Fine (F) Ta	Roots (R) (T) Medium (M) Ball (B	I OB Other	C O O	M Defe	T L	IS M	as ons if ons
4 0 10 10 10 10	CO	N SE	x x x	Street Name	Start End	Na Siz Siz	332 332	C M S H	L C M S H SV VV SV	V VV S M L S M	L A V H P	S LF RP S	Str T of	GS B % L % Z 9	% B L J C B I	J C B L J C B L J	CGDRWCZ%	CR & E	P 8 FD	FL BI BD D L U R LD RD S	SRH SRB SRL Z SA CU MC	0
1 6_No_Defect 77	0 43	7		8342 Garden Grove	MHJ130001 MHJ130002 D	S 749 SPJ130003 8 VCP S 750 SPJ130004 8 VCP	332 332						0 0.00						0 0.00			
1 6_No_Defect 78	1 43	15		8232 Garden Grove		S 783 SPJ130005 8 VCP	331 332						0 0.00						0 0.00			
1 6_No_Defect 78 1 6_No_Defect 78	2 40 3 42					S 789 SPJ130010 6 VCP S 796 SPJ130017 8 VCP	30 34 15 63						0 0.00						0 0.00			
1 6_No_Defect 78	4 45	1		8150 Garden Grove		S 841 SPJ130021 8 VCP	158 132						0 0.00						0 0.00			
1 6_No_Defect 78	5 43	14		Coast St./Garden Grove Blvd. 4/22/2004 7104 13421	MHJ130006 MHJ130007 D	S 6841 SPJ130022 10 VCP	306 308						0 0.00						0 0.00			The second pipe ID represents two current pipe IDs.
1 6_No_Defect 78	6 43	14		Coast St./Garden Grove Blvd. 4/22/2004 13420 7105 Easement/13062	MHJ130006 MHJ130007 D	S 6842 SPJ130022 10 VCP	306 308						0 0.00						0 0.00			The second pipe ID represents two current pipe IDs.
1 6_No_Defect 78 1 6_No_Defect 78	7 43 8 35	2 25		Coast St. 4/21/2004 7105 7111		S 751 SPJ130029 8 VCP	50 53 330 317						0 0.00						0 0.00			
1 6_No_Defect 78	9 35	21		8172 Central Ave. 4/12/2004 7046 7725	MHJ140002 MHJ140006 U	S 673 SPJ140001 8 VCP S 676 SPJ140004 8 VCP	82 88						0 0.00						0 0.00			
1 6_No_Defect 79 1 6_No_Defect 79	0 39 1 38					S 809 SPJ140018 8 VCP S 754 SPJ140034 8 VCP	379 382 229 228						0 0.00						0 0.00			
1 6_No_Defect 79 1 6_No_Defect 79	2 39 3 45			13291 Coast St. 4/13/2004 7116 7117 13331 Coast St. 4/28/2004	MHJ140030 MHJ140034 D MHJ140034 MHJ140035 D	S 755 SPJ140035 10 VCP S SPJ140036 10 VCP	254 261 151 151						0 0.00						0 0.00			
1 6_No_Defect 79	4 45	4		Easement/Coast St. 4/28/2004	MHJ140036 MHJ150007 D		297 297						0 0.00						0 0.00			
1 6_No_Defect 79	5 40	32	\bot		MHJ150002 MHJ150003 D		250 250	$\Box\Box$					0 0.00					$\Box \Box \Box$	0 0.00			
1 6_No_Defect 79	6 42 7 45	25	++	Crosswalk-		S 775 SPJ150005 8 VCP S SPJ150006 8 VCP	132 132 28 28	++++	+++++	+++++		+ + + + + +	0 0.00		++++		+++++		0 0.00	+++++++	 	+++
1 6_No_Defect 79	8 25	16		12551 Agnes	MHJ150008 MHJ150007 D MHK110008 MHK110010 D		28 28 245 259		 	+++++			0 0.00				+++++		0 0.00	 	 	
1 6_No_Defect 79	9 27	5		8882 Ann Cross Dr. 3/22/2004 8383 8384	MHK110012 MHK110013 D		300 287	ШП			ШТ		0 0.00						0 0.00			
1 6_No_Defect 80	0 32	9				S 3359 SPK110013 8 VCP	85 85						0 0.00						0 0.00			
1 6_No_Defect 80	1 25	14	++	8972 Ernest Fulsom		S 3379 SPK110021 8 VCP S 3380 SPK110022 8 VCP	190 192 190 190		+++++	+++++		+ + + + +	0 0.00		++++	+++++	+++++	+++-	0 0.00	+++++++	+++++	+++
1 6_No_Defect 80	3 25	20				S 3380 SPK110022 8 VCP S 3381 SPK110023 8 VCP	190 190		 	+++++			0 0.00				+++++		0 0.00	 	 	
1 6_No_Defect 80 1 6_No_Defect 80	4 33 5 34			12551 Loma St. 4/2/2004 8408 8407	MHK110017 MHK110016 U	S 3385 SPK110025 8 VCP	316 315						0 0.00						0 0.00			
1 6_No_Defect 80	6 32	27		12536 Adelle St. 4/2/2004 8415 8416	MHK110020 MHK110021 D	S 3388 SPK110028 8 VCP S 3393 SPK110029 8 VCP	316 318 267 267						0 0.00						0 0.00			
1 6_No_Defect 80 1 6_No_Defect 80	7 35 8 35					S 3396 SPK110032 8 VCP S 3397 SPK110033 8 ACP	175 166 170 177						0 0.00						0 0.00			
1 6_No_Defect 80 1 6_No_Defect 81	9 35 0 32					S 3398 SPK110034 8 VCP S 3361 SPK120005 8 VCP	350 350 75 79						0 0.00						0 0.00			
1 6_No_Defect 81	1 32	20				S 3365 SPK120009 8 VCP	301 301						0 0.00						0 0.00			
1 6_No_Defect 81 1 6_No_Defect 81	2 42 3 32	10				S 3373 SPK120017 8 VCP S 3382 SPK120019 8 VCP	165 165 255 255						0 0.00						0 0.00			
1 6_No_Defect 81 1 6_No_Defect 81	4 34 5 35			12870 Loma St. 4/2/2004 8444 8406	MHK120023 COK120022 U	S 3384 SPK120021 8 VCP S 3401 SPK120027 8 VCP	330 136 332 332						0 0.00						0 0.00			
1 6_No_Defect 81	6 34					S 3406 SPK120032 8 VCP	89 89						0 0.00						0 0.00			
		MAP	MAP																			1.3' MSA (SIPHON) & 0.1' From D/S MH MSA (SIPHON).
5 6_No_Defect 81 1 6_No_Defect 81	6 PPT 7 34	4-B2-2 1	4-B2-3 18		MHO220017 MHO220018 D/ MHK120020 MHK120019 U	S 156 SPO220025 8 VCP S 2977 SPK120041 8 VCP	138 1.3 140 203						0000 0 0 0.00					0000 0	0 0.00		2	Inspection couldn't completed.
				42200	WHATEGOED WHATEGOED C	5 2211 5 1112211 5 175	113 200						0 0.50						0.00			4.7' MSA (SIPHON),Also 0' From D/S MH MSA (SIPHON).
																						Inspection Couldn't Completed. Inspection Report Shows Both side
5 6_No_Defect 81	7 PPT	3-2 11	3-2 12	Y WAKEFIELD AVE 7/24/2012 12791 13157	MHP060002 MHP060003 D/	S 6607 SPP060004 8 VCP	192 4.7						0000 0 0 0.00					0000 g	0 0.00		2	100' inspection. We corrected them.
1 6_No_Defect 81 1 6_No_Defect 81	8 29 9 29	10 15		8750 Brookdale Ave. 3/29/2004 11555 11556 8750 Oakdale Dr. 3/29/2004 11560 11621		S 3091 SPK130001 8 VCP S 3095 SPK130002 8 VCP	152 156 175 177						0 0.00						0 0.00			
		MAP	MAP																0.00			10' From both MH MSA (SIPHON).
5 6_No_Defect 81 1 6_No_Defect 82				EUCLID STREET 9/6/2012 11894 11895 13051 Yockey St. 3/29/2004 11598 11599			26 20 55 60						0000 0 0 0.00						0 0.00		2	Inspection Couldn't completed
		MAP	MAP																			15' From both MH MSA (SIPHON).
5 6_No_Defect 82 1 6_No_Defect 82	1 29	4-B1-6 5	4-B1-6 6	HARBOR BLVD 10/3/2012 7543 7542 13111 Yockey St. 3/29/2004 11600 11601		S 593 SPR150013 12 VCP S 2968 SPK130012 8 VCP	32 30 50 56						0 0.00					0000 0	0 0.00		2	Inspection couldn't completed
5 6_No_Defect 82		MAP 2 July- 1 11	MAP 2 July- 1 15	MACNAB STREET 6/19/2012 10308 10298	11/	3883 S SIPHON 8 VCP	300 30						0000 0 0 000					0000 0	0 0.00			15' MSA (SIPHON) & 15' From U/S MH MSA (SIPHON). Inspection Couldn't Completed
1 6_No_Defect 82	2 44	6 MAP		13172 Yockey St. 4/23/2004 11603 11602	MHK130017 MHK130016 U	S 2970 SPK130014 8 VCP	145 141						0 0.00						0 0.00			
5 6_No_Defect 82 1 6_No_Defect 82		3-B5 38				S 5861 SPR120057 12 VCP S 695 SPK130031 8 VCP	8 4 160 151	+ + +	+++++				0000 0 0 0.00				++++++		0 0.00	++++++	+++++	
5 6_No_Defect 82	3 PPT	MAP 3-B5 11		NELSON STREET 9/13/2012 13424 11327	D/	S 6847 new 10 VCP	5 5	ЩП			ШП		0000 0 0 0.00					0000 0	0 0.00			
1 6_No_Defect 82	4 35	15			MHK130030 MHK130031 D	S 696 SPK130032 8 VCP	100 96						0 0.00						0 0.00	+		
5 6_No_Defect 82	4 PPT	MAP 3-B3-4 26			MHQ140040 MHQ140042 D/	S 5624 SPQ140049 8 VCP	12 5.1						0000 0 0 0.00					0000 0	0 0.00			
1 6_No_Defect 82	5 41	10		8612 Garden Grove Blvd. 4/20/2004 7668 7669	MHK130032 MHK130033 D	S 706 SPK130034 8 VCP	331 336						0 0.00					+++	0 0.00			
5 6_No_Defect 82	5 PPT	MAP 3-B4-2 21		GARDEN GROVE BLVD 9/24/2012 12897 12898	MHR120049 MHR120053 D/	S 5818 SPR120056 24 VCP	3 6.7						0000 0 0 0.00					0000 0	0 0.00	<u> </u>		
1 6_No_Defect 82		4		8562 Garden Grove Blvd. 4/21/2004 7669 7670	MHK130033 MHK130034 D	S 707 SPK130035 8 VCP	334 331						0 0.00						0 0.00			
5 6_No_Defect 82 1 6_No_Defect 82		MAP 2-1-1 7		LAMPSON AVE 7/6/2012 9036 13623 13081 Wilson St. 4/15/2004 7675 7674		S 7141 new 12 VCP S 711 SPK130039 8 VCP	14 6.7						0000 0 0 0.00						0 0.00			
1 6_No_Defect 82 5 6_No_Defect 82	7 PPT	MAP 4-B3 16		CHAPMAN AVE 0/26/2012 14281 10051	11/	S 7961 new 15 V/CP	219 218 10 7						0 0.00				+++++	0000 0	0 0.00	+++++++	 	+++
1 6_No_Defect 82		15		13111 Wilson St. 4/15/2004 7676 7675	MHK130040 MHK130039 U	S 712 SPK130040 8 VCP	220 221						0 0.00						0 0.00			
5 6_No_Defect 82 1 6_No_Defect 82	8 PPT	MAP 3-B3-4 27				S 5698 SPQ140052 8 VCP	7 7	$\coprod \ \ $		<u> </u>	ШП		0000 0 0 0.00					0000 0	0 0.00	<u> </u>	<u> </u>	
		MAP		13371 Hale Ave. 3/29/2004 11577 11576 GARDEN GROVE	MHK140005 MHK140004 U	S 2953 SPK140001 8 VCP	190 190						0 0.00									
5 6_No_Defect 82 1 6_No_Defect 83		4-B3 4 23		BLVD 9/26/2012 8443 9392 13272 Yockey St. 3/31/2004 11606 11607		S 2976 SPK130023 8 VCP S 7885 SPK140004 8 VCP	10 7.2 35 33						0000 0 0 0.00					0000 0	0 0.00			
5 6_No_Defect 83	0 PPT	MAP 2-2-2 15		TRASK AVENUE 7/20/2012 8362 7885	MHK150903 MHK150009 D/	S 2447 SPK150903 12 Tile	4 7.7						0000 0 0 0.00						0 0.00			
1 6_No_Defect 83	1 39	15		8651 Gloria Ave. 4/15/2004 7636 7634	MHK140016 MHK140014 U	S 681 SPK140009 8 VCP	215 222	$\Box\Box\Box$			шшТ		0 0.00						0 0.00			

	General Pipe	Structural Defect Coding	D S Construction Features S S D D S S S S S S S S S S S S S S S
92 92 15 15 15 15 15 15 15 15 15 15 15 15 15	D Previous MH ID O O O O O O O O O		
C C C C C C C C C C	Direction Existing 5 Size (in) Joint Len (in) GIS Com GIS Com CCTV Le	C F B H J D X O S L C M S H L C M S H SV VV SV VV S M L S M L A V H P S LF RP S	L d L d L d L d L d L d L d L d L d L d
5 6.No_Defect 831 PPT Map 1 4 SPRINGDALE STREET 6/7/2012 8757 875	88 MHF100027 MHF100028 D/S 1965 SPF100002 10 VCP 10 9		0000 0 0 0.00
line WESTERN AVE	86 MHK140015 MHK140016 DS 992 SPK140010 8 VCP 220 221		
5 6_No_Defect 832 PPT Map 1 12 EASEMENT 6/14/2012 7129 713	00 COI080003 COI080004 U/S 778 SPI080004 6 VCP 420 9.7 67 MHK140016 MHK140017 DS 993 SPK140011 8 ACP 215 202		0000 0 0 0.00 1 1 1 1
5 6_No_Defect 833 PPT 4-B3 1 STREET 9/26/2012 11591 11591	97 MHL150004 MHL150005 D/S 3031 SPL150034 18 VCP 20 10 17 MHK140018 MHK140017 US 994 SPK140012 8 VCP 50 41		
5 6_No_Defect 834 PPT	11 MHK150901 MHK150902 D/S 2445 SPK150901 12 Clay Tile 8 10.2		0000 0 0 0.00
1 6, No_Defect 835 41 11 8598 Edgebrook Dr. 4/21/2004 7647 764 5 6, No_Defect 835 PPT 3-85 17 NELSON STREET 9/6/2012 13390 1335	106 107 108 109		
	MHK140025 MHK140026 DS 1003 SPK140017 8 VCP 184 182		0 000
	66 MHN170020 MHN170909 D/S 3069 SPN170903 8 VCP 4 12 MHK140026 MHK140027 DS 688 SPK140018 8 VCP 124 127		0000 0 0 0.00
MAP BROOKHURST	MHK140026 MHK140027 DS 988 SPK140U18 8 VCP 124 127 89 MHN160018 MHN160002 D/S 2756 SPN160903 8 VCP 204 12		
	15		0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
5 6.No_Defect 838 PPT 384-2 7 HARBOR BLVD 10/3/2012 7015 1277 1 6.No_Defect 839 39 11 13252 Newland 4/15/2004 7661 766	84 D/S 7662 new 8 VCP 14 12 12 MHK140010 MHK140011 DS 699 SPK140025 8 VCP 30 34		0000 0 0 0.00
5 6_No_Defect 839 PPT 3-84-2 22 GARDEN GROVE BLVD 9/24/2012 13661 1286			0000 0 0 0.00
1 6, No_Defect 840 39 21 13466 Newland 4/15/2004 MAP 5 6, No_Defect 840 PPT 4-83 10 TRASK AVE 9/26/2012 11525 1410	MHK150007A- MHK150007B DS SPK140029-A 8 PVC 65 65 08 D/S 8238 new 21 VCP 7 12.3		
MAD	MHK140027 MHK140028 DS 834 SPK140039 8 VCP 57 55		0 0.00
MAP	02 MHK150001 MHK150008 DS 3025 SPK150005 12 VCP 10 13		0000 0 0 0.00
5 6, No_Defect 842 PPT 4-83 8 CHAPMAN AVE 9/26/2012 14281 1386 1 6, No_Defect 843 40 2 13640 Yockey St. 4/14/2004 11616 1161 1 9, No_Defect 843 40 2 13640 Yockey St. 4/14/2004 11616 1161	84 D/S 7941 new 15 VCP 23 13 18 MHK150013 MHK150015 DS 2792 SPK150006 8 VCP 50 51		0000 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
	66 MHL030016 MHK030001 D/S 5517 SPK030001 8 VCP 15 15 87 MHK150014 COK150001 US 2793 SPK150007 8 PVC 90 91		0000 0 0 0.000
MAP	98 MHO150008 MHO140023 U/S 3945 SPO140010 8 VCP 20 15.2		0000 0 0 0.00
MAP NEWHOPE	18 MHK150014 MHK150015 DS 2794 SPK150008 8 PVC 132 131		
5 6, No, Defect 845 PPT 4-B1-5 4 STREET 9/26/2012 6772 1146 1 6, No, Defect 846 40 5 13662 Yockey St. 4/14/2004 0 0	82 US 6696 new 8 VCP 16 15.8 MHK150016 MHK150016-A DS 2796 SPK150010 8 VCP 174 114		000 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
5 6. No, Defect 846 PPT 3-84-2 6 JACALENE LANE 10/3/2012 14345 1321 1 6. No. Defect 847 40 6 13551 Yockey St. 4/14/2004			0000 0 0 0.000
1 6.No_Defect 947 40 6 13551 Yockey St. 4/14/2004 5 6.No_Defect 847 PPT 3-84-2 4 KATHYLANE 10/3/2012 14343 132			
1 6.No_Defect 848 40 7 13524 Yorkey St. 4/14/2004	MHK150016-B MHK150008 DS SPK150010-B 8 VCP 173 173 173		0000 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
5 6.No_Defect 848 PPT 383-5 14 CHAPMAN AVE 8/31/2012 13862 1084 1 6.No_Defect 849 40 1 1 13640 Yockey St. 4/14/2004 11616 1162	46 D/S 7425 new 10 VCP 22 18.2 20 MHK150013 MHK150017 US 2797 SPK150011 8 VCP 272 282		0000 0 0 0.000
5 6_No_Defect 849 PPT 3-84-2 3 MORGAN LANE 10/3/2012 14:342 1322	20 D/S 8024 new 8 VCP 13 19.7		0000 0 0 0.00
1 6_No_Defect 850 45 32 13471 Trask Ave. 5/5/2004	MHK150008 MHL150001 DS SPK150012-A 12 VCP 329 329		
5 6_No_Defect 850 PPT 3-84-2 5 ROBERT LANE 10/3/2012 14344 132: 1 6_No_Defect 851 38 24 8330 Trask Ave. 4/14/2004 7690 7690	18 D/S 8022 new 8 VCP 13 20.1 11 MHK150011 MHK150012 DS 766 SPK150018 8 VCP 65 66		000 0 0 0.00
5 6_No_Defect 851 PPT			
5 6_No_Defect 852 PPT Map 1 11 WESTERN AVE EASEMENT 6/14/2012 7128 712	29 CO1080002 CO1080003 U/S 779 SP1080005 6 VCP 35 21.5		0000 UIS MH is CO.
MAP MAGNOLIA	86 MH.1000040 MH.100001 DS 3497 SPL090005 10 VCP 166 167		
	70 MHL160019 MHL160900 D/S 2758 SPL160900 8 VCP 25 21.7 12 MHL090013 MHL090011 US 3326 SPL090009 8 VCP 210 165		0000 0 0 0.00
5 6_No_Defect 854 PPT			0000 0 0 0.00
5 6_No_Defect 855 PPT	Ref DIS 7442 new 24 VCP 25 29 23.4 VCP 20 23.4		
5 6_No_Defect 856 PPT	I1 MHL100004 MHL100005 DS 3285 SPL100004 10 VCP 245 252 41 MHN130006 MHN1300901 DIS 6747 SPN130905 8 VCP 63 24		
1 6_No_Defect 857 50 9 12542 Mabee Cir. 5/19/2004 9568 956	77 MHL110008 MHL110007 US 3293 SPL110007 B VCP 160 151		
5 6 No_Defect 857 PPT 4-81-6 22 CARDINAL CIR 9/28/2012 13647 1364 1 6 No_Defect 858 50 8 12542 Mabee Cir. 5/19/2004 9568 941	46 D/S 7162 new 8 VCP 20 24 3 MHL110008 COL110001 US 3294 SPL110008 8 VCP 130 113		0000 0 0 0.00
	83 M-M090014 M-M090041 U/S 5169 SPM090043 8 PVC 80 24.4 5 M-HL110005 M-HL110015 DS 3295 SPL110009 8 VCP 220 226		0000
MAP CHAPMAN AVE 10/2/2012 14/046 130:	23 D/S 7904 new 12 VCP 18 24.7		
			0 000

	General Pipe	Structural Defect Coding Structural Defect Coding Defect	Construction Features Cons
N O O O O O O O O O O O O O O O O O O O	Dus Sewer 1D ag Sewer 1D ag Sewer 1D bit in the manual (i) (ii) (ii) (ii) (iii)	Crack Fracture Broken Hole Joint Property Fracture Broken Hole Joint Fracture Broken Hole Joint Fracture Hole Joint	O O O O O O O O O O
8 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2		L C M S H L C M S H SV VV SV VV S M L S M L A V H P S LF RP S & 2	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
MAP	MHL110013 MHL110014 DS 3300 SPL110015 8 VCP 225 225	0000	0 0 0.00
1 6_No_Defect 862 50 11 9351 Lenore Dr. 5/19/2004 9575 9580	5 MHO050009 MHO050010 D/S 5564 SPO050024 8 VCP 30 27.4 0 MHL110015 MHL110020 DS 3302 SPL110017 8 VCP 260 261	0000	0 0 0.00
	4 MHQ140041 MHQ140044 D/S 5626 SPQ140050 8 VCP 32 27.8 5 MHL110017 MHL110016 US 3303 SPL110018 8 VCP 190 190	0000	0 0 0.00
5 6_No_Defect 863 PPT	2 U/S 8323 new 8 PVC 30 28.8 1 MHL110017 MHL110018 DS 3304 SPL110019 8 VCP 255 262	0000	0 0 0.00
5 6 No Defect 864 PPT		0000	0 0 000
12762 Magnolia	MHL120033 MHL120032 US 3159 SPL120031 8 VCP 148 150	000	0 0.00
5 6,No_Defect 865 PPT B1 78 JOYZELLE DRIVE 6/15/2012 10113 10384	4 MHL060023A MHL060023 D/S 4671 SPL060902 15 VCP 28 31.2	0000	0 0 000
1 6_No_Defect 866 43 23 APP Ave. 4/23/2004 8355 9354 Ave. 4/23/2004 8055 8056 8056 8056 8056 8056 8056 8056	MHL120034 MHL120033 US 3160 SPL120032 8 VCP 185 183 5 D/S 6764 new 12 VCP 52 31.6	0000	
12912 Magnolia	MHL120037 MHL130012 DS 3164 SPL120036 8 VCP 303 300	000	0 0 0.00
5 6_No_Defect 867 PPT 4-B1-6 14 CARDINAL CIR 10/2/2012 13651 13644	4 D/S 7165 new 8 VCP 28 31.8	0000	0 0 0.00
	P. MHL120018 MHL120017 US 2972 SPL120038 8 VCP 133 136		
5 6_No_Defect 868 PPT 3-B4-2 16 BLVD 9/24/2012 12457 12458 1 6_No_Defect 869 PZ 56 16 1304/2 Casa Linda 3/22/2004 12099 12090	8 D/S 7263 new 12 VCP 31 33.5 D MHL130017 MHL130018 DS 2526 SPL130008 8 VCP 175 178	0000	0 0 0.00
5 6_No_Defect 869 PPT	1 D/S 7846 new 8 VCP 20 34.5 1 MHL130018 MHL130019 DS 2527 SPL130009 8 VCP 256 257	0000	0 0 0.00
5 6_No_Defect 870 PPT 3-2 8 WAKEFIELD AVE EASEMENT 7/24/2012 13167 13164	4 MHP060001 MHP060007 U/S 5617 SPP060002 8 VCP 34 35.6	0000	0 0 000
MAP	3 MHL130023 MHL130022 US 2688 SPL130013 8 VCP 1110 161		
1 6_No_Defect 872 26 25 Alley By Central 3/29/2004 11515 11516	5 MHQ150031 MHQ150002 D/S 7601 SPQ150031 8 VCP 35 38.4 6 MHL130024 MHL130025 D/S 2690 SPL130015 8 VCP 185 193	0000	0 0 0.00
9141 Garden Grove	MHK140900 MHK140019 U/S 2440 SPK140900 8 PVC 38 38.9 MHL130008 MHL130009 DS 3143 SPL130021 8 VCP 35 36	0000	0 0 000
5 6_No_Defect 873 PPT	1 U/S 7864 new 8 VCP 31 40.1	0000	0 0 0.00 1 1 UIS MH is CO
1 6_No_Defect 874 44 3 x Blvd. 4/23/2004 8498 8493	MHL130011 MHL130010 US 3153 SPL130023 8 VCP 3 345 345		
5 6_No_Defect 874 PPT 3-B3-1 22 AVENUE 8/2/2012 12588 12587	7 MHP110023 MHP110022 U/S 5089 SPP110014 6 Tile 50 44.7 MHL130011 MHL130012 DS 3158 SPL130024 8 VCP 349 350	0000	0 0 000
MAP MAGNOLIA	4 MHL170001 MHL170002 D/S 2296 SPL170016 8 VCP 40 46.1	0000	
13112 Magnolia	3 MHL130049 MHL130030 US 3089 SPL130027 8 VCP 65 61	0000	0 0.00
5 6_No_Defect 876 PPT 3-83-5 15 CHAPMAN AVE 8/31/2012 13861 13862	2 D/S 7424 new 10 VCP 50 46.8	0000	0 0 0.00 Same inspection Map 2 July 1 #4. Use this & delete other one.
	4 MHL130032 MHL130031 US 3090 SPL130030 8 VCP 83 81		
MAP		0000	0 0 0.00
MAP	8 MHL130033 MHL130034 DS 3092 SPL130031 8 VCP 187 187		
5 6_No_Defect 878 PPT 4-82-1 32 RANCHERO WY 9/4/2012 14130 14131 1 6_No_Defect 879 29 13 13137 Femdale Dr. 3/29/2004 11558 11559	1 DIS 7781 new 8 VCP 56 55 9 MHL130034 MHL130035 DS 3093 SPL130032 8 VCP 211 211	0000	0 0 0.00
5 6_No_Defect 879 PPT	1 MHL150034 MHL150043 D/S 2475 SPL150023 8 VCP 60 56.2	0000	0 0 0.00
MAP	0 MHL130035 MHL130036 DS 3094 SPL130033 8 VCP 100 97		
1 6_No_Defect 881 31 2 8881 Larson Ave. 3/30/2004 11567 11086	7 MHO050011 MH0060026 U/S 5567 SPO060004 8 VCP 55 56.4 6 MHL130039 COL130001 U/S 3103 SPL130035 8 VCP 130 130		0 0 000
13132 Magnolia	3 MHL130043 MHL130042 US 2956 SPL130038 8 VCP 130 134	0000	0 0 000
5 6 No Defect 882 PPT 4 17 COVEY COURT 6/25/2012 10379 10380	0 MHM090037 MHM090038 D/S 5165 SPM090039 8 VCP 65 60	0000	0 0 0 000
13161 Magnolia	6 MHL130044 MHL130045 DS 2959 SPL130041 8 VCP 336 336		0 0.00
	6 MHT120028 MHT120029 D/S 6533 SPT120033 10 PVC 42 61.5 MHL140018 MHL140019 DS SPL140004 8 VCP 38 38	0000	0 0 0.00
5 6 No Defect 884 PPT 2-1-4 8 EMERSON AVE 7/17/2012 11387 11284	4 MHN130018 MHN130019 D/S 2778 SPN130921 6 VCP 60 62.4	0000	
5 6_No_Defect 885 PPT	MHL140020 MHL140021 DS SPL140006 8 VCP 373 373 WHK150901 MHK150900 U/S 2444 SPK150900 8 PVC 61 62.5		0 0.00 0 0 0.00 0 0 0 0 0 0 0 0 0 0 0 0
MAP	B MHL140023 MHL140024 DS 2701 SPL140009 8 VCP 202 202		0 0.00 0 0.00 Same inspection Map 3-B2-4 # 12.
5 6_No_Defect 886 PPT 3-B3-3 15 ORA STREET 8/23/2012 12596 12591 1 6_No_Defect 887 30 8 9200 Imperial 3/30/2004 11540 11538 1 4 1 2 1 1 1 1 1 1 2 1 1 2 1 1 3 3 2 2 1 2 2 1 3 <td< td=""><td>1 MHP090013 MHP090030 U/S 5001 SPP090025 6 VCP 70 63 5 MHL140031 MHL140029 U/S 2706 SPL140014 8 VCP 145 145 4 MHL140024 MHL140</td><td></td><td>0 0 0.00 Use his & delete other one.</td></td<>	1 MHP090013 MHP090030 U/S 5001 SPP090025 6 VCP 70 63 5 MHL140031 MHL140029 U/S 2706 SPL140014 8 VCP 145 145 4 MHL140024 MHL140		0 0 0.00 Use his & delete other one.
	7 MHL060038 MHL060038A D/S 5173 SPL060041A 15 VCP 63 66.5 1 MHL140031 MHL140032 DS 2708 SPL140016 8 VCP 136 137	0000	0 0 0.00
	MHP140017 MHP140018 D/S 4822 SPP140017 8 VCP 260 67.1	0000	0 0 000
MAD	2 MHL140034 MHL140033 US 2710 SPL140018 8 VCP 255 254 6 MHN150009 MHN150008 US 2190 SPN150005 8 VCP 67 68.1	0000	0 0.00 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0

		General	Pipe		Structural Defect Codin	lure lure Bating air	Operational and Maintenance	D Construction Features	sous eatures Aband.	pauce
0. 0. D No. D No. Cd? (Y)			Camera er ID wer ID.	p ((t)		rformed Illapsed Illapsed Inface Inface Ining Fail Inin	मिवा । प्र	Manarities And Andrews	e scellane	d Aband
ng n	Location	Existing MH ID Previous MH ID	ng Sew ng Sew in)		Fracture Broken Hole Jo	pint D X WL O N X	Deposits Roots (R)	Infiltration Obstacles Vermin 5 2 2 5 Tap (Lateral) Line Material	M Mis	Gentified
Phass Contr Rank Revel DVD	reet Name CCTV Dat	ate Start End Start End	Direct Existi Previc	GIS G	C M S H SV VV SV VV S M L	SMLAVHP S LF RP S LF RP S	gg AE AE Other 65 AGS B % L % Z % B L J C B <td< td=""><td>Under Under Under</td><td>L Z SA CU MC L SE</td><td>20 20 20 Comments Recommendations</td></td<>	Under	L Z SA CU MC L SE	20 20 20 Comments Recommendations
	mperial Ave. 3/29/2004 LDINE 8/9/2007	04 11572 11084 MHL140008 COL140001 7 9674 9884 CON070003 MHN070023	1 US 2948 SPL140033 8 VCP 3 U/S 6126 SPN070023 8 VCP	120 119 125 127		0 0	0.00	0 0.00		
5 6_No_Defect 890 PPT 3-82-1 6 NEWH	HOPE	2 12503 12505 MHQ120037 MHQ120038	9 D/S 4121 SPQ120027 8 VCP	70 70.9		0000	0.50	2000 0 0 0 0 0		
	Magnolia 4/26/2004			368 371		0000 8 8	0.00	0000 0 0 0.00		
				3,1			0.00			U/S MHO190011 corrected to COO190002. D/S MHO190014
3 6_No_Defect 891 PPT 4 4 RHON	IDA 4/4/2007	7 6779 6829 COO190002 MHO190013	3 D/S 89 SPO190007 8 VCP	130 133		0 0	0.00	0 0 0.00		corrected to MHO190013.
		2 14001 14002	D/S 7622 new 12 VCP	78 71.9		0000 0 0	0.00	0000 0 0 0.00		
1 6_No_Defect 892 44 16 Ave.		04 11588 11589 MHL140013 MHL140014 07 11438 10923 COQ160003 MHQ160004		157 159 270 263		0 0	0.00	0 0.00		
MAP				2.0 200						
5 6_No_Defect 892 PPT 3-B3-4 4 TRASI 3 6_No_Defect 893 PPT 52 21 CARDI		2 10877 14001 COR150002 MHR150008	D/S 7621 new 12 VCP 8 D/S SPR150007 8 VCP	88 74.9 85 85		0000 0 0	0.00	0000 0 0 0.00		
MAP										
1 6 No Defect 904 30 10 Track	Y DRIVE 9/6/2012 Ave. 3/30/2004	2 7474 7475 MHS160009 MHS160010 14 11580 11581 MHL150002 MHL150003 7 7018 6637 COT130002 MHT130012	0 D/S 457 SPS160011 8 VCP 3 DS 2848 SPL150016 12 VCP	70 77 330 330		0000 0 0	0.00	0000 0 0 0.00		
3 6_No_Defect 894 PPT 22 12 LAIRD		7 7018 6637 COT130002 MHT130012	2 D/S 285 SPT130004 8 VCP	140 147		0 0	0.00	0 0 0.00 1		
5 6_No_Defect 894 PPT 3-B4-1 12 STREE		2 14606 14607	D/S 8369 new 8 PVC	78 79.7		0000 0 0	0.00	0000 0 0 0.00		
1 6_No_Defect 895 30 20 Trask a 3 6_No_Defect 895 GGSD 29 1020 SANTA		04 11581 11591 MHL150003 MHL150004 05 7966 7965 MHD080004 MHD080003		327 328 298 294		0	0.00	0 0.00		No Defect
MAP				230 234						
		12 6649 6648 MHP150005 MHP140016 4 11596 11595 MHL150030 MHL150029		245 79.8 235 243		0000 0 0	0.00	0000 0 0 0.00		
	A CATALINA 1/17/2005			160 160			0.00	0 0 0.00		No Defect
5 6_No_Defect 896 PPT 3-B5 28 EUCLI	ID STREET 9/5/2012	2 11743 11742 MHP120031 MHP110002	2 U/S 4397 SPP110026 8 VCP	85 84.6		0000 0 0	0.00	0000 0 0 0.00		
1 6_No_Defect 897 46 18 9862.0	Catherine Ave. 5/7/2004	4 9492 9495 MHM100009 MHM100013	3 DS 3579 SPM100013 8 VCP	210 203		0	0.00	0 0.00		
3 6_No_Defect 897 GGSD D 1 1024 SANT/	A BARBARA 1/9/2005	5 8609 7841 MHD080007 MHD080006	6 U/S 1944 SPD080026 8 VCP	289 287		0 0	0.00	0 0 0.00		
5 6_No_Defect 897 PPT 4-B1-1 12 BUEN.	A STREET 9/4/2012	2 7446 7447 MHS170014 MHS170013	3 U/S 428 SPS170003 8 VCP	88 88.5		0000 0 0	0.00	0000 0 0 0.00		
1 6_No_Defect 898 47 18 12424	Lambert Cir. 5/11/2004	9543 9545 MHM100036 MHM100038	8 DS 3275 SPM100039 8 VCP	290 294		0	0.00	0 0.00		
3 6_No_Defect 898 GGSD 29 1023 SANTA	A BARBARA 1/19/2005	05 8610 8609 MHD080008 MHD080007	7 U/S 1595 SPD080009 8 VCP	279 278		0 0	0.00	0 0 0.00		No Defect
5 6_No_Defect 898 PPT 3-B4-2 1 TRASI	K AVE 10/3/2012	2 11189 11074 MHO150003 CON150001	1 U/S 2282 SPN150001 8 VCP	80 88.5		0000 0 0	0.00	0000 0 0 0.00		U/S MH is CO
1 6_No_Defect 899 47 23 12452	Lambert Cir. 5/12/2004	9549 9548 MHM100042 MHM10004	1 US 3280 SPM100044 8 VCP	120 119		0	0.00	0 0.00		
3 6_No_Defect 899 GGSD 29 1023 SANTA	A BARBARA 1/19/2005	95 8611 8610 MHD080009 MHD080008	B U/S 1596 SPD080010 8 VCP	289 288		0 0	0.00	0 0 0.00		No Defect
5 6_No_Defect 899 PPT 3-B3-2 22 NEWI-STREE	HOPE ET 8/8/2012	2 12501 12500 MHQ120035 MHQ120034	4 U/S 4118 SPQ120024 8 VCP	90 89.8		0000 0 0	0.00	0000 0 0 0.00		
1 6_No_Defect 900 44 25 St.	Brookhurst 4/27/2004	04 10693 10697 MHM110047 MHM110048	8 DS 2628 SPM110001 8 VCP	330 324		0	0.00	0 0.00		
3 6_No_Defect 900 GGSD 30 1044 Y BARTI		95 8613 8612 MHD080011 MHD080010	0 U/S 1598 SPD080012 8 VCP	115 117		0 0	0.00	0 0 0.00		
Mag 2 MAGN 5 6_No_Defect 900 PPT B1 89 STRE	ET 6/15/2012	2 10375 10374 MHK060043 MHK060044	4 D/S 5161 SPK060043 8 VCP	72 91.7		0000		0000 0 0 0.00		
1 6_No_Defect 901 44 26 St.	Brookhurst 4/27/2004			50 52		0	0.00	0 0.00		Bad lighting. Unable to see any
3 6_No_Defect 901 GGSD 31 1045 Y BARTI		5 8614 8613 MHD080012 MHD080011	1 U/S 1554 SPD080013 8 VCP	309 306		0 0	0.00	0 0 0.00		defects. Redo inspection
5 6_No_Defect 901 PPT 3-B2-1 8 NEWH	ET 8/7/2012	2 12502 12501 MHQ120036 MHQ120038		100 92.2		0000 0 0	0.00	0000 0 0 0.00		
1 6_No_Defect 902 28 16 Wy.	3/24/2004	04 10699 10698 MHM110050 MHM110048		250 316		0	0.00	0 0.00		Bad lighting. Unable to see any
3 6_No_Defect 902 GGSD 31 1045 Y BARTI	LETT 2/2/2005	5 8624 8614 MHD080025 MHD080012	2 U/S 1555 SPD080014 8 VCP	350 348		0 0	0.00	0 0 0.00		defects. Redo inspection
5 6_No_Defect 902 PPT 4-B1-4 20 HURLI	EY AVE 9/12/2012	2 6795 6793 MHP190003 MHP190001	1 U/S 58 SPP190001 8 VCP	109 95.9		0000 0 0	0.00	0000 0 0 0.00		
1 6.No Defect 903 46 9 9872 C 3 6.No Defect 903 GGSD 31 1053 Y HOLL		4 9478 9477 MHM110002 MHM11000: 5 8627 8626 MHD090003 MHD090004		160 158 350 346		0 0	0.00	0 0.00		Bad lighting. Unable to see any defects. Redo inspection
MAD NEW	4OPE									redu inspection
5 6_No_Defect 903 PPT 3-B2-1 2 STREE	ET 8/7/2012	2 12508 12509 MHQ120044 MHQ120045 4 9478 9481 MHM110002 MHM110003		95 95.7 190 183		0000 0 0	0.00	0000 0 0 0.00		
3 6_No_Defect 904 GGSD 31 1047 Y BARTI			5 U/S 1556 SPD080024 10 VCP	258 255			0.00	0 0 0.00		Bad lighting. Unable to see any defects. Redo inspection
5 6_No_Defect 904 PPT	/ 0.000.00	2 6791 6777 MHM190016 COM190001	1 IUS 54 SPM90002 8 VCD	97 96.7		0000		0000 0 0 0.00		U/S MH Clean Out
	9/28/2012 ampson Ave. 5/10/2004			50 48		0000 0 0	0.00	0 000		O/O MIT CIBILI OUL
3 6_No_Defect 905 GGSD 31 1055 Y FAIRC		5 7851 7847 MHD090006 MHD090001		258 255		0 0	0.00	0 0 0.00		Bad lighting. Unable to see any defects. Redo inspection
	EN GROVE	2 14624 12442	D/S 9396 0 1/05	102 00.3		2000		0000 0 0 000		
	9/4/2012 ampson Ave. 5/10/2004	2 14621 12442 04 9481 9484 MHM110005 MHM110000	D/S 8386 new 8 VCP 8 DS 3256 SPM110009 8 VCP	102 99.3 225 283		0000 0 0	0.00	0000 0 0 0.00	+++++	
3 6_No_Defect 906 GGSD 31 1054 Y VANG	UARD 2/8/2005	5 7851 8629 MHD090006 MHD090007	7 U/S 1949 SPD090024 8 VCP	426 422		0 0	0.00	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0		No Defect
12552	RT STREET 10/1/2012 Oceanbreeze		D/S 8321 new 8 VCP	100 100.4		0000 0 0	0.00	0000 0 0 0.00	+++++	
1 6_No_Defect 907 47 5 Dr. 3 6_No_Defect 907 GGSD 31 1050 Y BARTI	5/10/2004			220 221 334 335			0.00	0 0.00		Bad lighting. Unable to see any
3 6_No_Defect 907 GGSD 31 1050 Y BARTI	LEII 2/3/2005	5 8634 8628 MHD090012 MHD090008	5 U/S 1557 SPD090005 10 VCP	334 335		0 0	0.00	0 0 0.00		defects. Redo inspection
5 6_No_Defect 907 PPT 4-B2-3 4 COMC		12 6794 6795 MHP190002 MHP190003 04 9516 9514 MHM110024 MHM110022		89 102 122 145		0000 0 0	0.00	0000 0 0 0.00		
3 6_No_Defect 908 GGSD 31 1050 Y BARTI				350 347		0 0	0.00	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0		Bad lighting. Unable to see any defects. Redo inspection
5 6_No_Defect 908 PPT 2-1-2 4 CHAP	MAN AVE 7/10/2012	2 13865 9645	D/S 7441 new 24 VCP	102 102.4		0000 0 0	0.00	0000 0 0 0.00		
		4 12045 12044 MHM110043 MHM110042		173 171		0	0.00	0 0.00		MSA = High water level. Unable to
3 6_No_Defect 909 GGSD 31 1051 Y BARTI	LETT 2/3/2005	5 8636 8635 MHD090014 MHD090013	3 U/S 1711 SPD090012 10 VCP	350 131			0.00	0 0 0.00	1 1	see any defects Redo inspection

	General	Structural Defect Coding	0 Construction Features 0 0 0 0 0
	Pipe	ed e	Index (Second Second Sec
O C C C C C C C C C C C C C C C C C C C	D Previous MH ID O O C C Sewer I O O O O O O O O O O O O O O O O O O	Crack Fracture Broken Hole Joint Green G	C T T T T T T T T T
A Property of Action 1999 County Name Co	in i	C	D Fine (F) Tap (T) Medium (M) Ball (B) D Other D S S S S S S S S S
	5 MHK140902 MHK140020 D/S 2443 SPK140903 8 Tile 103 104.3		0 0 0 0.00 1 1 0 0.00 1 1 0 0.00 0 0 0.00 1 1 0 0.00 0 0 0.00 0 0 0.00 0 0 0.00 0 0 0.00 0 0 0.00 0 0 0.00 0 0 0.00 0 0 0.00 0 0 0.00 0 0 0.00 0 0 0.00 0 0 0.00 0 0 0.00 0 0 0.00 0 0 0.00 0 0.00 0 0.00 0 0 0.00 0 0 0.00 0 0 0.00 0 0 0.00 0 0 0.00 0 0 0.00 0 0.00 0 0.00 0 0 0.00 0 0 0.00 0 0 0.00 0 0 0.00 0 0 0.00 0 0 0.00
	D MHM110045 MHM110046 DS 3119 SPM110052 8 VCP 259 258 5 MHD080015 MHD090014 U/S 1926 SPD090013 12 VCP 215 255		0 0.00 0 0.00 0 0 0.00 0 0 0 0 0 0 0 0
5 6_No_Defect 910 PPT 2-1-5 8 BELFAST DR 7/19/2012 12050 1411 1 6_No_Defect 911 17 13 12691 Abbott St. 3/5/2004 8460 844	4 US 7863 new 8 VCP 77 106.2 7 MHM110046 MHM120028 DS 3120 SPM110053 8 VCP 259 258	0000	0 0 0 0.00 1 1 U/S MH is CO
	5 MHD100006 MHD100005 U/S 1540 SPD100003 8 VCP 370 370 370		
	1 MHO230026 MHO230023 U/S 18 SPO230012 8 VCP 123 106.8	0000	0 0 0 0.00
	3 MHM120006 COM120001 US 2649 SPM120006 8 VCP 95 96 5 MHD100007 MHD100006 U/S 1541 SPD100004 8 VCP 370 367		0 0.00 0 0 0.00 0 0 0 0 0 0 0 0 0 0 0 0
	3 MHL030007 MHL030006 U/S 4521 SPL030014 8 VCP 90 107.1	0000	0 0000 0 0 0 0 0 0 0
	MHM120016 MHM120017 DS 2659 SPM120016 8 VCP 230 245		
MAP	3 MHR140022 MHR140023 DIS 6523 SPR140012 8 VCP 110 108.9		
1 6_No_Defect 914 25 22 12792 Village Rd. 3/19/2004 12033 1203	3 MHN100022 MHN1 M0025 UIS 8925 SFR M0012 6 VCP 110 106.9 2 MHN120023 MHN120023 MHN120023 MHN120023 MHN120023 MHN120023 B VCP 10 26 3 MHN1200018 MHN1200018 UIS 1749 SPD100017 10 VCP 285 283		0 0 0 0.00
MAP			
1 6_No_Defect 915 19 12 9561 Stanford Ave. 3/8/2004 8451 844	38 MHK150024 MHK150023 D/S 3027 SPK150027 8 VCP 110 110.3 7 MHM120032 MHM120032 US 3106 SPM120028 8 VCP 190 147	0000	
	9 MHD100020 MHD100019 U/S 1750 SPD100018 10 VCP 285 281		0 0 0.00
	MHK150016 MHK150024 D/S 3026 SPK150028 8 VCP 107 112	0000	
1 6,No_Defect 916 19 13 9600 Stanford Ave. 3/8/2004 8447 845 3 6,No_Defect 916 GGSD 35 1151 MANLEY 5/2/2005 7920 792 7	2 MHM120028 MHM120033 US 3107 SPM120029 8 VCP 145 195 1 MHD100020 MHD100021 D/S 1751 SPD100019 10 VCP 285 284		0 0.00 0 0.00 0 0 0.00 0 0 0 0 0 0 0 0
	0 MHL150041 MHL150042 D/S 2482 SPL150030 8 VCP 53 112	0000	0 0 0 0.00
	D MHM120032 MHM120031 US 3110 SPM120032 8 VCP 178 179 2 MHD100021 MHD100022 D/S 1752 SPD100020 10 VCP 199 196		0 0.00
	9 MHL150040 MHL150041 D/S 2481 SPL150029 8 VCP 124 114.5	0000	0 0 0 0.00
1 6.No_Defect 918 32 11 8841 Garden Grove Blvd. 4/1/2004 3 6.No_Defect 918 GGSD 37 1186 TRINETTE 5/23/2005 7923 780	MHM130003 MHM130004 DS SPM130002 10 VCP 331 331 1 MHD100023 MHE100006 IUS 1936 SPD100027 8 VCP 361 359		
MAP			
5 6,No_Defect 918 PPT 4-81-5 23 CORK ST 9/19/2012 10569 105: 1 6,No_Defect 919 32 12 Blvd. 4/1/2004	0 MHM170020 MHM170021 D/S 2217 SPM170016 8 VCP 100 116 MHM130004 MHM130004 D/S SPM130003 10 VCP 328 328		
3 6_No_Defect 919 GGSD 37 1186 TRINETTE 5/23/2005 7924 792	3 MHD100024 MHD100023 U/S 1563 SPD100022 8 VCP 350 349		
	1 MHR140023 MHR140006 D/S 6530 SPR140013 8 VCP 110 118.9 5 MHM130023 MHM130022 US 2330 SPM130008 6 VCP 229 234	0000	
3 6_No_Defect 920 GGSD 37 1187 TRINETTE 5/23/2005 7924 792	5 MHD100024 MHD110001 D/S 1564 SPD100023 8 VCP 350 346		0 0 0.00
	5 MHK110042 MHK110031 D/S 3244 SPK110020 8 Tile 10 119.2 11 MHM130025 MHM130026 DS 2333 SPM130011 6 VCP 175 174	0000	
	5 MHD110001 MHD110002 D/S 1565 SPD110003 8 VCP 358 355		0 0 000
	B MHK160022 MHK160023 U/S 650 SPK160025 B VCP 120 120.1 0 MHM130031 MHM140003 DS 2825 SPM130017 B VCP 315 319		
	3 MHD110005 MHD110004 U/S 1566 SPD110006 8 VCP 342 349		0 0 0.00
	3 MHO190009 MHO190010 D/S 86 SPO190004 8 VCP 121 122	0000	0 0 0 000
1 6,No_Defect 923 36 21 Galway St./Belfast 4/7/2004 10774 1078 3 6,No_Defect 923 GGSD 37 1351 STANFORD 6/6/2005 7810 780	6 MHM130036 MHM130017 DS 2679 SPM130022 8 VCP 26 23 9 MHD110008 MHE110002 U/S 1431 SPE110034 8 VCP 350 346		0 0.00
9832 G.Grove Blvd./	7 MHK140901 MHK140902 D/S 2442 SPK140902 8 Tile 122 123.6	0000	0 0 0 0.00
1 6_No_Defect 924 22 27 Alley 3/15/2004 10777 1100 3 6_No_Defect 924 GSD 37 1352 STANFORD 6/6/2005 7932 781	11 MHM130039 COM130002 US 2343 SPM130025 6 VCP 20 24 0 MHD110008 MHD110008 US 1938 SPD110024 8 VCP 350 348		0 0.00
	0 MHT090004 MHT090005 D/S 3930 SPT090022 8 VCP 125 123.8	0000	0 0 0 0.00
	9 MHM130013 MHM130014 DS 2842 SPM130037 12 VCP 50 52 3 MHD110011 MHD110010 US 1571 SPD110011 8 VCP 154 153		0 0.00
	77 MHQ120035 MHQ120032 U/S 4758 SPQ120036 8 VCP 125 123.9	0000	0 0 0 0.00
1 6_No_Defect 926 28 11 13170 Gelway St. 3/24/2004 12051 1205 3 6_No_Defect 926 GGSD 37 1353 STANFORD 6/6/2005 7935 793	12 MHM130021 MHM140005 DS 2844 SPM130039 12 VCP 330 330 4 MHD110012 MHD110011 U/S 1572 SPD110012 8 VCP 265 264		
5 6_No_Defect 926 PPT		0000	0 0 0 0.00
1 6_No_Defect 927 26 12 9381 Crosby 3/22/2004 12055 120 3 6_No_Defect 927 GSSD 38 1372 PARK 6/8/2005 8647 781	4 MHM130043 MHM130042 US 2498 SPM130040 8 VCP 303 306 2 MHD110017 MHE110004 U/S 1433 SPD110001 8 VCP 350 349		0 0.00 0 0.00 0 0 0.00 0 0 0 0 0 0 0 0
	8 MHL150039 MHL150040 D/S 2480 SPL150028 8 VCP 119 128.2		0 0 0 0.00
1 6_No_Defect 928 26 7 1320 Vener 3/19/2004 12057 1205	8 MHM130045 MHM130046 DS 2500 SPM130042 8 VCP 150 151 3 MHD110018 MHD110017 U/S 1575 SPD110016 8 VCP 204 346		
5 6_No_Defect 928 PPT 3-B3-3 14 SAFFORD STREET 8/27/2012 11472 1147	0 MHQ140029 MHQ140027 U/S 3823 SPQ140008 8 VCP 130 128.9		
1 6_No_Defect 929 28 9 Galway St. 3/24/2004 10756 1208	0 MHM/30017 MHM/30018 DS 2846 SPM/30052 12 VCP 175 185 9 MHD110019 MHD110018 U/S 2129 SPD110017 8 VCP 350 347		0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
MAP	8 MHQ110026 CQQ110001 U/S 4131 SPQ110007 8 VCP 125 129		
1 6_No_Defect 930 43 21 9671 Central Ave. 4/22/2004	MHM140003-RMHM140004-R DS SPM140003-R 8 VCP 391 391		
MAP BROOKHURST	7 MHD110023 MHE110008 U/S 1439 SPE110039 8 VCP 350 351		
5 6_No_Defect 930 PPT 4-B1-2 18 STREET 9/7/2012 6892 756	2 MHN180041 MHN190011 D/S 325 SPN190006 10 VCP 115 130.1		0 0 0 0.00

	General Pipe	Structural Delect Coding Structural Delect Coding Delect Coding Delect Coding Delect Coding	Constituction Features 9 0 0 Constituction Features 9 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
to o o o o o o o o o o o o o o o o o o	Crange (ft) 1 1 1 1 1 1 1 1 1		Sept
Section Sect	Start End G G S S S S S S S S S S S S S S S S S	S H L C M S H SV W SV W S M L S M L A V H P S LF RP S Q P P	AGS B W L W Z W B L J C B L J
3 6,No_Defect 931 GGSD 38 1377 TUNSTALL 6/13/2005 7944 7943	9 MHD110025 MHD110024 UIS 1578 SPD110020 8 VCP 173 233 9 MHD110020 DIS 2216 SPM170015 8 VCP 129 130.4	0	
1 6_No_Defect 932 24 12 13412 Donegal 3/17/2004 12008 12013	MeMINIA0025 MeNINIA0032 DIS 2718 SPMI40009 8 VCP 250 258 MeMINIA00326 MeNINIA00325 UIS 1579 SPDI10021 8 VCP 166 166	0 0	0 0.00 0 0 0.00 0 0 0.00 0 0 0.00 0 0 0.00 0 0 0.00 0 0 0 0.00 0 0 0 0.00 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
1 6_No_Defect 933 24 13 13451 Donegal 3/17/2004 12013 12014	P. MrHN080045 MrHN080046 D/S 4890 SPN080036 8 VCP 350 130.5 4 MrHN140032 MrHN150004 D/S 2724 SPM140015 8 VCP 150 155	0000 o	
MAP	MHD110027 MHD110026 UIS 1580 SPD110022 8 VCP 360 356	0	0 0.00
1 6_No_Defect 934 24 14 9571 Russell 3/17/2004 12016 12019	5 MHM140034 MHM140033 US 2725 SPM140016 8 VCP 215 216 6 MHD120004 MHD120005 D/S 1662 SPD120017 8 VCP 261 257	0	0 0.00
5 6, No_Defect 934 PPT MAP 4-B2-2 ROXEY DRIVE 9/19/2012 14165 7441 1 6, No_Defect 935 25 3 9792 Central Ave. 3/17/2004 10768 107/1 3 6, No_Defect 935 PPT 52 3 ANTHONY AVE 12/22/2007 7948 7949	DIS 7853 New 8 VCP 129 131.9 0 MHM130033 MHM140001 US 2347 SPM140023 6 VCP 150 130 1 MHD120007 MHD120008 DIS 1798 SPD120001 12 VCP 295 296	0000 0	
5 6, No_Defect 935 PPT MAP 4-B2-2 44 TREVA CIRCLE 9/10/2012 11052 1105	1 MHL150034 MHL150033 U/S 2474 SPL150022 8 VCP 135 132.8	0000 0	0 0.00
5 6,No_Defect 936 PPT		0000 0	0 0.00
	9 M=MH40008 M=MH40007 UIS 2508 SPM140031 8 VCP 150 152 MHD120011 MHD120021 DIS 1715 SPD120013 12 VCP 259 260	0	0 0.00 0.00 0 0.00 0.00 0.00 0 0.00 0.00 0 0.00 0 0.00 0 0.00 0 0.00 0 0.00 0 0.00 0 0.00 0 0.00 0 0.00 0 0.00 0 0.00 0 0.00 0 0.00 0 0.00 0 0.00 0 0.00 0 0.00 0 0.
1 6_No_Defect 938 24 20 13321 Shapell 3/18/2004 12073 12075	6 MHN180013 MHN180012 U/S 139 SPN180002 8 VCP 133 135 5 MHM140010 MHM140012 DS 2511 SPM140034 8 VCP 258 260	0000 0	0 0.00 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
MAP PARTRIDGE	0 MHD120021 MHE120002 D/S 1792 SPE120025 12 VCP 225 222	0	0 0.00
	9 DIS 8371 new 8 PVC 135 136 7 MeM140012 MeM140014 DS 2513 SPM140036 8 VCP 258 258 8 MeE080003 MeE080002 UIS 1260 SPE080009 8 VCP 350 354		0 0.000
5 6_No_Defect 939 PPT		0000 0	0 0.00
SANTA BARBARA	9 MHM140014 MHM140016 DS 2515 SPM140038 8 VCP 353 255		0 0.00 0 0 0.00 0 0 0.00 0 0 0.00 0 0 0.00 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
	2 MHT120011 COT120003 UIS 5438 SPT120003 8 VCP 150 138.3 7 MHM150005 MHM150006 DIS 2874 SPM150020 18 VCP 270 277	0000 o	0 0.00 0 0 0.00 U/S MH is CO
3 6_No_Defect 941 GGSD 34 1126 Y BAILEY ALLEY 4/13/2005 8893 8892	2 MHE080017 MHE080016 U/S 1334 SPE080020 8 VCP 172 172	0	
1 6_No_Defect 942 3 6 12091 Nutwood St. 2/5/2004 11158 11156	9 MNW24033 MNW24034 DS 2577 SPN090003 8 VCP 34 31	0000 0	0 0.00
MAP	1 MH-E0800221 MH-E080022 D/S 1737 SPE080023 8 VCP 410 322 322 3 MH-L150038 MH-L150037 U/S 2478 SPL150026 8 VCP 148 144.6	0	Same Inspection Map 4-B2-2 # 33.
1 6,No_Defect 943 1 13 12031 Faye Ave. 2/4/2004 11272 1107:	3 MNW23015 CNW23913 US 2554 SPN090013 8 VCP 205 88		Cap ped ped ped
	MHE080022 MHE080023 D/S 1338 SPE080024 8 VCP 163 160	0	
1 6_No_Defect 944 3 23 10371 Mahalo Wy. 2/6/2004 11267 11268	5 MHQ140031 MHQ140032 D/S 3827 SPQ140012 8 VCP 160 149 8 NNW14044 MNW14045 DS 2552 SPN100029 8 VCP 123 259	0000 0	0 0.00 0 0 0.00 0 0 0.00 0 0 0.00 0 0 0.00 0 0 0.00 0 0 0.00 0 0 0.00 0 0 0 0.00 0 0 0 0.00 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
MAP	5 MHE080022 MHE090011 U/S 1337 SPE090015 8 VCP 134 133		0 0.00
	6 MHQ210016 MHQ210017 D/S 394 SPQ210017 8 VCP 162 154 0 MNW14045 MNW13033 DS 2921 SPN100032 8 VCP 50 258	0000 0	0 0.00 0 0 0.00 0 0 0.00
3 6_No_Defect 945 GGSD 29 1022 SANTA CATALINA 1/18/2005 7836 7837	7 MHE080024 MHD080001 D/S 1448 SPD080002 8 VCP 298 295		0 0.00 No Defect
12551 Kengsington	6 MHQ220025 MHQ220026 D/S 7 SPQ220014 8 VCP 132 154.4 5 MHN110005 MHN110000 US 2541 SPN110009 8 VCP 215 252	0000 0	0 0.00
3 6_No_Defect 946 GGSD 35 1137 BELGRAVE ALLEY 4/21/2005 8903 8902	2 MHE090009 MHE090008 U/S 1395 SPE090032 8 VCP 192 189	0	
12551 Kengsington	2 MHR140021 MHR140022 D/S 6522 SPR140011 8 VCP 150 155.2	0000 0	0 0.00
1 6_No_Defect 947 5 17 Ln. 2/10/2004 11257 11258	8 MHN110005 MHN110006 DS 2543 SPN110011 8 VCP 20 22 7 MHE090020 MHE090021 D/S 1619 SPE090008 8 VCP 310 130	0	0 0.00
	P. MHK160025 MHK160040 D/S 669 SPK160039 8 VCP 156 155.7 0 MHNN10011 MHN110008 US 2545 SPN10013 8 VCP 245 255	0000 0	0 0.00
VALLEY VIEW	0 MiNN110011 MiNN110018 US 2545 SPN110013 8 VCP 245 255 1 MHE090021 MHE090022 D/S 1740 SPE090034 10 VCP 365 338		0 0.00
	9 MHR100016 MHR100015 U/S 6170 SPR100043 8 VCP 160 156.1 3 MHN110011 U/S 2548 SPN110016 8 VCP 3 190 182	0000 0	
3 6_No_Defect 949 PPT 50 37 BELGRAVE AVE 12/21/2007 7857 7880) MHE090030 MHE090041 D/S 1796 SPE090041 12 VCP 260 265	0	0 0.00
12666 Brookhurst	6 MHO110050 MHO110048 DIS 6583 SPO110029 10 VCP 155 158.1 5 MHN110032 MHN110031 US 2630 SPN110038 8 VCP 120 122	0000 0	0 0.00
June	MHE090037 MHE090042 D/S 1527 SPE090047 8 VCP 328 204	0	0 0.00 MSA - High water. Bad lighting. Camera jumps 250 1922, Unable to see any defects. Redo inspection
5 6_No_Defect 950 PPT B1 42 MAUREEN DRIVE 6/11/2012 9729 9649	0 MHN050028 COM050005 U/S 5056 SPM050013 8 VCP 155 158.4 7 MHN110032 MHN110048 DS 2831 SPN110039 8 VCP 250 247	0000	0000 U/S MH is CO
	7 M-HN110032 M-HM110048 DS 2631 SPN110039 8 VCP 250 247 M-HE090041 M-HE090042 D/S 1797 SPE090052 12 VCP 258 260	0	0 0.00 0.00 0 0.0

	General	Structural Defect Coding	Construction Features 8 8 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9
N N N N N N N N N N N N N N N N N N N	Pipe Q Q Q Q Q Q Q Q Q Q Q Q Q Q Q Q Q Q Q	mmed Pippeed P	Inter Ration Defects Company C
S S S S S S S S S S S S S S S S S S S	9 MH ID Previous MH ID 5 90 97 97 14 15 16 17 17 18 18 18 18 18 18 18 18 18 18 18 18 18		
88 4	End Start End Q	S H L C M S H SV VV SV W S M L S M L A V H P S LF RP S 4	\$\frac{0}{24}\$ \frac{0}{2}\$ \frac{1}{2}\$ \fr
5 6_No_Defect 951 PPT 4-B1-5 22 CORK ST 9/19/2012 1057	10571 MHM170021 MHM170022 D/S 2218 SPM170017 8 VCP 170 162.2	0000	0000 0 0 0.00 1 1
	11120 MHN120002 MHN120001 US 2804 SPN120001 8 VCP 334 333 8653 MHE090042 MHE090043 D/S 1960 SPE090054 12 VCP 258 259		
	11283 MHN130018 MHN130016 U/S 2777 SPN130916 6 VCP 163 163.1	0000	000 0 0 0.00
	11122 MHN120002 MHN120003 DS 2805 SPN120002 8 VCP 126 127 8918 MHE090043 MHE090044 D/S 2098 SPE090024 12 VCP 200 166		0 0.00 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
VALLEY VIEW	13361 MHN120006 MHN120006-A DS 6783 SPN120009 10 VCP 300 77		0 0.00
MAP TWINTREE	8858 MHE090045 MHF090042 U/S 1500 SPF090049 8 VCP 268 36		0 0 0.00 1 1 1 MSA = Siphon
5 6_No_Defect 954 PPT 3-B3-4 21 AVENUE 8/29/2012 1169 1 6_No_Defect 955 8 17 Flower St. 2/17/2004 1124	12855 MHR100016 COR100002 U/S 6469 SPR100049 8 VCP 165 165.7 11251 MHN120014 MHN120017 DS 2536 SPN120015 8 VCP 155 151	0000	
3 6_No_Defect 955 GGSD 38 1358 TRINETTE 6/7/2005 7800 5 6. No_Defect 955 PPT 2-1-2 9 HALEKULANI DR 7/10/2012 1456	8876 MHE100009 MHE100007 UIS 1955 SPE100054 8 VCP 330 326 14565 UIS 8327 new 8 VCP 165 165.9		
1 6_No_Defect 956 9 11 10352 Stanford Ave. 2/19/2004 0	0 MHN120015 MHN120016 DS 2537 SPN120016 8 VCP 223 221		0 0.00
MAP SHERMAN	7802 MHE100009 MHE100008 U/S 1424 SPE100043 8 VCP 192 190 1183 MHP130025 MHP130022 U/S 4288 SPP130015 8 VCP 150 168.2	0000	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
	0 MHN120016 MHN120017 DS 2538 SPN120017 8 VCP 58 57 7805 MHE100010 MHE100011 DIS 1426 SPE100045 8 VCP 275 318		0 0.00
MAP			
1 6_No_Defect 958 9 13 10281 Stanford Ave. 2/19/2004 1125	6879 MHO230030 MHO230012 D/S 169 SPO230028 8 VCP 170 168.4 11252 MHN120017 MHN120026 DS 2539 SPN120018 8 VCP 75 79	0000	000 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
3 6_No_Defect 958 GGSD 38 1360 BLACKMER 6/7/2005 7800	7831 MHE100011 MHE100022 U/S 1427 SPE100046 8 VCP 93 94		0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
1 6_No_Defect 959 9 15 10402 Park Ave. 2/19/2004 1124	11053 MHL150043 MHL150035 D/S 2483 SPL150032 8 VCP 170 169.2 11122 MHN120009 MHN120003 DS 2917 SPN120019 8 VCP 360 358	0000	
3 6_No_Defect 959 GGSD 38 1361 CERULEAN 6/7/2005 7800	7807 MHE100012 MHD100025 D/S 1429 SPE100048 8 VCP 347 345		
10401 Garden	11507 MHQ160018 MHQ160017 U/S 4316 SPQ160002 8 VCP 165 169.4	0000	0000 0 0 0.00 USMHis CO
1 6_No_Defect 960 30 4 Grove Blvd. 3/30/2004 3 6_No_Defect 960 GGSD 39 1388 ST MARK 6/27/2005 887/	MHN130002 MHN130003 DS SPN130001 8 VCP 230 230 8877 MHE100015 MHE100014 U/S 1509 SPE100023 8 VCP 374 376		0 0.00 0 0 0.00 0 0 0 0 0 0 0 0 0 0 0 0
5 6_No_Defect 960 PPT	7451 MHS170026 MHS180001 D/S 431 SPS170006 8 VCP 165 169.8	0000	0000 0 0 0.00
1 6_No_Defect 961 45 13 Garden Grove Blvd. 4/30/2004 VALLEY VIEW	MHN130008 MHN130004 US SPN130003 8 VCP 186 186 1 0 MHE100019 MHE100020 D/S 1512 SPE100026 8 VCP 350 353		
3 6_No_Defect 961 PPT 50 12 ALLEY 12/19/2007 0			
5 6_No_Defect 961 PPT 3-82-5 12 MORGAN LANE 8/27/2012 1313 1 6_No_Defect 962 30 6 Grove Blvd. 3/30/2004	13214 MHQ80037 COQ080002 US 5845 SPQ080045 8 VCP 167 170.6 MHN130000 MHN130010 DS SPN130007 8 VCP 194 194	0000	0000 0 0 0.00 US MH is CO
3 6_No_Defect 962 GGSD 51 1647 CHASE 12/8/2005 8803	8803 MHE100028 MHE100029 D/S 1255 SPE100007 8 VCP 193 193		0 0 0.00
	7315 MH0220026 MH0220027 D/S 184 SPO220032 8 VCP 250 170.9 11287 MHN130020 MHN130022 DS 2885 SPN130017 8 VCP 320 325	0000	0000 0 0 0.00
3 6_No_Defect 963 GGSD 52 1656 CHASE 12/13/2005 8786	8803 MHE100029 MHE100023 D/S 1238 SPE100002 8 VCP 84 82		0 0 0.00
	10373 MHK060044 MHK070050 D/S 4785 SPK060044 8 VCP 193 173 173 11295 MHN130027 MHN130030 DS 2893 SPN130025 8 VCP 160 164	0000	0000 0 0.00 0 0 0.00 0 0 0.00 0 0 0.00 0 0 0.00 0 0 0.00 0 0 0.00 0 0 0.00 0 0 0.00 0 0 0 0.00 0 0 0 0.00 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
	0 MHE100036 MHE100063 D/S 1954 SPE100053 8 VCP 260 80		0 0 0.00 MSA. After 39.6' there is no inspection on DVD. Reverse inspection on DVD. Reverse inspection on DVD. Reverse inspection on EVE.
MAP	6779 MHO190011 COO190002 D/S 88 SPO190006 8 VCP 172 174.5		0000 0 0 0.00
1 6_No_Defect 965 30 3 10401 Garden Grove Blvd. 3/30/2004	MHN130002 MHN130001 US SPN130029 8 VCP 307 307	0000	0 0.00
MAP	8871 MHE100042 MHE100041 U/S 1952 SPE100051 8 VCP 300 299		
5 6_No_Defect 965 PPT 481-6 24 CARDINAL CIR 9/28/2012 1092 1 6_No_Defect 966 30 23 Grow Blvd. 3/31/2004	10919 MHQ150033 MHQ150032 U/S 4851 SPQ150032 8 VCP	0000	
	8873 MHE100046 MHE100045 U/S 1507 SPE100021 8 VCP 515 615 615		0 0.00
10011 Garden	7610 MHK160024 MHK160025 D/S 656 SPK160024 8 VCP 185 177.7	0000	0000 0 0 0.00
1 6_No_Defect 967 30 24 Grove Blvd. 3/31/2004 1133	11338 MHN130014 MHN130015 DS 2936 SPN130032 8 VCP 185 195 7792 MHE100049 MHE100043 U/S 1411 SPE10030 8 VCP 258 255		0 0.00
	13228 MHT120028 MHT120027 U/S 6632 SPT120032 10 VCP 172 181.6	0000	0000 0 0 0 0.00
1 6_No_Defect 968 30 25 10055 Garden Grove Blvd. 3/31/2004 1133	11337 MHN130015 MHM130001 DS 2937 SPN130033 8 VCP 187 118 17793 MHE100049 MHE100048 [U/S] 1412 SPE100031 8 VCP 340 338		0 0.00
MAP			
1 6_No_Defect 969 14 1 13052 Brookhurst 3/1/2004 1070	6647 MHPH30016 COP140003 US 4820 SPP140015 8 VCP 195 184.5 10709 MHN130026 MHN130026 US 2328 SPN130034 6 VCP 108 110 8848 MHR100051 MHR100052 DIS 11415 SPE100034 8 VCP 260 257		000 0 0 0.00 0 0 0.00 0 0 0 0.00 0 0 0
MAP			
1 6_No_Defect 970 14 5 13180 Brookhurst 3/1/2004 1070	11056 MHL150039 MHL150038 US 2479 SPL150027 8 VCP		000 0 0 0.00 0 0 0.00 0 0 0 0.00 0 0 0
MAP I I STONE HAVEN I	9571 MHL110013 MHL110012 U/S 3299 SPL110013 8 VCP 185 186		000 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
	11292 MHN140002 MHN140003 DS 2325 SPN140001 6 VCP 65 63 8878 MHE1000018 U/S 1956 SPE110062 8 VCP 387 384		0 0.00
5 6_No_Defect 971 PPT 1 19 WILDGOOSE STREET 5/7/2012 8213	8212 MHG080002 MHG080001 U/S 961 SPG080001 8 VCP 188 188.3	0000	0000 0 0 0 0.00
1 6_No_Defect 972 18 21 10242 Dekota 3/9/2004 1130 3 6_No_Defect 972 GGSD 39 1390 ST MARK 6/30/2005 782	11302 MHN140021 MHN140020 US 2901 SPN140009 8 VCP 160 146		0 0.00 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0

				General			Г	Structural Defect Coo	dina	1 - 1 1 5		Operational and Maintenance			Construction Features	8 F		
		9 (Pipe				ad Pipe	spair it Rating	хөри			t Rating		Feature ry Aban	ngoner	
	No. ape No VD No.	nspec. 1	Ev	isting MH ID Previous MH ID	rwer ID	h (ft) ent ath (ft)	Crack Eractura	Broken Hole	Deforme Collapse Surface Damage	Sags Sags Tural De	Doocite	Poste (P)	Infiltration Obstacles V	Water Index 11 Index 12 Index 13 Index	Intruding Seal Line Material	Aiscella truction rr Surve	ed Aba	
se rity king	e No. O No. ection ersal Ta	Watch	Ex	Island Win ID Previous Win ID	ction of ction of ction of ction of ction of ction of ctions So vious So vi	t Lengti Comm Comm	C F	Broken Hole .	J D X	Mr Struc	D Fi	Roots (R) Fine (F) Tap (T) Medium (M) Bal	I (B) I OB Other	min	L IS	M M M	dentii	
Prio Pra	Tapi Insp Rev Rev	Street Name	CCTV Date Sta	art End Start End	Direction Prev. Prev. Matt	Join Leng G1S	L C M S H L C M S	H SV VV SV VV S M L	SMLAVHP S LF R	SP S DA T	AGS B % L % Z % B	L J C B L J C B L J C B L	JCGDRWCZ%	R T T Og ED ET BI BI	D D L U R LD RD SRH SRB SRL Z SA	CU WC E S	O Comments Re	Recommendations
5 6_No_Defect 972 PPT	MAP 4-B1-6 15	HALA WAY	10/1/2012 115	508 11509 MHQ160018 MHQ160019	9 D/S 4317 SPQ160003 8 VCP	189 189.6				0000 0 0	0.00			0000 0 0 0.00		2		
1 0_110_DGGGG 070	18 6	10300 Central Ave.		176 11282 MHO140002 MHN14000		150 118				0	0.00			0 0.00				
3 6_No_Defect 973 GGSD	39 1390		6/30/2005 78	23 7822 MHE110011 MHE110010	0 U/S 1443 SPE110042 8 VCP	314 311				0 0	0.00			0 0 0.00				
5 6_No_Defect 973 PPT		NEWHOPE STREET	8/7/2012 125	505 12504 MHQ120039 MHQ120038	8 U/S 4122 SPQ120028 8 VCP	145 191.7				0000 0 0	0.00			0000 0 0 0.00				
1 6_No_Defect 974 3 6_No_Defect 974 GGSD					3 US 2329 SPN140025 6 VCP 9 U/S 1405 SPE110030 8 VCP	100 102 138 138				0 0	0.00			0 0.00				-
5 6_No_Defect 974 PPT	MAP 4-B2-3 13	NEWLAND STREET	9/25/2012 145	541 14544	D/S 8306 new 8 PVC	191 192.7				0000 0 0	0.00			0000 0 0 000				
1 6_No_Defect 975 3 6_No_Defect 975 GGSD		9831 Central Ave.	3/4/2004 107	714 11077 MHN140010 CON14000	12 US 2641 SPN140029 8 VCP	75 76				0	0.00			0 0.00				
3 6_No_Detect 9/5 GGSD	June	TRINETTE	12/13/2005 883	34 8833 MHE110042 MHF110041	1 U/S 1632 SPF110035 8 VCP	350 349				0 0	0.00			0 0 0.00			+	
5 6_No_Defect 975 PPT 1 6_No_Defect 976	Map 2 B1 66				6 D/S 5172 SPL060034A 15 VCP 1 DS 2642 SPN140030 8 VCP	192 194 325 327				0000	000			0000				
3 6_No_Defect 976 GGSD		ALONZO COOK	9/13/2007 776	68 7767 MHE110054 MHE110053	3 U/S 1379 SPE110022 8 VCP	119 118				0 0	0.00			0 0 0.00				
5 6_No_Defect 976 PPT	MAP 3-B2-1 5	NEWHOPE STREET	8/7/2012 125	505 12506 MHQ120039 MHQ12004	2 D/S 4123 SPQ120029 8 VCP	205 194.7				0000 0 0	0.00			0000 0 0 000				
1 6_No_Defect 977 3 6_No_Defect 977 GGSD					4 DS 2643 SPN140031 8 VCP 4 U/S 1380 SPE110023 8 VCP	335 323 107 108				0	0.00			0 0.00				
	MAP	WESTMINSTER				107 108				0 0				0 0 0.00				
5 6_No_Defect 977 PPT 1 6_No_Defect 978	4-B1-5 10	BLVD			12 D/S 5350 SPQ170018 15 VCP 13 US 2646 SPN140034 8 VCP	195 194.7 180 183			+++++++++++++++++++++++++++++++++++++++	0000 0 0	0.00	 		0000 0 0 0.00	+++++++++++	+++	+	
3 6_No_Defect 978 GGSD					6 U/S 1961 SPE110065 8 VCP	200 201				0 0	0.00			0 0 0.00				
5 6_No_Defect 978 PPT	MAP 4-B1-2 19				1 D/S 324 SPN180029 10 VCP	201 197.3	<u> </u>			0000 0 0	0.00			0000 0 0 0.00				
1 6_No_Defect 979		ALLEY WEST OF			6 US 2648 SPN140036 8 VCP	110 106				0	0.00			0 0.00		$+ \overline{+}$		
3 6_No_Defect 979 GGSD 5 6_No_Defect 979 PPT	MAP	ADAMS VIC PLACE	9/19/2012 144	21 8920 MHE110059 MHE110050	8 U/S 2125 SPE110003 8 VCP U/S 8182 new 6 PVC	350 312 201 200.6			++++++	0 0	0.00	- 		0 0 0.00	+++++++++++++++++++++++++++++++++++++++	+++	+	
1 6_No_Defect 980		Trask Ave.	9/19/2012 144 3/30/2004 113	315 11319 MHN150003 MHN150003	0/S 8182 New 6 PVC 8-A DS 2856 SPN150003 18 VCP	625 349				0000 0 0	0.00			0 0.00				
3 6_No_Defect 980 GGSD	P3-2 4	ALLEY WEST OF ADAMS	10/2/2007 89	22 8928 MHE110060 MHE110038	8 D/S 2127 SPE110005 8 VCP	65 74				0 0	0.00			0 0 0.00				
5 6_No_Defect 980 PPT	MAP 3-B4-1 15	PARTRIDGE STREET	9/4/2012 146	507 14608	D/S 8370 new 8 PVC	202 204.3				0000 0 0	0.00			0000 0 0 0.00				
1 6_No_Defect 981	31 13		3/31/2004	MHN150003-A MHN15000	4 DS SPN150003-A 18 VCP	88 88				0	0.00			0 0.00				
3 6_No_Defect 981 PPT	52 10 MAP	BAILEY ST	12/22/2007 78	28 7829 MHE120001 MHE120003	2 D/S 1794 SPE120026 12 VCP	296 289				0 0	0.00			0 0 0.00 1	1		MSA = HWL	
5 6_No_Defect 981 PPT	2 July- 4 16			380 10381 MHM090038 MHM09003		200 205.7				0000 0 0	0.00			0000 0 0 0.00				
1 6_No_Defect 982 3 6_No_Defect 982 GGSD	P1 9				5 DS 2916 SPN150004 18 VCP 7 U/S 1374 SPE120014 8 VCP	30 28 200 203				0 0	0.00			0 0.00				
5 6_No_Defect 982 PPT		GILBERT STREET	7/10/2012 139		D/S 7489 new 15 VCP	212 212.8				0000 0 0	0.00			0000 0 0 0.00				
1 6_No_Defect 983 3 6_No_Defect 983 GGSD	29 28 P2 10				12 DS 2857 SPN150028 15 VCP 17 U/S 1382 SPE110025 8 VCP	330 330 250 249				0 0				0 0.00				
5 6_No_Defect 983 PPT	MAP 3-B3-4 22	TWINTREE AVENUE		207 44000 MUD400040 MUD40004	6 D/S 6168 SPR100041 8 VCP	215 213.2				0000								
1 6_No_Defect 984	28 28	Trask Ave.	3/25/2004 107	719 10720 MHN150006 MHN15000	7 DS 2859 SPN150030 18 VCP	80 79				0000 0 0				0 0.00				
3 6_No_Defect 984 GGSD	P2 7		9/18/2007 77	72 7771 MHE120026 MHE120024	4 U/S 1383 SPE120020 8 VCP	250 249				0 0	0.00			0 0 0.00				
5 6_No_Defect 984 PPT	Map 1 3				7 D/S 1964 SPF100001 10 VCP	260 214				0000				0000				
1 6_No_Defect 985 3 6_No_Defect 985 GGSD	P2 8	HOWE	9/18/2007 77	72 7898 MHE120026 MHE120029	77 US 2860 SPN150031 18 VCP 55 U/S 1963 SPE120035 8 VCP	615 607 235 236				0 0	0.00			0 0 0.00				-
5 6_No_Defect 985 PPT 1 6_No_Defect 986	2-1-1 15	VALENCIA WAY	7/9/2012 84	70 8468 MHL120014 MHL120013	3 U/S 3129 SPL120014 8 VCP 33 DS 2865 SPN150033 18 VCP	214 215.2				0000 0 0	0.00			0000 0 0 0.00				
3 6_No_Defect 986 GGSD					11 U/S 1257 SPF080052 8 VCP	249 246				0 0	0.00			0 0 0.00				
	MAP	NEWHOPE																
5 6_No_Defect 986 PPT 1 6_No_Defect 987	28 27		3/25/2004 113	320 10719 MHN150005 MHN15000	3 U/S 4024 SPQ120023 8 VCP 6 DS 2861 SPN150035 18 VCP	215 215.3 375 368			 	0000 0 0	0.00			0000 0 0 0.00	 		<u>+</u>	
3 6_No_Defect 987 GGSD	40 1429	MIRANDA	7/20/2005 88	06 8804 MHF080002 MHF080001	1 U/S 1256 SPF080051 8 VCP	131 127				0 0	0.00			0 0 0.00				
5 6_No_Defect 987 PPT					9 D/S 277 SPL160023 8 VCP	225 217.2				0000 0 0	0.00			0000 0 0 0.00				
1 6_No_Defect 988 3 6_No_Defect 988 GGSD	1 8 44 1514	10682 Allen Dr. SPRINGDALE	2/4/2004 112 10/4/2005 829	211 11212 MNW13024 MNW13025 99 8298 MHF080005 MHF080004	5 DS 2388 SPO090023 8 VCP 4 U/S 1094 SPF080001 8 VCP	355 355 270 266				0 0	0.00			0 0.00				
5 6_No_Defect 988 PPT	MAP				2 U/S 2473 SPL150021 8 VCP	220 218				0000				0000				-
1 6 No Defect 989	1 12	10552 Paladium				220 218 263 260				0000 0 0	0.00			0000 0 0 0.00		+++	+	-
3 6_No_Defect 989 GGSD	43 1508	CHAPMAN	10/3/2005 73	60 8299 MHF080007 MHF080008	3 DS 2575 SPO090038 8 VCP 5 U/S 1303 SPF080034 8 VCP	114 113				0 0	0.00			0 0 0.00				
5 6_No_Defect 989 PPT	MAP 4-B1-5 24	CORK ST	9/19/2012 105	567 10569 MHM170018 MHM170020	10 D/S 2215 SPM170014 8 VCP	217 220.5				0000 0 0	0.00			0000 0 0 0.00				
	13 19	10942 Lampson Ave.	3/2/2004 123	304 11768 MHO110028 MHO11000	01 DS 4429 SPO110020 8 VCP	160 187				0	0.00			0 0.00				
3 6_No_Defect 990 GGSD	43 1506 MAP	SPRINGDALE	10/3/2005 73	60 7359 MHF080007 MHF080006	6 U/S 1178 SPF080004 8 VCP	175 173				0 0	0.00			0 0 0.00				-
5 6_No_Defect 990 PPT	2 July- 4 18	COVEY COURT Stanford	6/25/2012 103	379 10378 MHM090037 MHM09003	16 U/S 5164 SPM090038 8 VCP	225 221.4				0000 0 0	0.00			0000 0 0 0.00		2		
	42 18	Ave./Seville Ct.		307 11833 MHO120005 MHO12000		346 346				0	0.00			0 0.00		+		
3 6_No_Defect 991 GGSD			10/3/2005 83	17 8316 MHF080010 MHG08003	77 U/S 1111 SPF080002 8 VCP	299 297		++++		0 0	0.00			0 0 0.00			+	
5 6_No_Defect 991 PPT	MAP 3-B2-2 18	NEWHOPE STREET	8/7/2012 125	506 12599 MHQ120042 MHQ12004	11 U/S 4759 SPQ120037 8 VCP	220 223.9				0000 0 0	0.00			0000 0 0 0.00				
1 6_No_Defect 992 3 6_No_Defect 992 GGSD	7 16				25 US 2321 SPO120023 6 VCP 6 U/S 1183 SPF080009 8 VCP	250 258 255 253				0	0.00			0 0.00		+ + +		
3 0_140_Deletit 992 (GGSD	43 1494 MAP					255 253		+++++		0 0	W-900			0 0 0.00		+++	+	
5 6_No_Defect 992 PPT	3-B2-2 4	10930 Garden			2 U/S 6249 SPP070025 8 VCP	220 226.1			+++++++++++++++++++++++++++++++++++++++	0000 0 0	0.00	 		0000 0 0 0.00	+++++++++++	+++	+	
1 6_No_Defect 993 3 6_No_Defect 993 GGSD	21 23 43 1495	Grove Blvd.	3/16/2004 122 9/27/2005 73	260 12261 MHO130003 MHO13000 65 7367 MHF080017 MHF080019	9 D/S 1185 SPF080011 8 VCP	435 462 257 254		+++++		0 0	0.00			0 0.00		+++	+	
					1-1-1	1 1 204												

	General Pine	Structural Defect Coding	Operational and Maintenance
7 (7)	(f) (f) (g) (g) (g) (g) (g) (g) (g) (g) (g) (g	in Repair (Repair (Rep	Meant Rail Mean Rail Rail Rail Rail Rail Rail Rail Rail
N N N N N N N N N N	D Previous MH ID Up Weg Weg Weg Up Up Up Up Up Up Up U	ck Fracture Broken Hole Joint A B S B B WL B	
2 5 5 5 2 2 2 2 2 2	d Start End 0 w 4 8 8 9 9 9 10 L C h	1 S H L C M S H SV VV SV VV S M L S M L A V H P S LF RP S & 3	
5 6_No_Defect 993 PPT 4-B2-2 9 STREET 9/21/2012 11062 110	33 MH-L160008 MH-L170001 D/S 2484 SPL160022 8 VCP 230 230.5 88 MH-D130008 MH-D130033 DS 4925 SPD130008 12 VCP 157 135	0000 (
	9 MHF080017 MHF080066 U/S 1184 SPF080010 8 VCP 222 221		0 0 0.00
5 6_No_Defect 994 PPT	41 UIS 7921 SPK160003 8 VCP 246 231.7 30 MHO130034 MHO130035 DS 4928 SPO130025 12 VCP 50 29	0000 (0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
3 6_No_Defect 995 GGSD 43 1499 SANTA MONICA 9/28/2005 7367 736	66 MHF080019 MHF080018 U/S 1186 SPF080012 8 VCP 362 358		0 0 000
5 6,No_Defect 995 PPT 3-2 3 IVANHOE STREET 7/23/2012 9701 970 1 6,No_Defect 996 12 4 13181 Westlake St. 2/26/2004 11095 110	96 MHO130024 MHO130052 US 2835 SPO130026 12 VCP 25 25	0000 4	
3 6_No_Defect 996 GGSD 43 1495 DIAMOND 9/27/2005 7367 736 5 6_No_Defect 996 PPT 2-2-1 14 GARDEN GROVE 7/3/2012 13412 134	MHF080019	0000	
			end plu
	80 MHO130019 MHO130035 US 4929 SPO130027 12 VCP 230 240 0 MHF080022 MHF080021 U/S 1189 SPF080015 8 VCP 332 328		0 0.00 1 1 9
10560 Garden	73 MHP140003 MHP140002 U/S 3903 SPP140002 6 VCP 232 232.6 58 MH0130048 COO130001 US 2369 SPO130035 8 VCP 340 338	0000 (0 0 0 0.00 U/S MH is CO
	4 MHF080023 MHF080043 DIS 1191 SPF080017 8 VCP 333 330		0 0 0.00
10712 Garden	56 MHM170018 MHM170017 U/S 2214 SPM170013 8 VCP 247 237.4 55 MH0130030 MH0130031 DS 2583 SP0130039 6 VCP 168 169	0000	
	5 MHF080026 MHF080044 D/S 2431 SPF080056 8 VCP 322 319		0 0 0.00
	82 MHM090039 MHM090040 DIS 5167 SPM090041 8 PVC 245 247.4 70 MH0130041 MH0130042 DIS 2485 SP0130045 8 VCP 260 263	0000	0 0 0.00
3 6_No_Defect 1000 GGSD 42 1466 SANTA BARBARA 9/9/2005 7377 737	6 MHF080028 MHF080027 U/S 1195 SPF080021 8 VCP 193 192		0 0 000
	0 MHJ120015 MHJ120016 D/S 837 SPJ120025 8 Tile 245 251.8 73 MHO130044 MHO130045 DS 2488 SPO130048 8 VCP 285 285	0000 (
3 6_No_Defect 1001 GGSD 41 1463 GARNET 8/30/2005 8772 877	3 MHF080035 MHF080036 DIS 1232 SPF080042 8 VCP 192 191		0 0.00
1 6_No_Defect 1002 18 2 13201 Cypress St. 3/5/2004 11173 111	3 MHO230024 MHO230025 D/S 19 SPO230013 8 VCP 147 251.8 93 MHO130045 MHO140005 DS 2489 SPO130049 8 VCP 180 182	0000 4	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
3 6,No_Defect 1002 GGSD	0 MHF080038 MHF080039 D/S 1197 SPF080023 8 VCP 192 190		0 0 0.00
1 6_No_Defect 1003 12 12 13121 Adland St. 2/27/2004 11174 111	98 MHM180006 MHM180007 D/S 201 SPM180004 8 VCP 249 252.2 75 MHO130046 MHO130047 DS 2490 SPO130050 8 VCP 320 329		0 0 0.00 0.00 0.00 0 0.00 0 0.00 0 0.00 0 0.00 0 0.00 0 0.00 0 0.00 0 0.00 0 0.
1440	MHF080039 MHF080040 D/S 1198 SPF080024 8 VCP 192 188	 	
1 6_No_Defect 1004 24 3 13032 Benton St. 3/16/2004 11165 111	8 MH2210012 MHC210014 D/S 2 SPC210012 8 VCP 253 254.5 . 90 MHC130031 MHC130051 US 2273 SPC130054 6 VCP 165 165 165 66 MHF080003 JMHT080053 JD/S 1202 SPF080028 8 VCP 253 251	0000 (0 0 0 0.00 0 0 0.00 0 0 0 0.00 0 0 0 0.00 0 0 0.00 0 0 0.00 0 0 0.00 0 0 0.00 0 0 0.00 0 0 0.00 0 0 0.00 0 0 0 0.00 0 0 0 0.00 0 0 0.00 0 0 0 0.00 0 0 0 0.00 0 0 0 0.00 0 0 0 0.00 0 0 0 0.00 0 0 0.00 0 0 0 0.00 0 0 0 0.00 0 0 0 0.00 0 0 0 0.00 0 0 0 0.00 0 0 0 0.00 0 0 0 0.00 0 0 0 0.00 0 0 0 0.00 0 0 0 0.00 0 0 0 0.00 0 0 0 0.00 0 0 0 0.00 0 0.00 0 0 0.00 0 0 0.00 0 0 0.00 0 0 0.00 0 0 0.00 0 0 0.00 0 0.00 0 0 0.00 0 0 0.00 0 0 0.00 0 0 0.00 0 0 0.00 0 0 0.00 0 0 0.00 0 0 0.00
MAP	8 MHS170011 MHS170112 D/S 467 SPS170013 8 VCP 245 256	0000	
1 6_No_Defect 1005 12 5 13281 Westlake St. 2/26/2004 11101 111	02 MHO140030 MHO140031 DS 2836 SPO140017 12 VCP 15 15		0 0.00
MAP	6 MHF080044 MHF080045 D/S 1234 SPF080044 8 VCP 322 321	 	
	30 MHT140020 MHT140021 D/S 7777 SPT140021 8 VCP 287 256.4 08 MH0140038 MH0140037 US 2359 SPO140024 8 VCP 285 280	0000 0	
3 6_No_Defect 1006 GGSD 43 1500 ONYX 9/28/2005 0 0	08 MHO140038 MHO140037 US 2359 SPD140024 8 VCP 285 280 MHF080053 MHF080064 D/S 1693 SPF080031 8 VCP 23 22		0 0 0.00
	66 MH0210007 MH0210012 D/S 121 SP0210007 8 VCP 256 258.1 8 8 MH0130029 MH0140048 DS 2582 SP0140032 8 VCP 295 292		
3 6_No_Defect 1007 GGSD 43 1504 SANTA BARBARA 10/3/2005 7369 831	6 MHF080056 MHF080010 U/S 1305 SPF080036 8 VCP 222 220		
	76 MHX060041 MHX060042 D/S 5163 SPK060041 8 VCP 267 260.9	0000 4	
	86 MH0140007 MH0140008 DS 2290 SP0140045 8 VCP 380 377 9 MHF090006 MHF0900043 UIS 1300 SPF090027 8 VCP 216 212		0 0.00
	88 MHR100015 MHR100014 UIS 6169 SPR100042 8 VCP 265 265.7 16 MH-0150013 MH-0150012 UIS 2364 SPO150005 8 VCP 394 394	0000 (D 0 0 0.00 Pipe ID was 6190. We checked GIS & changed it
3 6.No_Defect 1009 GGSD 46 1548 VANGUARD 10/24/2005 8730 735	MHF090007 MHF090005 U/S 1398 SPF090029 8 VCP 170 225		0 0 0.00
1 6_No_Defect 1010 18 14 10632 Trask 3/8/2004 11117 111	3 MHK150025 MHK150026 D/S 649 SPK150029 8 VCP 274 267.6 18 MHO150013 MHO150014 DS 2365 SPO150006 8 VCP 350 353		
MAP	9 MHF090007 MHF090006 U/S 1286 SPF090006 8 VCP 350 346		
1 6_No_Defect 1011 21 7 10492 Trask 3/9/2004 11184 111	17		0 0 0 0.00
MAP	MHF090007 MHF090008 D/S 1783 SPF090007 8 VCP 186 185	900	
1 6_No_Defect 1012 18 17 10492 Trask 3/8/2004 11185 111 VALLEY VIEW	87 MHO150015 MHO150001 DS 2278 SPO150020 8 VCP 350 353		0 0.00
MAP WESTMINSTER	0 MHF090008 MHE090045 U/S 1741 SPE090010 8 VCP 190 389	 	
1 6_No_Defect 1013 21 5 10282 Trask 3/9/2004 11189 112	84 MHR170008 MHR170008 DIS 4360 SPR170007 15 VCP 271 271.4 05 MHC1500003 MHC1500006 DS 2283 SPC1500023 8 VCP 20 11 2 MHF0500008 MHF0500009 DIS 1784 SPF050008 8 VCP 350 345		0 0 0 0.00 0 0 0.00 0 0 0 0.00 0 0 0 0.00 0 0.00 0 0.00 0.00 0 0.00 0 0.00 0 0.00 0 0.00 0 0.00 0 0.00 0 0.00 0 0.00 0 0.00 0 0.00 0 0.00 0 0.00 0 0.00 0 0.00 0 0.00 0 0.00 0 0.00 0 0.0
June Map 2 5 6 No Defect 1013 PPT P1 79 LIQYZFI F DRIVE 6/45/2013 10384 101	2 NHF000008 NHF000009 D/S 1784 SPF00008 8 VUP 350 345 75 NHL060023 NHL060024 D/S 3743 SPL060027 15 VCP 270 273.4	0000	
	01 MH0150004 MH0150005 DS 2853 SP0150024 15 VCP 590 604		0 0.00

	9 6 V	General Pipe	Structural Defect Coding Defect Coding De	0 0 0 0 0 0 0 0 0 0
State Stat	ority ritring ritring Per No. D No. Wersal I D Watt	Parking Sawer I Cam I Landburg	C F B H J D X WL d L	Deposits Roots (R) Inditation Obstacless Vermin S V V S Tap (Lateral) Line Metarial V S S S S S S S S S
Column C	3 6_No_Defect 1014 GGSD 45 1538 JASPER 10/17/2006 8659 8658 8658 655 655 655 655 655 655 655 6	MHO130016 MHO130017 D/S 3936 SPO130015 8 VCP 650 275.6		
A column	3 6,No_Defect 1015 GGSD 46 1551 BELGRAVE 10/24/2005 8737 8738	MHF090027 MHF090028 D/S 1291 SPF090014 8 VCP 260 259 MHK150902 MHK150903 D/S 2446 SPK150902 12 Tile 272 276.9	0000	0 0 000
Column C	3 6.No Defect 1016 GGSD 46 1550 SAPPHIRE 10/24/2005 8737 8753	MHF090027 MHF090051 D/S 2435 SPF090028 8 VCP 260 255		
The content of the	1 6_No_Defect 1017 2 7 12161 Le Ann 2/4/2004 11862 11861	MNE27003 MNE27002 US 3798 SPP090007 8 VCP 260 270		
No. 16. No.	1 6_No_Defect 1018 2 6 12202 Le Ann 2/4/2004 11863 11862	MNE27004 MNE27003 US 3799 SPP090008 8 VCP 270 272		
Maria Mari	5 6_No_Defect 1018 PPT	MNE27006 MNE27007 DS 3802 SPP090011 8 VCP 270 269		
Note 1	1 6_No_Defect 1020 2 18 11381 Jerry Ln. 2/5/2004 0 0	MNE14006 MNE14007 DS 3785 SPP100012 8 VCP 130 133		0 0.00
Column C	5 6.No_Defect 1020 PPT 4 11 COVEY 6/26/2012 10382 10383 10383 1 1 1 6.No_Defect 1021 2 19 11361.jerry.in, 2/5/2004 0 0 0 0	MHM090040 MHM090041 D/S 5168 SPM090042 8 PVC 300 288.7 MNE14007 MNE14008 DS 3786 SPP100013 8 VCP 170 164	0000	
Note	5 6.No,Defect 1021 PPT 3-83-2 14 CYPRESS STREET 8/10/2012 11198 11200 1 6.No,Defect 1022 2 20 11321 Jerry Ln. 2/5/2004 11850 11851	D/S 6844 new 12 VCP 290 289 MNE14008 MNE14009 DS 3787 SPP100014 8 VCP 330 339	0000	
	5 6.No_Defect 1022 PPT	MHK160022 MHK160024 D/S 657 SPK160023 8 VCP 293 291.6 MNE14018 MNE14019 DS 3733 SPP100020 8 VCP 185 191	0000	
Author 10 Control	5 6_No_Defect 1023 PPT 3-82-6 20 TWINTREE AVE 8/29/2012 12709 12644	MHS100016 MHT100004 U/S 5651 SPS100030 15 VCP 285 291.7	0000	00 0 0 000
1	June Man 2		0000	0 0 0.00 MHF090006 corrected to MHF090043
State Stat	3 6_No_Defect 1025 GGSD 46 1542 JADE 10/19/2005 8747 8746	MHF090046 MHF090044 U/S 1786 SPF090022 12 VCP 260 257		0 0 000
1 1 1 1 1 1 1 1 1 1	1 6_No_Defect 1026 45 21 12730 Pinehurst Pvt. 5/4/2004 11757 11743	MHP110039 MHP120031 DS 4626 SPP110028 8 VCP 100 87		0 0.00
State Continue C			0000	
A NAME SAME	MAD	D/S 8325 new 8 VCP 296 292.8		
1 6. Duck Date 1 09 1 6 1 77	3 6.No_Delect 1028 GGSD D1 1564 DIAMOND 10/27/2005 8751 8752 5 6.No_Delect 1028 PPT 2-1-5 15 EASEMENT 7/24/2012 14825 11235	MHF090050 MHF090009 D/S 1966 SPF090001 18 VCP 280 256		0 0 000
1 6.No. Defect 1000 0 45 0 75 0 No. Defect 1000 0 505 0 30 1374	1 6.No.Defect 1029 6 27 Ave. 2/12/2004 0 0 0 3 6.No.Defect 1029 GGSD 50 1619 TAYLOR 11/14/2005 7395 7394	MHF100004 MHF100003 U/S 1208 SPF100005 8 VCP 183 185		0 0.00
5 (a,No,Defect 1031 CF)	1 6 No Defect 1030 45 27 Pyt 5/5/2004 11743 11744	MHP120031 MHP120032 DS 4398 SPP120032 8 VCP 10 8		0 0.00
5 6, No, Defect 1031 PPT 3-85 1 VIC PLACE 9/19/2012 14442 11226 DIS 8181 new 6 PVC 300 298.4 1 101 PPT 3-85 1 VIC PLACE 9/19/2012 14442 11226 DIS 8181 new 6 PVC 300 298.4 1 101 PPT 3-85 1 VIC PLACE 9/19/2012 14442 11226 DIS 8181 new 6 PVC 300 298.4 1 101 PPT 3-85 1 VIC PLACE 9/19/2012 14442 11226 DIS 8181 new 6 PVC 300 298.4 1 101 PPT 3-85 1 VIC PLACE 9/19/2012 14442 11226 DIS 8181 new 6 PVC 300 298.4 1 101 PPT 3-85 1 VIC PLACE 9/19/2012 14442 11226 DIS 8181 new 6 PVC 300 298.4 1 101 PPT 3-85 1 VIC PLACE 9/19/2012 14442 11226 DIS 8181 new 6 PVC 300 298.4 1 101 PPT 3-85 1 VIC PLACE 9/19/2012 14442 11226 DIS 8181 new 6 PVC 300 298.4 1 101 PPT 3-85 1 VIC PLACE 9/19/2012 14442 11226 DIS 8181 new 6 PVC 300 298.4 1 101 PPT 3-85 1 VIC PLACE 9/19/2012 14442 11226 DIS 8181 new 6 PVC 300 298.4 1 101 PPT 3-85 1 VIC PLACE 9/19/2012 14442 11226 DIS 8181 new 6 PVC 300 298.4 1 101 PPT 3-85 1 VIC PLACE 9/19/2012 14442 11226 DIS 8181 new 6 PVC 300 298.4 1 101 PPT 3-85 1 VIC PLACE 9/19/2012 14442 11226 DIS 8181 new 6 PVC 300 298.4 1 101 PPT 3-85 1 VIC PLACE 9/19/2012 14442 11226 DIS 8181 new 6 PVC 300 298.4 1 101 PPT 3-85 1 VIC PLACE 9/19/2012 14442 11226 DIS 8181 new 6 PVC 300 298.4 1 101 PPT 3-85 1 VIC PLACE 9/19/2012 14442 11226 DIS 8181 new 6 PVC 300 298.4 1 101 PPT 3-85 1 VIC PLACE 9/19/2012 14442 11226 DIS 8181 new 6 PVC 300 298.4 1 VIC PLACE 9/19/2012 14442 11226 DIS 8181 new 6 PVC 300 298.4 1 VIC PLACE 9/19/2012 14442 11226 DIS 8181 new 6 PVC 300 298.4 1 VIC PLACE 9/19/2012 14442 11226 DIS 8181 new 6 PVC 300 298.4 1 VIC PLACE 9/19/2012 14442 11226 DIS 8181 new 6 PVC 300 298.4 1 VIC PLACE 9/19/2012 14442 11226 DIS 8181 new 6 PVC 300 298.4 1 VIC PLACE 9/19/2012 14442 11226 DIS 8181 new 6 PVC 300 298.4 1 VIC PLACE 9/19/2012 14442 11226 DIS 8181 new 6 PVC 300 298.4 1 VIC PLACE 9/19/2012 14442 11226 DIS 8181 new 6 PVC 300 298.4 1 VIC PLACE 9/19/2012 14442 11226 DIS 8181 new 6 PVC 300 298.4 1 VIC PLACE 9/19/2012 14442 11226 DIS 8181 new 6 PVC 300 298.4 1 VIC PLACE 9/19/2012 14442 11226 DIS 8181 new 6 PVC 300 298.4 1 VIC PLACE	5 6_No_Defect 1030 PPT 3-B2-1 7 STREET 8/7/2012 12502 12503 1 6_No_Defect 1031 10 10 10 12742 Pinehurst 2/20/2004 11744 11745	MHP120032 MHP120033 DS 4399 SPP120033 8 VCP 30 32		0 0.00
5 6,No_Defect 1032 PPT 382-1 4 STREET 8/72012 1256 1257 MHQ120042 MHQ120042 MHQ120043 D/S 4124 SPQ12003 8 VCP 280 299.1 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	5 6.No_Delect 1031 PPT 3-85 1 VIC PLACE 9/19/2012 14442 11226 1 6.No_Delect 1032 39 28 11370 Garden Grove Blvd. 4/16/2004 11014 11886	MHP130030 MHP130001 DS 5132 SPP130003 10 VCP 119 118		0 0.00
	5 6_No_Defect 1032 PPT 3-B2-1 4 STREET 8/7/2012 12506 12507	MHG120042 MHG120043 D/S 4124 SPG120030 8 VCP 280 299.1		00 0 0 0.00
1 6.No. Defect 1034 11 8 11152 Paloma Ave. 22020004 11874 11876 MHP14003 MHP130015 DS 3004 SPP13009 G VCP 255 258 U DLDLOW 113020005 8797 7402 MHF100009 UNS 1654 SPF10003 8 VCP 328 325 U DLDLOW 115020005 B797 7402 MHF100009 UNS 1654 SPF10003 8 VCP 328 325 U DLDLOW 115020005 B797 7402 MHF100009 UNS 1654 SPF10003 8 VCP 328 325 U DLDLOW 11502005 B797 7402 MHF100009 UNS 1654 SPF10003 8 VCP 328 325 U DLDLOW 11502005 B797 7402 MHF100009 UNS 1654 SPF10003 8 VCP 328 325 U DLDLOW 11502005 B797 7402 MHF100009 UNS 1654 SPF10003 8 VCP 328 325 U DLDLOW 11502005 B797 7402 MHF100009 UNS 1654 SPF10003 8 VCP 328 325 U DLDLOW 11502005 B797 7402 MHF100009 UNS 1654 SPF10003 8 VCP 328 325 U DLDLOW 11502005 B797 7402 MHF100009 UNS 1654 SPF10003 8 VCP 328 325 U DLDLOW 11502005 B797 7402 MHF100009 UNS 1654 SPF10003 8 VCP 328 325 U DLDLOW 11502005 B797 7402 MHF100009 UNS 1654 SPF10003 8 VCP 328 325 U DLDLOW 11502005 B797 7402 MHF100009 UNS 1654 SPF10003 8 VCP 328 325 U DLDLOW 11502005 B797 7402 MHF100009 UNS 1654 SPF10003 8 VCP 328 325 U DLDLOW 11502005 B797 7402 MHF100009 UNS 1654 SPF10003 8 VCP 328 325 U DLDLOW 11502005 B797 7402 MHF100009 UNS 1654 SPF10003 B VCP 328 325 U DLDLOW 11502005 B797 7402 MHF100009 UNS 1654 SPF10003 B VCP 328 325 U DLDLOW 11502005 B797 8 VCP 328	3 6.No_Defect 1033 GGSD 51 1624 HUNTLEY 11/16/2005 8784 8783 1 6.No_Defect 1034 11 8 11152 Paloma Ave. 2/20/2004 11874 11876	MHF100012 MHF100011 U/S 1235 SPF100014 8 VCP 350 348 MHP140003 MHP130015 DS 3904 SPP130006 6 VCP 255 258		
5 6, No, Defect 1034 PPT 481-6 11 NADIA WAY 10/2/2012 11510 11499 MHQ160020 MHQ170012 D/S 4319 SPQ160005 8 VCP 300 301.9 1 0.00 0 0 0.0	5 6_No_Defect 1034 PPT	MHG160020 MHG170012 D/S 4319 SPG160005 8 VCP 300 301.9		
3 6.No_Defect 1035 PPT 50 9 LAMPSON 12/19/2007 7390 730 730 730 730 730 730 730 730 730 73	3 6_No_Defect 1035 PPT 50 9 LAMPSON 12/19/2007 7390 7391 5 6_No_Defect 1035 PPT 2-1-3 10 FLOWER STREET 7/16/2012 11317 11318	MHF110002 MHF110003 D/S 1204 SPF110002 8 VCP 352 352 MHN140035 MHN140037 D/S 2914 SPN140022 8 VCP 300 302.6	0000	

g g δ _N Σ	General Pipe	Structural Defect Coding	Operational and Maintenance Declaration Construction Features Construct
1	Previous MH ID	Fracture Broken Hole Joint 5 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	Roots (R) Inflitration Obstacles Vermin 5 0 W 80 V 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
MAP	MHF110004 MHF110005 DIS 1211 SPF110004 8 VCP 272 265	0 0 0.00	0000 0 0 000
1 6_No_Defect 1037 11 21 11201 Crosby Ave. 2/23/2004 11879 11886 3 6_No_Defect 1037 PPT 43 3 TRINETTE 9/18/2007 7733 7734	MHP130018 MHP130019 DS 3909 SPP130011 6 VCP 225 241 MHF110010 MHF110010 DS 1136 SPG110038 8 VCP 338 340	0 0.00	0 0.00
1 6_No_Defect 1038	MHN140033 MHN140035 DIS 2913 SPN140021 8 VCP 300 302.8 MHP130019 MHP130020 DS 4285 SPP130012 6 VCP 280 280 MHP110011 MHD110015 DIS 1140 SPG110042 8 VCP 338 340	0000 0 0 0.00	
11060 Sherman	MHS120001 MHS110003 U/S 6592 SPS120028 10 VCP 280 303.8 MHP130021 MHP130020 US 4286 SPP130013 6 VCP 160 163	0000 0 0 0.00	0000 0 0 0.00
3 6_No_Defect 1039 GGSD 35 1140 TOPAZ 4/22/2005 7411 7410	MHF10016 MHF10015 US 1221 SPF110009 8 VCP 205 281 S MHS100020 MHS100020 DS 6493 SPS100011 15 VCP 305 305	0 0 0.00	0000 0 0000
1 6_No_Defect 1040 39 24 13122 Sherman Ave. 4/16/2004 12318 12319	NHP130025 MHP130026 DS 4289 SPP130016 8 VCP 320 326 MHF110017 MHF110018 U/S 1656 SPF110042 8 VCP 215 257	0 0.00	0 0.00
1 6_No_Defect 1041 39 25 Sherman Ave. Easement 4/16/2004	MH-L090038 MH-D90040 D/S 3496 SPL090004 10 VCP 295 306.2 MM-P130026 MM-P130027 DS SPP130017 8 VCP 76 76 MM-P110018 MM-P110016 U/S 1222 SPP110010 8 VCP 309 306	0000 0 0 0.00	0000 0 0 0000
5 6.No.Defect 1041 PPT 3-82-6 16 TWINTREE AVE 8/29/2012 12716 12717	MHS100023 MHS100024 D/S 6496 SPS100014 15 VCP 302 306.5	0000 0 0.00	0 0 0.00 DIS MH ID was 12807. We checked GIS & changed it
1 6,No_Defect 1042 21 20 Grove Blvd. 3/15/2004 11822 11823 3 6,No_Defect 1042 GGSD 52 1664 TOPAZ 12/12/2005 7412 7413 MAP SYCAMORE	B MMP130046 MHP130047 DS DS 5293 SPP130042 8 PEP 70 64 MHF110018 MHF110019 DIS 1223 SPF110011 8 VCP 180 255 MH-1120017 MH-1120018 DIS BS 839 SP1120027 8 Tile 307 307	0 0.00	0 0.00
	MMP130024 MMP130023 US 5295 SPP130044 6 VCP 115 118 MMF110031 MMF120021 DIS 1275 SPF120017 8 VCP 213 262	0 0.00	0 0.00 1 1 off
5 6.No_Defect 1043 PPT	MHK120017 MHK130004 D/S 3374 SPK120018 10 Tile 317 312 MHP140001 MHP140001 DS 3902 SPP140001 6 VCP 330 335	0000 0 0 0.00	0000 0 0 0.00 2 2 2 24 MSA (MMC). Inspection Completed
5 6_No_Defect 1044 PPT	MHF110032 MHF110033 DIS 1624 SPF110028 8 VCP 169 166 MHF110031 DIS 1624 SPF110028 8 VCP 306 313 MHF110036 MHF110036 MHF110036 MHF110037 UIS 1642 SPF110041 8 VCP 256 255	0000 0 0 0.00	0000 0 0 000
	MHF1100038 MHF1100040 D/S 3917 SPT100033 10 VCP 316 315.6 MHF110037 MHF110036 U/S 1627 SPF110031 8 VCP 119 119 119	0000 0 0 0000	0000 0 0 0.00
	MHL150036 MHL150038 DIS 2477 SPL150025 8 VCP 320 317.4 MHF110038 MHF110037 UIS 1628 SPF110032 8 VCP 300 297	0000 0 0 0.00	0000 0 0 0.00
	MHS170010 MHS170011 DIS 466 SPS170012 8 VCP 315 318.2 MHF110039 MHE110039 US 1630 SPE110001 8 VCP 350 349	0000 0 0 0.00	0000 0 0 0.00
5 6_No_Defect 1048 PPT	UIS 6682 SPL160026 8 VCP 448 319.2 MHF110040 MHF110017 UIS 1641 SPF110040 8 VCP 350 347 MHF110040 MHF110017 UIS 1641 SPF110040 8 VCP 350 347 MHF110040 MHF110040 MHF110040 MHF110040 MHF110040 MHF110040 MHF110040 B VCP 350 347 MHF110040 MHF110040 MHF110040 MHF110040 B VCP 350 347 MHF110040 MHF110040 MHF110040 MHF110040 MHF110040 B VCP 350 347 MHF110040 MHF110040 MHF110040 MHF110040 MHF110040 B VCP 350 347 MHF110040 MHF110040 MHF110040 MHF110040 MHF110040 B VCP 350 347 MHF110040 MHF110040 MHF110040 MHF110040 B VCP 350 347 MHF110040 MHF110040 MHF110040 MHF110040 B VCP 350 347 MHF1100	0000 0 0 0.00	0000 0 0 0.00
3 6_No_Defect 1050 GGSD 52 1657 TRINETTE 12/13/2005 8833 8832 5 6_No_Defect 1050 PPT 22/1 4 MONROE STREET 7/6/2012 7723 7724	In MH-L150035 MH-L150035 DIS 2476 SPL150024 8 VCP 320 319.4 MH-F110041 MH-F110040 US 1631 SPF110034 8 VCP 350 349 MH-J130014 MH-J140001 DIS 787 SPJ130009 8 Tille 330 319.9	0000 0 0 0.00	0000 0 0 0.00
5 6_No_Defect 1051 PPT		0000 0 0 0.00	0 0 0.000 1 1 MSA = Siphon
June Map 2 HARCOURT AVE 6/7/2012 8988 8994	MHL030008 MHL030019 U/S 4532 SPL030020 8 VCP 320 323.6	0 0 0.00	0000 0 0 0000
5 6_No_Defect 1053 PPT	MHF120005 MHF120006 DIS 1743 SPF120032 8 VCP 299 297 MHR160028 MHR160029 DIS 4348 SPR160020 8 VCP 325 324.2 MHF120007 MHF120006 US 1744 SPF120033 8 VCP 350 349	0 0 0 0.00	
5 6_No_Defect 1054 PPT 3-5 20 3-6 10 9TH STREET 7/31/2012 12530 12481	MHF120007 MHF120006 US 1744 SPF120033 8 VCP 350 349	0000 0 0.00	0 0 0.00 191.5' MSA (OBJECT IN JOINT). 1000 0 0 0.00 2 191.5' MSA (OBJECT IN JOINT). 1000 0 0.00 1000
3 6_No_Defect 1056 GGSD 52 1667 TOPAZ 1/9/2006 8656 8655	MHS170019 MHS170021 DIS 567 SPS170025 8 VCP 330 326.9 MHF120011 MHF120010 US 1226 SPF120004 8 VCP 350 349	0000 0 0 0.00	0000 0 0 0.00
3 6_No_Defect 1057 GGSD P4 A- 2 8 SYLVAN ST 10/28/2007 7428 8723	MHK150037 MHK160025 D/S 668 SPK150041 8 VCP 329 327.6 MHF120020 MHF120024 D/S 1700 SPF120016 10 VCP 264 264	0000 0 0 0.00	0000 0 0 0.00
3 6_No_Defect 1058 PPT 43 35 POPLAR 9/25/2007 8720 8721	MHS170025 MHS170025 D/S 427 SPS170002 8 VCP 330 328 MHF120021 MHF120022 D/S 1276 SPF120018 8 VCP 350 351	0000 0 0 0.00	0000 0 0 0.000
5 6.No_Defect 1058 PPT 4-B2-2 40 STREET 9/12/2012 7603 7620 3 6.No_Defect 1059 GGSD 52 1669 OWEN 1/11/2006 8816 8815 MAND 40 10 <td>MHK150026 MHK150036 DIS 666 SPK150039 8 VCP 329 328.5 MHF120031 MHS 120003 UIS 1620 SPF120029 8 VCP 220 219 MHR110030 MHR120001 DIS 5739 SPR120032 10 VCP 138 330.3</td> <td>0000 0 0 0.00</td> <td>0000 0 0 0.00</td>	MHK150026 MHK150036 DIS 666 SPK150039 8 VCP 329 328.5 MHF120031 MHS 120003 UIS 1620 SPF120029 8 VCP 220 219 MHR110030 MHR120001 DIS 5739 SPR120032 10 VCP 138 330.3	0000 0 0 0.00	0000 0 0 0.00
3 6_No_Defect 1060 PPT 49 36 YEASEMENT 11/9/2007 8209 8206	MHG060002 MHG060003 DIS 1780 SPG060002 10 VCP 30 4 MHS170024 MHS170024 DIS 568 SPS170026 8 VCP 330 331.2	0 0 0.00	0 0 0.00 1 1 MSA = gas flap
KNOTT	MHS170024 MHS170025 DIS 568 SPS170026 8 VCP 330 331.2 MHG070001 MHH070004 UIS 1777 SPH070019 12 VCP 325 324 MH	0000 0 0 0.00	0000 0 0 0.00

Part of the control o	Intruding Seal S TO S TO S
	L U R LD RD SRH SRB SRL Z SA CU IMC F W F W F W F W W W
5 6,No_Defect 1061 PPT	
5 6.No_Defect 1062 PPT 4-81-1 3 SUNSWEPT AVE 9/6/2012 7493 7494 MHS170023 MHS170024 D/S 471 SPS170017 8 VCP 330 332.4	
5 6.No.Defect 1063 PPT 3-882-5 6 STREET 8282012 12708 12709 MHS100015 [MHS100015 MHS100015 MHS10	2
5 6, No, Defect 1064 PPT 383-2 2 TAFT STREET 8/21/2012 12301 12302 MHO140025	258.9' Umarked MH
3 6.No,Defect 1066 [GSD 45 1527 SCANDIA 1011/2005 8223 MHG080014 MHG08015 IDS 970 SPG88011 8 VCP 332 3330 SCANDIA 1011/2005 8224 823 MHG080014 MHG08015 IDS 970 SPG88011 8 VCP 333 335.1 SCANDIA 1011/2005 8224 823 MHG080014 MHG08015 IDS 970 SPG88011 8 VCP 332 330 SCANDIA 1011/2005 8224 823 MHG080014 MHG08015 IDS 970 SPG88011 8 VCP 332 330 SCANDIA 1011/2005 8248 SPL13011 8 VCP 332 333 335.1 SCANDIA 1011/2005 8224 823 MHG080016 MHG08015 IDS 970 SPG88011 8 VCP 332 333 335.1 SCANDIA 1011/2005 8224 8233 MHG080016 MHG08015 IDS 971 SPG08011 8 VCP 332 333 335.1 SCANDIA 1011/2005 8224 8223 MHG08016 IDS 971 SPG08011 8 VCP 332 333 335.1 SCANDIA 1011/2005 8224 8223 MHG08016 IDS 971 SPG08011 8 VCP 332 331 335.1 SCANDIA 1011/2005 8224 8223 MHG08016 IDS 971 SPG08011 8 VCP 332 331 335.1 SCANDIA 1011/2005 8224 8223 MHG08016 IDS 971 SPG08011 8 VCP 332 331 335.1 SCANDIA 1011/2005 8224 8223 MHG08016 IDS 971 SPG08011 8 VCP 332 333 335.1 SCANDIA 1011/2005 8224 8223 MHG08016 IDS 971 SPG08011 8 VCP 332 333 335.1 SCANDIA 1011/2005 8224 8223 MHG08016 IDS 971 SPG08011 8 VCP 332 333 335.1 SCANDIA 1011/2005 8224 8223 MHG08016 IDS 971 SPG08011 8 VCP 332 333 335.1 SCANDIA 1011/2005 8224 8223 MHG08016 IDS 971 SPG08011 8 VCP 332 333 335.1 SCANDIA 1011/2005 8224 8223 MHG08016 IDS 971 SPG08011 8 VCP 332 333 335.1 SCANDIA 1011/2005 8224 8223 MHG08016 IDS 971 SPG08011 8 VCP 332 333 335.1 SCANDIA 1011/2005 8224 8223 MHG08016 IDS 971 SPG08011 8 VCP 332 333 335.1 SCANDIA 1011/2005 8224 8223 MHG08016 IDS 971 SPG08011 8 VCP 332 333 335.1 SCANDIA 1011/2005 8224 8223 MHG08016 IDS 971 SPG08011 8 VCP 332 333 335.1 SCANDIA 1011/2005 8224 8223 MHG08016 IDS 971 SPG08011 8 VCP 332 3331 SCANDIA 1011/2005 8224 8223 MHG08016 IDS 971 SPG08011 8 VCP 332 3331 SCANDIA 1011/2005 8224 8223 MHG08016 IDS 971 SPG08011 8 VCP 332 3331 SCANDIA 1011/2005 8224 8223 MHG08016 IDS 971 SPG08011 8 VCP 332 3331 SCANDIA 1011/2005 8224 8223 MHG08016 IDS 971 SPG08011 8 VCP 332 3331 SCANDIA 1011/2005 8224 8223 MHG08016 IDS 971 SPG08011	
5 6.No_Defect 1067 PPT MAP 10 KEELAVE 9/5/2012 7490 7491 MHS170018 MHS170019 D/S 469 SPS170015 8 VCP 330 335.8	
5 6.No_Defect 1068 PPT 3-82-4 10 ADRIAN STREET 8/24/2012 12668 12669 MHT090003 MHT090004 D/S 3929 SPT090021 8 VCP 335 336.2 000 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	
5 6, No, Defect 1069 PPT H-52-2 34 MAYS AVENUE 9/12/2012 6981 6978 MHL150044 MHL150037 U/S 265 SPL150033 8 VCP 365 338.3	
5 6,No_Defect 1070 PPT 3-84-2 2 LEDA LANE 10/3/2012 7432 6665 MHR140017 MHR140016 U/S 418 SPR140018 8 VCP 3.26 3.39	
3 6,No_Defect 1072 GGD 44 1518 SANTA BARBARA 105/2005 8307 8306 MHG080029 MHG080028 U/S 1101 SPG080026 8 VCP 253 250 5 6,No_Defect 1072 PPT 3-84-1 7 BLVD 9/5/2012 12786 12787 MHT120039 D/S 6597 SPT12034 10 VCP 344 340	
3 6,No_Defect 1073 GGSD 44 1519 SANTA BARBARA 105/2005 8308 8307 MHG080030 MHG080029 U/S 1102 SPG080027 8 VCP 253 261 0 0 0 0.00 0 0 0.00 0 0 0.00 0 0 0 0.00 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	
3 6.No_Defect 1074 GSD 44 1520 CARLOTTA 10/6/2005 830 8309 MHG080030 DIS 1103 SPG880028 8 VCP 308 304 USD 1 VCP 308 304	
5 6,No,Defect 1075 PPT Mey 56 MANLEY STREET 5/25/2012 7927 7936 MHD110003 MHD110013 DIS 1755 SPD110005 10 VCP 339 340.9	U/S MH was 8633, D/S MH was 8637, Pipe ID was 1975, Pipe size was 10". We checked & changed it
3 6.No_Defect 1076 GGSD D 1 1509 SANTA CATALINA 10/4/2005 8312 8226 MHG080034 MHG080034 MHG080034 B VCP 357 281 0 0 0 0.00 0 0.00 0 0 0.00 0 0 0.00 0 0 0 0.00 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	
5 6_No_Defect 1077 PPT	U/S MH is CO
3 6_No_Defect 1079 GGSD 44 1512 SANTA MONICA 104/2005 8319 8318 MHG080038 MHF080011 U/S 1113 SPG080037 8 VCP 271 215 0 0 0 0.00 0 0 0.00 0 0 0 0.00 0 0 0 0	
3 6_No_Defect 1080 GGSD 44 1511 WUTZKE 104/2005 8319 8317 MHG080038 MHG080037 U/S 1112 SPG80008 8 VCP 257 254	
5 6_No_Defect 1081 PPT 4-82-3 10 WOODBURY AVENUE 9/25/2012 10541 10390 MHM150015 COM150001 D/S 2032 SPM150010 8 VCP 200 347.8	
5 6 No_Defect 1082 PPT 2-1-2 2 CHAPMAN AVE 7/10/2012 13867 13866 DIS 7443 new 24 VCP 348 350.1 0000 0 0 0.00 0 0.00 0 0.00 0 0.00 0 0.00 0	
3 6,No,Defect 1084 GGSD 50 1595 WILD GOOSE 11/8/2005 8271 8288 MHG099008 MHG099008 MHG099008 DIS 1331 SPG99026 8 VCP 130 121	
3 6.No. Defect 1085 GGSD 48 1579 WUTZKE 11/3/2005 7343 7341 MHG090030 MHG090020 UIS 1482 SPG990043 8 VCP 214 212 0 0 0 0.00 0 0.00 0 0 0.00 0 0 0 0 0 0	
3 6_No_Defect 1087 GGSD 39 1389 AMY 6/29/2005 8283 8289 MHG090032 MS 1086 SPG090029 8 VCP 267 346 I I I I I I I I I I I I I I I I I I I	
5 6.No_Defect 1089 PPT 481-5 9 BLVD 9/21/2012 10928 10929 MHQ170003 MHQ170004 DIS 5348 SPQ170016 15 VCP 122 359.3	
5 6,No,Defect 1090 PPT 48 2-1 1 ENLO STREET 9/10/2012 11596 11616 MHL150030 MHK150031 D/S 2801 SPK150/13 8 VCP 349 360.5	
5 6, No, Defect 1091 PPT 382-4 7 A LIARD AVE 8/24/2012 12671 12672 MHT090006 MHT090007 DIS 4025 SPT090024 8 VCP 90 385.5 A SPT090024 8 VCP 90 385.5 A SPT090024 8 VCP 90 385.5 A SPT090024 B VCP 90 385.5 A SPT090	2 159.5 MSA . Inspection Completed

	General	Structural Defect Coding	Operational and Maintenance	pu pa
ου ο	Pipe Pipe	mmed ppsed Pig asperators asperators asperat	Maint Rais Modects Modects	Abandons
0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	D Previous MH ID 0 848 848 (i) 10 Previous MH ID 0 848 848 (ii) 10 Previous MH ID 0 848 848 (iii) 10 Previous MH ID 0 848 848 848 (iii) 10 Previous MH ID 0 848 848 848 (iii) 10 Previous MH ID 0 848 848 848 848 848 848 848 848 848 8	Crack Fracture Broken Hole Joint Q 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	27 E E E E E E E E E	dentified
18 10 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	d Start End Q u d d d Start End Q u d d d d d d d d d d d d d d d d d	M S H L C M S H SV VV SV VV S M L S M L S M L A V H P S LF RP S &	5 8 9 9 ASS B % L % Z % B L J C B L J C B L J C G D R W C Z % C R & 5 5 6 FD FL BI BD D L U R LD RD SRH SRB SRL Z SA CU MC F	Section Sec
5 6_No_Defect 1093 PPT	12 D/S 7321 new 10 VCP 359 367 6 MHG090055 MHG090054 U/S 1686 SPG090006 8 VCP 280 282	0000	000 0 0 0.00 0 0 0.00 0 0 0.00 0 0 0.00 0 0 0.00 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	
	7 MHS170012 MHS170014 D/S 426 SPS170001 8 VCP 375 367.3	0000	000 0 0 0.00	
	9 MHG100002 MHG100001 U/S 1116 SPG100004 8 VCP 138 135		0 0 0.00	
5 6_No_Defect 1095 PPT May 10 AVENUE 5/16/2012 8622 8623	3 MHD080023 MHD080024 D/S 1606 SPD080022 8 VCP 372 370.1 2 MHG100004 MHG100002 U/S 1117 SPG100005 8 VCP 150 148	0000	0000 0000 0000 0000 0000 0000 0000 0000 0000	
	21 MHR080021 MHS080001 D/S 6100 SPR080003 15 VCP 369 370.4	0000	000 0 0 0.00	
Map 1 SANTA GERTRUDES	3 MHG100004 MHG100003 U/S 1118 SPG100006 8 VCP 173 169			
3 6_No_Defect 1098 GGSD 50 1599 LAMPLIGHTER 11/8/2005 8325 8321	1 MHD080023 MHD080022 D/S 1605 SPD080021 8 VCP 372 370.7 6 MHG100005 MHG100006 D/S 1120 SPG100008 8 VCP 149 148 3 148	0000	0000 0000 0000 0000 0000 0000 0000 0000 0000	307 MSA (MMC). Inspection
5 6_No_Defect 1098 PPT 2-2-1 6 2-2-1 5 AVENUE 7/6/2012 14651 710:	3 DIS 8435 12 Tile 351 380.4 6 MHG100007 MHG100006 U/S 1121 SPG100009 8 VCP 306 308 308		000 0 0 0.00 0 0.00 0 0 0.00 0 0 0.00 0 0 0.00 0 0 0 0.00 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	Completed
	22 MHS080001 MHS080002 D/S 6101 SPS080005 15 VCP 370 380.5	0000	000 0 0 0.00	
MAP	8 MHG100008 MHF100026 UIS 1123 SPG100011 8 VCP 243 240		0 0 0.00	
3 6_No_Defect 1101 GGSD 50 1613 LAMPLIGHTER 11/14/2005 8331 832	20 MHR070005 MHR080021 DIS 6099 SPR080002 15 VCP 375 380.6 7 MHG100010 MHG100007 UIS 1122 SPG100010 8 VCP 294 291		000 0 0 0.00	
KNOTT	0 MHS170016 MHS170026 D/S 432 SPS170007 8 VCP 385 386.1	0000	000 0 0 0.00	
MAP MORNINGSIDE	5 MHG100011 MHG100012 DIS 1683 SPG100001 10 VCP 410 413	+++++++++++++++++++++++++++++++++++++++	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	
KNOTT	9 MHS170015 MHS170016 D/S 430 SPS170005 8 VCP 385 386.8 6 MHG100012 MHG100012 MHG100013 D/S 1684 SPG100002 10 VCP 410 413	0000	000 0 0 0.00	
5 6_No_Defect 1103 PPT 3-83-3 9 BANNER AVENUE 8/27/2012 11474 1147	73 MHQ140031 MHQ140030 U/S 3826 SPQ140011 8 VCP 385 387.2	0000	000 0 0 0.00	
	6 MHG100013 MHG110050 D/S 1685 SPG100003 10 VCP 360 395		0 0 0.00 1	
5 6,No,Defect 1104 PPT 4-B1-1 15 AVE 9/4/2012 7447 7441 3 6,No,Defect 1105 PPT 41 22 KILLARNEY 9/17/2007 7728 772	8 MHS170014 MHS170015 D/S 429 SPS170004 8 VCP 386 390 7 MHG110006 MHG110044 U/S 1129 SPG110031 8 VCP 338 342	0000	000 0 0 0.00	
MAP WESTMINSTER	15 MHQ170005 MHQ170006 D/S 4959 SPQ170001 15 VCP 370 394.8		000 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	
3 6_No_Defect 1106 PPT	7 MHG110007 MHG110019 DIS 1053 SPG110026 8 VCP 343 342 88 MHR120052 MHR120053 DIS 6173 SPR120060 24 VCP 398 395		0 0 0.00	
3 6_No_Defect 1107 PPT 41 20 KILLARNEY 9/17/2007 8760 8241	88 MHRT20052 MHRT20053 DIS 5173 SPR12000 24 VCP 399 395 6 MHG110008 MHG110007 US 1313 SPG110054 8 VCP 256 257	0000	000 0 0 0.00	
	3 MH-U060004 COJ060001 D/S 1902 SPJ060004 8 Known 390 398.9 1 MH-G110008 MH-G110017 D/S 1470 SPG110052 8 VCP 343 342	0000	000 0 0.00	
MAP WESTMINSTER	90 MHQ170004 MHQ170005 D/S 5349 SPQ170017 15 VCP 390 402.2	0000	0000 0 0 000	
	8 MHG110009 MHG110006 U/S 1130 SPG110032 8 VCP 338 339		0 0 0.00	
	8 MHI090026 MHI090027 D/S 1722 SPI090005 15 VCP 400 404.9 0 MHG110009 MHG110008 U/S 1131 SPG110033 8 VCP 258 262	0000	000 0 0.00	
5 6_No_Defect 1110 PPT 3-83-4 6 TRASK AVENUE 8/30/2012 12002 1200	33 MHR150005 MHR150004 U/S 3893 SPR150003 12 VCP 420 419.7	0000	000 0 0 0.00	
3 6 No Defect 1111 PPT 41 24 LAMPLIGHTER 9/17/2007 7729 773:				
	86 MHR100013 MHR100012 U/S 6167 SPR100040 8 VCP 420 422 0 MHG110010 MHF110009 D/S 1306 SPF110027 8 VCP 367 371		000 0 0 0.00	
5 6_No_Defect 1112 PPT		0000	000 0 0 0.00	Pipe SPG110037 corrected to
MAP GARDEN GROVE	0 MHG110011 MHG110010 D/S 1133 SPG110035 8 VCP 362 363		0 0 0.00	SPG110035
5 6_No_Defect 1113 PPT 3-B4-2 18 BLVD 9/24/2012 12903 1290	04 MHG120065 MHG120066 DIS 5822 SPQ130038 24 VCP 432 435.1 2 MHG110012 MHG110014 UIS 1135 SPG110037 8 VCP 256 257	0000	000 0 0 0.00	
5 6, No, Defect 1114 PPT 3-84-2 17 GARDEN GROVE 9/24/2012 12904 1256 3 6, No, Defect 1115 PPT 43 4 TRINETTE 9/19/2007 7734 773	32 MHG120056 MHG130001 DIS 5823 SPQ130039 24 VCP 434 435.2 5 MHG110013 MHG110042 DIS 1137 SPG11039 8 VCP 338 342	0000	000 0 0 0.00	
5 6_No_Defect 1115 PPT 3-B5 14 NUTWOOD STREET 9/13/2012 11120 1112	22 D/S 7583 new 10 VCP 379 458.1	0000	0 0 0.00	
MAP	2 MHG110017 MHG110018 DIS 1144 SPG110046 8 VCP 343 343			
3 6_No_Defect 1117 PPT 42 4 PALOMAR 9/18/2007 8762 8763	9 MHN180011 MHN180007 D/S 529 SPN180030 8 VCP 534 524 3 MHG110018 MHG110026 D/S 1145 SPG110047 8 VCP 343 343 8 MHG110019 MHG110020 D/S 1037 SPG110021 8 VCP 343 343		000 0 0 0.00 0 0 0.00 0 0 0.00	262.6 Unmapped MH
3 6,No,Defect 1119 PPT 42 7 SCANDIA 9/18/2007 8248 8241 3 6,No,Defect 1120 PPT 42 8 SCANDIA 9/18/2007 8249 825:	9 MHG110020 MHG110025 D/S 1038 SPG110022 8 VCP 343 344 2 MHG110021 MHG110025 D/S 1039 SPG110023 8 VCP 212 0		0 0 0.00	
3 6_No_Defect 1121 PPT 43 12 STANFORD 9/21/2007 8250 813- 3 6_No_Defect 1122 PPT 43 11 STANFORD 9/21/2007 8251 8251	4 MHG110023 MHG110022 U/S 1088 SPG110027 8 VCP 369 366 0 MHG110024 MHG110023 U/S 1040 SPG110024 8 VCP 258 260		0 0 0.00	
3 6_No_Defect 1124 PPT 43 7 STANFORD 9/21/2007 8252 8763	2 MHG110025 MHG110025 D/S 1041 SPG110025 8 VCP 359 361 3 MHG110025 MHG110026 D/S 1314 SPG110055 8 VCP 256 257 1 MHG110026 MHG110026 D/S 1146 SPG110048 8 VCP 258 259		0 0 0.00 0 0 0.00 0 0 0 0.00 0 0 0 0 0	
3 6_No_Defect 1126 PPT 43 31 CANTER 9/24/2007 7744 7746	1 MH6110028 MH6110022 LDS 1146 SPG310048 8 VCP 258 259 258 259 6 MHG110028 MHG10004 DVS 1461 SPG120017 8 VCP 258 260 1 MHG110032 MHG110031 US 1369 SPG110007 8 VCP 115 55		0 0 0.00	
3 6_No_Defect 1128 PPT 47 11 DANVERS 10/9/2007 8234 823 3 6_No_Defect 1129 PPT 47 5 ALMONDINE 10/9/2007 8234 823	2 MHG110032 MHG110034 U/S 1970 SPG110008 8 VCP 220 211 3 MHG110034 MHG110033 U/S 1971 SPG110009 8 VCP 115 50		0 0 0.00	
	5 MHG110037 MHG110035 U/S 1974 SPG110011 8 VCP 220 225 6 MHG110037 MHG110038 U/S 1975 SPG110012 8 VCP 25 46		0 0 0.00	Pipe SPG110011 corrected to
	9 MHG110037 MHG110039 D/S 1976 SPG110013 8 VCP 260 235 8 MHG110039 MHG110038 U/S 1977 SPG110014 8 VCP 1110 61		0 0 0.00	SPG110013

				General				Structural Defect Co	dina	1 1	1	Operational and Maintenance			Construction Features	W D	
		o l		Contra	Pip	e		Silaciana Bereci Oc	adid P III	Rating ects	×ep	Operational and maintenance		Rating	Constitution 1 cardico	eous Feature	peuop
	i g	ο No. Ο No. η η η η η η η η η η η η η η η η η η η			er ID ver ID.	£ ± £			formex llapsec mage ing Fa	gs Struct ral Def	lect In			Maint efects efect (Intruding Seal	scellan action I	I Aban
glocator	lo. Bion Ne	Location a DA	Exist	ing MH ID Previous MH ID	a Sew	mmer (ft)	Crack Fracture	Broken Hole B H	Joint B X D X	Po Sa Po tructu tructu	Deposits D	Roots (R) Fine (F) Tap (T) Medium (M)	Infiltration Obstacles Ver		Line Material L IS	M Mis	antified
Phase Priority Sankin	Tape N OVD N nspec	Street Name	CCTV Date Start	End Start End	Existin Previou	Janut Length	CMSHICMS	H SV VV SV VV S M	SMLAVHPSIE	ACP Cotal S	AE AE Other	N. I. C. B. I. I. C. B. I. I. C. B	Other	A A CP Cotal C Cotal C Cotal C C Cotal C C C C C C C C C C C C C C C C C C C	D I II R I D RD SRH SRB SRI 7	Z cason	ទី ២ Comments Recommendations
3 6_No_Defect 1134 PPT		ALMONDINE			U/S 1978 SPG110015 8 VCP		0 11 2 0 11 3	11 30 00 30 00 0		0 0	U) 1100 D	5 2 3 6 5 2 3 6 5 2 3 6 5	5 E 3 C G B K W 2 2 C	0 0 0.00	J D E O K ED KD SKII SKB SKE Z	SA CO INC F IL	O Comments Recommendations
3 6_No_Defect 1135 PPT 3 6_No_Defect 1136 PPT		ALMONDINE ALMONDINE		8250 MHG110041 MHG110023 8234 MHG110041 MHG110034		250 228 330 401				0 0	0.00			0 0 0.00			
3 6_No_Defect 1137 PPT	47 6	ALMONDINE	10/9/2007 8241	8240 MHG110041 MHG110040	U/S 1979 SPG110016 8 VCP	170 220				0 0	0.00			0 0 0.00			
3 6_No_Defect 1138 PPT 3 6_No_Defect 1139 PPT		TRINETTE		7736 MHG110042 MHG110014 7726 MHG110044 MHF110006		338 339 258 258				0 0	0.00			0 0 0.00			
3 6_No_Defect 1140 PPT		LAMPSON		8175 MHG110050 MHG110049		40 33				0 0	0.00			0 0 0.00			
3 6_No_Defect 1141 PPT 3 6_No_Defect 1142 PPT		LAMPSON PARK		8291 MHG110050 MHG110051 8254 MHG120001 MHG120002		10 8 283 282				0 0	0.00			0 0 0.00			
3 6_No_Defect 1143 PPT	43 13	SUTTER		8255 MHG120001 MHG120005		256 257				0 0	0.00			0 0 0.00			
3 6_No_Defect 1144 PPT 3 6_No_Defect 1145 PPT		PARK MARIETTA		8764 MHG120002 MHG120028 8256 MHG120005 MHG120006						0 0	0.00			0 0 0.00			
3 6_No_Defect 1146 PPT 3 6_No_Defect 1147 PPT		MARIETTA MARIETTA		7747 MHG120006 MHG120007 7322 MHG120007 MHG120025						0 0	0.00			0 0 0.00			
3 6_No_Defect 1147 PPT 3 6_No_Defect 1148 PPT		WILD GOOSE		7322 MHG120007 MHG120025 8250 MHG120009 MHG110023		289 292 260 261				0 0	0.00			0 0 0.00			
3 6_No_Defect 1149 PPT 3 6_No_Defect 1150 PPT		WILD GOOSE WILD GOOSE		8257 MHG120010 MHG120009 8258 MHG120011 MHG120010						0 0	0.00			0 0 0.00			
3 6_No_Defect 1150 PPT 3 6_No_Defect 1151 PPT		ACACIA		8258 MHG120011 MHG120010 8260 MHG120011 MHG120012		239 239 354 356				0 0	0.00			0 0 0.00			
3 6_No_Defect 1152 PPT 3 6_No_Defect 1153 PPT		KNOTT		8144 MHG120011 MHH120010 8261 MHG120012 MHG120026		436 444 354 359				0 0	0.00			0 0 0.00			
3 6_No_Defect 1153 PPT 3 6_No_Defect 1154 PPT	43 26 44 1	ACACIA PARK		8257 MHG120017 MHG120026 MHG120017 MHG120009						0 0	0.00			0 0 0.00			
3 6_No_Defect 1155 PPT 3 6_No_Defect 1156 PPT		DUMONT	0.00.00	8263 MHG120017 MHG120018		347 348				0 0	0.00			0 0 0.00			
3 6_No_Defect 1156 PPT 3 6_No_Defect 1157 PPT		DUMONT ANTHONY	9/25/2007 8265		U/S 1050 SPG120010 8 VCP	347 348 355 357	 	 	+++++++++++++++++++++++++++++++++++++++	0 0	0.00	 	+++++++++	0 0 0.00	+++++++++++++++++++++++++++++++++++++++	++++	
3 6_No_Defect 1158 PPT 3 6_No_Defect 1159 PPT		ANTHONY		8265 MHG120021 MHG120020	U/S 1051 SPG120011 8 VCP	354 358				0 0	0.00			0 0 0.00			
3 6_No_Defect 1160 PPT		ANTHONY ANTHONY	9/25/2007 8267	7327 MHG120022 MHG120027	D/S 1317 SPG120031 8 VCP	354 356 352 354	 	 	+++++++++++++++++++++++++++++++++++++++	0 0	0.00	 	+++++++++	0 0 0.00 1	+++++++++++++++++++++++++++++++++++++++	++++	
3 6_No_Defect 1161 PPT 3 6_No_Defect 1162 PPT		ANTHONY MARIETTA		7406 MHG120024 MHF120001 7748 MHG120025 MHG120008		360 361 289 288				0 0	0.00			0 0 0.00			
3 6_No_Defect 1162 PPT 3 6_No_Defect 1163 PPT		MARIETTA ACACIA	9/24/2007 8261	7323 MHG120026 MHG120013	D/S 982 SPG120001 8 VCP	289 288 354 354	<u>+ </u>	 	 	0 0	0.00	 	 	0 0 0.00	 		
3 6_No_Defect 1164 PPT 3 6_No_Defect 1165 PPT		ANTHONY PARK		7328 MHG120027 MHG120023 7745 MHG120028 MHG120003						0 0	0.00			0 0 0.00			
3 6_No_Defect 1166 PPT	45 13	MARKON	10/5/2007 8202	8200 MHH060006 MHH060004	U/S 953 SPH060007 8 VCP		 	 	 	0 0	0.00	 	 	0 0 0.00	 		
3 6_No_Defect 1167 PPT 3 6_No_Defect 1168 PPT		PATTERSON PATTERSON	9/24/2007 8205	8204 MHH060009 MHH060008 8208 MHH060010 MHG060001	U/S 957 SPH060011 8 VCP	315 318 377 381				0 0	0.00			0 0 0.00			
3 6_No_Defect 1169 PPT		LINCOLN	10/12/2007 8127	8128 MHH060011 MHH060012	D/S 902 SPH060005 8 VCP					0 0	0.00			0 0 0.00			
3 6_No_Defect 1170 PPT	47 26	LINCOLN	10/12/2007 8128	7193 MHH060012 MHH060013	D/S 905 SPH060006 8 VCP	384 385				0 0	0.00			0 0 0.00			
3 6_No_Defect 1171 PPT	45 29	EASEMENT	10/6/2007 8189	8190 MHH070001 MHH070002	D/S 1774 SPH070016 12 VCP	207 206				0 0	0.00			0 0 0.00			
3 6_No_Defect 1172 PPT 3 6_No_Defect 1173 PPT		EASEMENT		8191 MHH070004 MHH070003		327 330				0 0	0.00			0 0 0.00			
3 6_No_Defect 1173 PPT 3 6_No_Defect 1174 PPT		DOIG		8113 MHH070006 MHH070005 8114 MHH070007 MHH070006	U/S 895 SPH070005 8 VCP U/S 896 SPH070006 8 VCP	309 314 346 348				0 0	0.00			0 0 0.00			
3 6_No_Defect 1175 PPT 3 6_No_Defect 1176 PPT	45 20 45 21	MONARCH MONARCH		8116 MHH070009 MHH070008 8112 MHH070009 MHH080006		225 225 562 562				0 0	0.00			0 0 0.00			
3 6_No_Defect 1177 PPT		ORANGEWOOD	10/6/2007 8119	8120 MHH070011 MHH070012	D/S 1675 SPH070011 8 VCP					0 0	0.00			0 0 0.00			
3 6_No_Defect 1178 PPT 3 6_No_Defect 1179 PPT		ORANGEWOOD MONARCH		8121 MHH070012 MHH070013 8 8122 MHH070015 MHH070014		369 371 400 403				0 0	0.00			0 0 0.00			
3 6_No_Defect 1179 PPT		MARKON	10/5/2007 8197	8198 MHH070016 MHH070017	D/S 952 SPH070020 8 VCP	400 402				0 0	0.00			0 0 0.00			
3 6_No_Defect 1181 PPT 3 6_No_Defect 1182 PPT	40 33 40 34	HUNT MONARCH		8108 MHH080003 MHH080002 8107 MHH080004 MHH080001		243 244 410 414				0 0	0.00			0 0 0.00			
3 6_No_Defect 1183 PPT		HUNT	9/12/2007 8110	8109 MHH080004 MHH080003	U/S 894 SPH080003 8 VCP		 			0 0	0.00			0 0 0.00			
3 6_No_Defect 1184 PPT 3 6 No_Defect 1185 PPT		MONARCH MONARCH		8111 MHH080004 MHH080005 8112 MHH080005 MHH080006						0 0	0.00			0 0 0.00			
3 6_No_Defect 1186 PPT	45 28	MARKON	10/6/2007 8188	8189 MHH080007 MHH070001	D/S 951 SPH070015 12 VCP	374 376				0 0	0.00			0 0 0.00			
3 6_No_Defect 1187 PPT 3 6_No_Defect 1188 PPT		BELGRAVE		8 161 MHH090001 MHH090002 8 8180 MHH090001 MHH090008		326 329 452 455				0 0	0.00			0 0 0.00			
3 6_No_Defect 1189 PPT	41 4	EDISON	9/14/2007 8167	8168 MHH090004 MHH100009	D/S 934 SPH100008 8 VCP	357 361				0 0	0.00			0 0 0.00			
3 6_No_Defect 1190 PPT 3 6_No_Defect 1191 PPT		CHAPMAN		7191 MHH090005 MHI090010 8179 MHH090008 MHH090007	D/S 904 SPH090003 8 VCP U/S 944 SPH090007 8 VCP	392 395 451 455				0 0	0.00			0 0 0.00			
3 6_No_Defect 1192 PPT	48 49	CHAPMAN	10/31/2007 8181	8182 MHH090009 MHH090010	D/S 946 SPH090009 8 VCP	142 147				0 0	0.00			0 0 0.00 1			
3 6_No_Defect 1193 PPT		WESTERN			D/S 947 SPH090010 8 VCP		++++++		+++++++++++++++++++++++++++++++++++++++	0 0	0.00		+++++++++++++++++++++++++++++++++++++++	0 0 0.00	+++++++++++++++++++++++++++++++++++++++	++++	
3 6_No_Defect 1194 PPT 3 6_No_Defect 1195 PPT	48 33 39 36	EASEMENT ANACONDA			U/S 1080 SPH090001 8 VCP D/S 903 SPH100006 8 VCP		+++++		+++++++++++++++++++++++++++++++++++++++	0 0	0.00		+++++++++++++++++++++++++++++++++++++++	0 0 0.00	+++++++++++++++++++++++++++++++++++++++	++++	
3 6_No_Defect 1195 PPT 3 6_No_Defect 1196 PPT 3 6_No_Defect 1197 PPT	39 38		9/10/2007 8101	8102 MHH100003 MHH100004	D/S 903 SPH100006 8 VCP D/S 887 SPH100002 8 VCP	300 302				0 0	0.00			0 0 0.00			
3 6_No_Defect 1197 PPT 3 6_No_Defect 1198 PPT		ANACONDA			D/S 888 SPH100003 8 VCP U/S 889 SPH100004 8 VCP		+++++	 	+++++++++++++++++++++++++++++++++++++++	0 0	0.00	 	+++++++++++++++++++++++++++++++++++++++	0 0 0.00 1	+++++++++++++++++++++++++++++++++++++++	+++	Pipe SPH090002 corrected to
3 6_No_Defect 1198 PPT 3 6_No_Defect 1199 PPT	41 8 41 9	MONARCH MONARCH					++++++	+++++	+++++++++++++++++++++++++++++++++++++++	0 0	0.00	 	++++++++++	0 0 0.00 3	+++++++++++++++++++++++++++++++++++++++		SPH100004
3 6_No_Defect 1199 PPT 3 6_No_Defect 1200 PPT 3 6_No_Defect 1201 PPT	43 33		9/25/2007 8104	8098 MHH100006 MHH110010	D/S 891 SPH090002 8 VCP D/S 890 SPH100005 8 VCP D/S 943 SPH100013 8 VCP	540 548				0 0				0 0 0.00			
		INDUSTRY	9/14/2007 8160	8158 MHH100008 MHH090001	D/S 930 SPH090004 8 VCP	413 392				0 0		 	+++++++++++++++++++++++++++++++++++++++	0 0 0.00		1	MSA = Siphon
3 6_No_Defect 1202 PPT 3 6_No_Defect 1203 PPT 3 6_No_Defect 1204 PPT 3 6_No_Defect 1205 PPT 3 6_No_Defect 1206 PPT	41 2	INDUSTRY EDISON	9/14/2007 8160	8159 MHH100008 MHH100007	U/S 929 SPH100007 8 VCP	410 411 357 359				0 0	0.00						
3 6_No_Defect 1205 PPT	41 6	EDISON	9/14/2007 8168	8169 MHH100011 MHH100010	D/S 935 SPH100009 8 VCP U/S 936 SPH100010 8 VCP					0 0	0.00			0 0 0.00			
		Y EDISON PALA			D/S 937 SPH100011 8 VCP D/S 922 SPH120012 8 VCP	357 357		1 1 1 1 1 1 1 1		0 0				0 0 0.00			
3 6_No_Defect 1208 PPT	40 43	MONARCH	9/12/2007 8094	8095 MHH110002 MHH110003	D/S 882 SPH110003 8 VCP	388 392				0 0				0 0 0.00 0 0 0.00 1			
3 6_No_Defect 1200 PPT 3 6_No_Defect 1209 PPT 3 6_No_Defect 1209 PPT 3 6_No_Defect 1210 PPT 3 6_No_Defect 1211 PPT	49 14	MONARCH MONARCH	11/5/2007 8096	8097 MHH110004 MHH110005	D/S 884 SPH110005 8 VCP D/S 885 SPH110006 8 VCP	40 54				0 0	0.00			0 0 0.00			
3 6_No_Defect 1211 PPT	49 15	LAMPSON	9/26/2007 8154	8151 MHH110008 MHG110045	U/S 1773 SPH110009 12 VCP	450 459				0 0				0 0 0.00 3			
3 6_No_Defect 1212 PPT	44 13	LAMPSON LAMPSON	9/26/2007 8154	7135 MHH110008 MHH110016	D/S 1769 SPH110002 12 VCP U/S 1770 SPH110007 12 VCP	50 62 660 666				0 0				0 0 0.00			
3 6_No_Defect 1214 PPT	44 20	LAMPSON	9/28/2007 8099	7189 MHH110011 MHI110001	D/S 1772 SPH110008 12 VCP	660 660				0 0	0.00			0 0 0.00 2			
3 6_No_Defect 1214 PPT 3 6_No_Defect 1215 PPT 3 6_No_Defect 1216 PPT	49 16	INDUSTRY LAMPSON			D/S 1731 SPH110012 18 VCP D/S 1768 SPH110001 12 VCP					0 0	0.00			0 0 0.00			
3 6_No_Defect 1217 PPT	41 30	LAMPSON	9/18/2007 8172	8173 MHH110017 MHH110018	D/S 939 SPH110015 8 VCP	480 514				0 0	0.00		 	0 0 0.00 2	 		
3 6_No_Defect 1218 PPT		GARDEN GROVE			D/S 940 SPH110016 8 VCP					0 0	0.00			0 0 0.00			0' MSA =LINE DOESN'T EXIST,
2 6_No_Defect 1219	G055 9	Y BLVD KNOTT		5 10876 MHP130032 MHP130033			++++++	++++++++++++++++++++++++++++++++++++	+++++++++++++++++++++++++++++++++++++++	0 0		 	+++++++++++++++++++++++++++++++++++++++	0 0	+++++++++++++++++++++++++++++++++++++++	1	PROBABLY ABANDONED
3 6_No_Defect 1219 PPT 2 6_No_Defect 1220	45 23 M020 5	EASEMENT	10/5/2007 8139	8138 MHH120006 MHH120005	U/S 915 SPH120005 8 VCP U/S 5279 SPP120021 6 VCP	170 62 240 0.0		++++++		0 0	0.00		++++++++++	0 0 0.00	1	1	MSA = Bends 0' MSA= NO INSPECTION
3 6_No_Defect 1220 PPT	47 18	KNOTT	10/10/2007 8144	8143 MHH120010 MHH120009	U/S 920 SPH120010 8 VCP	314 314		 	 	0 0	0.00		 	0 0 0.00		1	O MONE NO INSPECTION
3 6_No_Defect 1221 PPT 2 6_No_Defect 1222	47 15	KNOTT	10/10/2007 8145	8292 MHH120011 MHG110046	D/S 2130 SPG110001 8 VCP U/S 2067 SPJ070007 8 VCP	623 511 86 83.9				0 0	0.00			0 0 0.00			
3 6_No_Defect 1222 PPT					D/S 923 SPH120013 8 VCP					0 0	0.00			0 0 0.00			

				General				Structural Defect C	Coding	P 8		Operational and Maintenance		9 0	Construction Features	Ser les	Du Du
					Dibe	- t			med psed Pip ce age g Failure	Repair ruct Rati Defects	at Index			aint Ratir acts act Score		sllaneous ion Featu	bandone (bandone)
a do	ion No.	al Inspec	Exis	sting MH ID Previous MH ID	an of Car	mment (ft) (ft)	Crack Fracture	Broken Hole B H	X Collai Puior	Point Sags Quick St tructural tructural	Deposits D		Infiltration Obstacles Version I OB	A Chuick Ma Chuich Ma Chui	(Lateral) Line T L	ruding Seal SS Material W IS M	nutified A
Phase Priority Rankin	Tape N DVD N Inspec	Street Name	CCTV Date Sta	rt End Start End	Direction Existin Previou Size (ir	GIS Co	C M S H L C M S	H SV VV SV VV S M	LSMLAVHPS LF	PACP S AN Total S	AGS B % L % Z % B	LJCBLJCBLJCB	L J C G D R W C Z % (PACP Total C O&M E D 1	BI BD D L U R LD RD SRH	SRB SRL Z SA CU MC	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
2 6_No_Defect 1223 3 6_No_Defect 1223 PPT	G011 3 40 26	MAGNOLIA ST ACACIA	7/26/2005	MHL070013- MHL070014 A A 9 8148 MHH120014 MHH120013	U/S SPL070030-A 8 VCP	47 46.8 111 112				0 0	0.00			0 0 0.00			
2 6_No_Defect 1224 3 6_No_Defect 1224 PPT	G012 2	MACDUFF ST ACACIA	7/27/2005 800	2 8707 MHK080025 COK080002	U/S 1857 SPK080025 8 VCP U/S 925 SPH120015 8 VCP	88 87.9 270 271				0 0	0.00			0 0 0.00			
2 6_No_Defect 1225	G012 3				U/S 1858 SPK080026 8 VCP	100 103.9				0 0	0.00			0 0			Pipe SPH1200 corrected to
3 6_No_Defect 1225 PP1 2 6_No_Defect 1226	40 24 G030 6	ACACIA CHAPMAN AV		2 8150 MHH120016 MHH120015 18 13114 MHQ090048 MHQ090057		300 301 10 8.2				0 0	0.00			0 0 0.00			SPH120016
3 6_No_Defect 1226 PP1 2 6_No_Defect 1227	40 20 G038 4	MONARCH MORGAN LN			D/S 880 SPH120001 8 VCP U/S 6282 SPQ110036 8 VCP	287 290 60 69.6				0 0	0.00			0 0 0.00			
3 6_No_Defect 1227 PP1 2 6_No_Defect 1228	40 21 G043 1	MONARCH SPINNAKER ST			D/S 881 SPH120002 8 VCP U/S 5452 SPT110010 8 VCP	300 302 95 96.0				0 0	0.00			0 0 0.00			
3 6_No_Defect 1228 PP1		GARDEN GROVE BLVD			D/S 1670 SPH130002 10 VCP	135 141				0 0	0.00			0 0 0.00			
2 6_No_Defect 1229 3 6_No_Defect 1229 PPT	G043 3 48 42	LAUX CR GARDEN GROVE BLVD		92 12393 MHT110012 MHT110013 11 7187 MHH130004 MHI130013	D/S 5548 SPT110013 8 VCP D/S 1678 SPH130005 10 VCP	198 198.9 330 332				0 0	0.00			0 0 0.00			
2 6_No_Defect 1230 3 6_No_Defect 1230 PPT	G059 3	CHAPMAN AV WESTERN	12/13/2005 1298	37 12988 MHP090032 MHP090033	D/S 6345 SPP090004 18 VCP U/S 871 SPI080001 8 VCP	22 14.9 110 112				0 0	0.00			0 0 0.00			
2 6_No_Defect 1231	M001 1	VICILIA ST	8/4/2005 1084	48 10847 MHK060019 MHK060018	U/S 5334 SPK060005 8 VCP	100 106.6				0 0				0 0			MHK060018 CLEANOUT MAINLINE
3 6_No_Defect 1231 PP1 2 6_No_Defect 1232	49 8 M001 2	WESTERN VICILIA ST			D/S 873 SPI080003 8 VCP D/S 5335 SPK060006 8 VCP	10 10 80 90.9				0 0	0.00			0 0 0.00			
3 6_No_Defect 1232 PPT 2 6_No_Defect 1233	49 37 M001 3	SANTA RITA Y BOWLES AV	11/9/2007 808	0 8081 MHI080005 MHI080006	D/S 876 SPI080010 8 VCP D/S 5937 SPK060037 8 VCP	335 343 180 180.4				0 0	0.00			0 0 0.00			
3 6_No_Defect 1233 PPT 2 6_No_Defect 1234		WESTERN BOWLES AV	11/2/2007 808	2 7127 MHI080007 COI080001	U/S 874 SPI080007 8 VCP D/S 5336 SPK060007 8 VCP	165 276				0 0	0.00			0 0 0.00	1	1	MSA = Bends
3 6_No_Defect 1234 PP1	49 5	WESTERN	11/2/2007 808	2 8081 MHI080007 MHI080006	U/S 877 SPI080011 8 VCP	210 211.9 85 84				0 0	0.00			0 0 0.00			
2 6_No_Defect 1235 3 6_No_Defect 1235 PP1		MAC ST WESTERN	11/2/2007 808	2 8083 MHI080007 MHI080008		280 292.0 10 10				0 0	0.00			0 0 0.00			
2 6_No_Defect 1236 3 6_No_Defect 1236 PPT	M001 9 48 30	MAC ST WESTERN	10/31/2007 719	9 7200 MHI090002 MHI090003	D/S 5339 SPK060010 8 VCP D/S 1072 SPI090009 8 VCP	80 89.4 101 111				0 0	0.00			0 0 0.00		1	
2 6_No_Defect 1237 3 6_No_Defect 1237 PP1	M001 11 48 31	MACNAB ST WESTERN	8/4/2005 1085	55 10856 MHK060026 MHK060027	D/S 5342 SPK060013 8 VCP D/S 1073 SPI090010 8 VCP	280 308.1 9 9				0 0	0.00			0 0 0.00	1		
2 6_No_Defect 1238	M001 12	MACNAB ST WESTERN	8/4/2005 1085	56 10857 MHK060027 MHK060028	D/S 5343 SPK060014 8 VCP	95 94.2				0 0				0 0			Pipe SPH090012 corrected to
3 6_No_Defect 1238 PP1 2 6_No_Defect 1239	48 35 M001 13	EASEMENT JOYZELLE AV		4 7203 MHI090007 MHI090006 57 10860 MHK060028 MHK060031	U/S 1075 SPI090012 8 VCP D/S 5344 SPK060015 8 VCP	138 138 275 276.0				0 0	0.00			0 0 0.00			SPI090012
3 6_No_Defect 1239 PPT 2 6_No_Defect 1240	48 32 M002 3	WESTERN TRACY AV	10/31/2007 720	6 7208 MHI090009 MHH090012	U/S 1081 SPI090017 8 VCP D/S 3769 SPK060020 8 VCP	35 39 130 123.5				0 0	0.00			0 0 0.00			
3 6_No_Defect 1240 PP1		CHAPMAN			D/S 1082 SPI090018 8 VCP	70 70				0 0	0.00			0 0 0.00			MHL060007 CLEANOUT
2 6_No_Defect 1241 3 6_No_Defect 1241 PPT	M002 9 39 43	OLSON ST FIELDGATE		63 10162 MHL060008 MHL060007 8 7159 MHI090013 MHI100002	U/S 3724 SPL060011 8 VCP D/S 1011 SPI100001 8 VCP	75 85.2 234 238				0 0	0.00			0 0 0.00			MAINLINE
2 6_No_Defect 1242	M004 12	ROYAL PALM BLVD	8/8/2005 1015	53 10154 MHL070024 MHL070025	D/S 5203 SPL070018 8 VCP	215 215.9				0 0				0 0			
3 6_No_Defect 1242 PP1 2 6_No_Defect 1243	39 40 M009 11	BELGRAVE Y DANIEL AV			D/S 1012 SPI090002 8 VCP U/S 6314 SPQ070005 8 VCP	390 394 90 91.8				0 0	0.00			0 0 0.00			
3 6_No_Defect 1243 PPT 2 6_No_Defect 1244	39 41 M011 4	BELGRAVE ROBERT LN	9/10/2007 716	1 7212 MHI090015 MHI090016	D/S 908 SPI090031 8 VCP D/S 5844 SPQ080044 8 VCP	390 391 55 86.9				0 0	0.00			0 0 0.00			
3 6_No_Defect 1244 PPT		LAURELTON	9/10/2007 716	2 7124 MHI090017 COI090002	U/S 1013 SPI090003 8 VCP	145 147				0 0	0.00			0 0 0.00			Repeat inspection, DVD 47 - Section 21
2 6_No_Defect 1245	M011 12				U/S 6556 SPT080006 8 VCP	121 128.8				0 0				0 0			Repeat inspection, DVD 47 -
3 6_No_Defect 1245 PPT 2 6_No_Defect 1246	39 34 M020 12	LAURELTON BUARO ST	9/10/2007 716 9/14/2005	3 7162 MHI090018 MHI090017 MHR110017 MHR110018		364 365 34 34.4				0 0	0.00			0 0 0.00			Section 22 Pipe SPI090020 corrected to
3 6_No_Defect 1246 PPT 2 6_No_Defect 1247	39 31 M021 1	SANTA ROSALIA EASEMENT		3 7126 MHI090020 COI090001 68 12169 MHR110034 MHR110035		65 58 140 129.3				0 0	0.00			0 0 0.00			Pipe SPI090020 corrected to SPI090019
3 6_No_Defect 1247 PP1		SANTA ROSALIA ALLEY		3 7164 MHI090020 MHI090019		300 305				0 0	0.00			0 0 0.00	3		Repeat inspection, DVD 47 - Section 19
2 6_No_Defect 1248	M021 2	EASEMENT	9/15/2005	MHR110035 MHR110035A		249 249.1				0 0				0 0			
3 6_No_Defect 1248 PPT 3 6_No_Defect 1249 PPT		SANTA ROSALIA VANGUARD			U/S 1084 SPI090020 8 VCP U/S 911 SPI090034 8 VCP	136 142 203 206				0 0	0.00			0 0 0.00			Repeat inspection, DVD 47 - Section 20
2 6_No_Defect 1250	M024 10	CHAPMAN AV	10/28/2005 1311	13 13114 MHQ090056 MHQ090057	D/S 6349 SPQ090039 18 VCP	269 260.9				0 0	0.00						Section 20
3 6_No_Defect 1250 PPT 2 6_No_Defect 1251	M024 11	AMY CHAPMAN AV	10/28/2005 1311	14 12977 MHQ090057 MHQ090058	U/S 912 SPI090035 8 VCP D/S 6278 SPQ090001 18 VCP	212 213 343 355.0				0 0				0 0 0.00			
3 6_No_Defect 1251 PPT 2 6_No_Defect 1252	39 32 R001 6	SANTA ROSALIA FERRIS LN			D/S 870 SPI090023 8 VCP D/S 5192 SPL080017 8 VCP	267 271 60 64.8				0 0	0.00	<u> </u>		0 0 0.00			
3 6_No_Defect 1252 PPT	39 33	LAURELTON		6 7163 MHI090025 MHI090018		329 331				0 0	0.00			0 0 0.00			Repeat inspection, DVD 47 - Section 23
2 6_No_Defect 1253 3 6_No_Defect 1253 PPT		MARYLEE DR SANTA ROSALIA	9/8/2007 721	6 7215 MHI090025 MHI090024	U/S 4722 SPL080032 8 VCP U/S 869 SPI090022 8 VCP	200 118.1 267 270				0 0					2		
2 6_No_Defect 1254 3 6_No_Defect 1254 PPT	R004 2 48 20	CHAPMAN AV CHAPMAN	10/30/2007 721	7 8073 MHI090029 MHI090030	D/S 7466 SPL090006 18 VCP D/S 1724 SPI090024 15 VCP	152 151.7 400 404				0 0	0.00			0 0 0.00	++++++	$++++\mp$	
2 6_No_Defect 1255 3 6_No_Defect 1255 PPT	R004 4	CHAPMAN AV CHAPMAN	7/28/2005 1388	81 13877 MHL090005 MHL090006	D/S 7464 SPL090008 18 VCP D/S 1726 SPl090026 15 VCP	358 357.2 50 50				0 0				0 0 0 0.00			
2 6_No_Defect 1256	R004 5	CHAPMAN AV WESTERN	7/28/2005 1387	77 13876 MHL090006 MHL090007	D/S 7456 SPL090039 18 VCP U/S 1078 SP1090015 8 VCP	326 322.4 97 126				0 0				0 0 0.00			
3 6_No_Defect 1256 PPT 2 6_No_Defect 1257	R004 10	MAC ALPINE RD	7/28/2005 1030	07 10308 MHK080012 MHK080013	D/S 3892 SPK080016 8 VCP	295 284.0				0 0				0 0			
3 6_No_Defect 1257 PPT 2 6_No_Defect 1258	49 12 R005 5	WESTERN MARYLEE DR			D/S 1079 SPI090016 8 VCP U/S 5893 SPK080021 8 VCP	10 17	+++++			0 0	0.00	+++++++++		0 0 0.00	+++++++	- 	MHK080018 IS BURIED MANHOLE
3 6_No_Defect 1258 PPT 2 6_No_Defect 1259		WESTERN CHAPMAN AV	10/31/2007 719	7 7125 MHI100001 COI100001	U/S 1069 SPI100002 8 VCP D/S 7448 SPL090026 18 VCP	63 64				0 0	0.00			0 0 0.00			
3 6_No_Defect 1259 PP1	49 27	LAMPSON	11/6/2007 813	2 8085 MHI110003 MHI110004	D/S 1727 SPI110001 15 VCP	315 163				0 0				0 0 0.00		1	MSA = Camera stuck
2 6_No_Defect 1260 3 6_No_Defect 1260 PPT	R006 5 49 28	MAUREEN DR LAMPSON			U/S 5074 SPL050021 8 VCP D/S 1728 SPI110002 15 VCP	270 267.1 340 344				0 0				0 0 0.00			Muscass Is Marie
2 6_No_Defect 1261 3 6_No_Defect 1261 PPT	R008 7	HOMEWAY DR		1 9750 MHL050028 MHL050026 6 7189 MHI110005 MHI110001	U/S 5075 SPL050023 8 VCP D/S 1729 SPI110003 15 VCP	70 69.4 340 343				0 0	0.00			0 0			MHL050026 IS NOT MH., THIS IS BURIED CLEANOUT
2 6_No_Defect 1262	R008 8	HOMEWAY DR	8/8/2005 975	1 9752 MHL050028 MHL050030	D/S 5076 SPL050024 8 VCP	250 253.4				0 0				0 0 0.00			
3 6_No_Defect 1262 PPT 2 6_No_Defect 1263	R008 9	HOMEWAY DR	8/8/2005 975	2 9753 MHL050030 MHL050031	U/S 1015 SPI120015 8 VCP D/S 5077 SPL050025 8 VCP	270 286 135 136.6				0 0	0.00			0 0 0.00			
3 6_No_Defect 1263 PP1 2 6_No_Defect 1264	40 6 R008 10	BICKLEY CR			D/S 1153 SPI120002 8 VCP D/S 5561 SPL050034 8 VCP	280 289 359 358.0				0 0				0 0 0.00			
3 6_No_Defect 1264 PPT	40 18	VILLAGE CENTER DR	9/11/2007 713	7 7143 MHI120003 MHI120004	D/S 1016 SPI120016 8 VCP	130 143				0 0	0.00			0 0 0.00			
2 6_No_Defect 1265 3 6_No_Defect 1265 PPT	R009 3	DEWEY DR VILLAGE CENTER		18 9673 MHL050022 COL050002 3 7145 MHI120006 MHI120004	U/S 3739 SPL050045 8 VCP D/S 1158 SPI120003 8 VCP	104 103.7				0 0	0.00			0 0 0.00	+++++	$++++\mp$	
3 6_No_Defect 1265 PP1 2 6_No_Defect 1266					D/S 1158 SPI120003 8 VCP U/S 5228 SPL060033 8 VCP					0 0	0.00						

				General				Structural	Defect Coding	m 8	T T	Operational and Maintenance		_ Construc	ction Features	S	
		9 (Pipe				ad d Po	aniure apair A Rating	×epu			t Rating	snoeu	Feature by Aban ndoned	
	No. Appe No.	nspec. N		xisting MH ID Previous MH ID	Wer ID	h (ff)	Create Frank	a Brahan Hala	beforme collapse aurface hamage	oint Reisags A Struc tural De	Denesite	Resta (D)	Infiltration Obstacles V	X Main Defects 11 Index 12 Index	Intruding Seal	ruction r Surve ed Aba	
ractor	o No. o No. ection ersal Ta	Watch	-	xisting with 10 Previous with 10	ting Se ting Se vious	Comm Comm	Crack Fractu	B H	J D X	Struc Struc	E D D Other	Fine (F) Tap (T) Medium (M) B	II (B) I OB Other		IS M	l Const	
Prio Pha	Tapu Insp Rev Rev	Street Name VILLAGE CENTER	CCTV Date S	tart End Start End	Dire Exis Prev Siz e	Join GIS GIS CCT	L C M S H L C M	S H SV VV SV VV	/ S M L S M L A V H P S L	F RP S DA T	2 AGS B % L % Z % B	B L J C B L J C B L J C B	JCGDRWCZ%	C R 4 T OR O FD FL BI BD D L U	R LD RD SRH SRB SRL Z SA CU MC	Res GIS	Comments Recommendations
3 6_No_Defect 1266 PPT 2 6_No_Defect 1267	40 19 R011 12	DR			U/S 1159 SPI120004 8 VCP 2 D/S 6183 SPP080012 8 VCP	30 31 310 332.0				0 0	0.00			0 0 0.00			
3 6_No_Defect 1267 PPT		VILLAGE CENTER DR	9/11/2007 71	146 7145 MHI120007 MHI120006	U/S 1160 SPI120005 8 VCP	100 104				0 0	0.00			0 0 0.00			
2 6_No_Defect 1268	R011 14	VILLAGE CENTER			9 U/S 6237 SPP070022 8 VCP	117 118.5				0 0				0 0			MHP 070009 IS CLEANOUT
3 6_No_Defect 1268 PPT 2 6_No_Defect 1269	40 9 R012 8	CRISSEY WY		148 7146 MHI120009 MHI120007 2946 12916 MHP080017 MHP080016	U/S 1161 SPI120006 8 VCP 3 U/S 6239 SPP080021 8 VCP	200 232 111 116.2				0 0	0.00			0 0 0.00			MHP 080016 IS CLEANOUT
3 6_No_Defect 1269 PPT					U/S 1162 SPI120007 8 VCP	200 112				0 0	0.00			0 0 0.00			
2 6_No_Defect 1270 3 6_No_Defect 1270 PPT	R012 10 40 15	VILLAGE CENTER		148 7149 MHI20009 MHI20010	0 U/S 6240 SPP080022 8 VCP D/S 1163 SPI120008 8 VCP	100 99.1				0 0	0.00			0 0 0 0 0 0			MHP 080019 IS CLEANOUT
2 6_No_Defect 1271	R012 14				U/S 6241 SPP080023 8 VCP	317 116.4				0 0				0 0			
3 6_No_Defect 1271 PPT 2 6_No_Defect 1272	40 13 R013 2	DR		149 7150 MHI120010 MHI120011 1122 12981 MHQ080012 MHQ080013	D/S 1164 SPI120009 8 VCP B D/S 6305 SPQ080003 8 VCP	140 152 235 236.9				0 0	0.00			0 0 0.00			
3 6_No_Defect 1272 PPT		VILLAGE CENTER DR	9/11/2007 71	150 7151 MHI120011 MHI120012	D/S 1165 SPI120010 8 VCP	330 342				0 0	0.00			0 0 0.00			
2 6_No_Defect 1273	R015 8	VILLAGE CENTER			U/S 6301 SPR070008 6 VCP	70 68.6				0 0				0 0			
3 6_No_Defect 1273 PPT 2 6_No_Defect 1274	40 16 R016 4	ORANGEWOOD		151 7152 MHI120012 MHI130005 1037 13038 MHR070006 MHR070007		290 304 353 350 1				0 0	0.00			0 0 0.00 1			
3 6_No_Defect 1274 PPT					U/S 1007 SPI120012 8 VCP	205 200				0 0	0.00			0 0 0.00			
2 6_No_Defect 1275 3 6_No_Defect 1275 PPT	R016 5	AV		038 13039 MHR070007 MHR070008 131 8130 MHI120015 MHI120014	B D/S 6565 SPR070002 12 VCP U/S 907 SPI120031 8 VCP	185 170.3 130 128				0 0	0.00			0 0 0.00			
2 6_No_Defect 1276	R016 6	ORANGEWOOD		13040 MHR070008 MHR070009		150 160.3				000		<u> </u>		0 0			
3 6_No_Defect 1276 PPT 2 6_No_Defect 1277	41 15 R017 6				U/S 1020 SPI120018 8 VCP 7 D/S 6104 SPQ080028 10 VCP	210 205 351 350.5				0 0	0.00			0 0 0.00	+		
3 6_No_Defect 1277 PPT 2 6_No_Defect 1278		PARK	9/12/2007 71	175 7176 MHI120017 MHI120018	D/S 1024 SPI120021 8 VCP	252 253 275 274.9				0 0	0.00			0 0 0.00			
3 6_No_Defect 1278 PPT		PARK		176 7177 MHI120018 MHI120019		273 275			 	0 0	0.00		 	0 0 0.00	++++++		Pipe SPI120021 corrected to SPI120022
2 6_No_Defect 1279 3 6_No_Defect 1279 PPT	R017 9 41 11		8/26/2005 13		B D/S 5716 SPQ070025 10 VCP D/S 1026 SPI120023 8 VCP	255 253.5 355 371				0 0				0 0 0 0.00			
2 6_No_Defect 1280 3 6 No Defect 1280 PPT	R017 11	WEST ST	8/26/2005 13	067 13068 MHQ080049 MHQ080050	D/S 6107 SPQ080031 10 VCP D/S 1027 SPI120024 8 VCP	176 174.9 246 249				0 0				0 0 0 0 0 1			
2 6_No_Defect 1281	R018 10	CHAPMAN AV	8/29/2005 13	025 13026 MHS090010 MHS090011	D/S 6219 SPS090025 12 VCP	180 175.4				0 0				0 0		ŀ	HIGH FLOW
3 6_No_Defect 1281 PPT 2 6_No_Defect 1282	R019 1	CHAPMAN AV	8/30/2005	MHS090035 MHS090030		279 272 12 11.9				0 0				0 0 0.00			
3 6_No_Defect 1282 PPT 2 6_No_Defect 1283	R019 3		8/30/2005	MHR090030 MHR090029		250 253 48 48.2				0 0				0 0 0.00			
3 6_No_Defect 1283 PPT 2 6_No_Defect 1284	40 38 R019 10	ANTHONY CHAPMAN AV			D/S 1031 SPI120028 8 VCP 2 D/S 6269 SPR090028 12 VCP	275 276 420 417.9				0 0	0.00			0 0 0.00			
3 6_No_Defect 1284 PPT 2 6_No_Defect 1285	40 4 R019 13				D/S 1008 SPI120013 8 VCP D/S 6109 SPQ080033 10 VCP	330 352 185 187.5				0 0				0 0 0.00			
3 6_No_Defect 1285 PPT 2 6_No_Defect 1286	40 5 R020 1		9/11/2007 71	156 7138 MHI120028 MHI120002	D/S 1009 SPI120014 8 VCP 2 U/S 5473 SPR090031 8 VCP	360 367 115 91.1				0 0	0.00			0 0 0.00			
3 6_No_Defect 1286 PPT 2 6_No_Defect 1287	41 14 R020 2	HOOVER	9/17/2007 71	172 7171 MHI120029 MHI120016	U/S 1021 SPI120019 8 VCP 2 D/S 5474 SPR090032 8 VCP	80 86 185 180.6				0 0				0 0 0.00			
3 6_No_Defect 1287 PPT	41 18	HOOVER	9/17/2007 71	172 7173 MHI120029 MHI130008	D/S 1022 SPI120020 8 VCP	320 322				0 0	0.00			0 0 0.00			
2 6_No_Defect 1288 3 6_No_Defect 1288 PPT	R020 8 41 28	GARDEN GROVE		203 12181 MHR090026 MHR090005 140 7139 MHI130002 MHI130001	5 D/S 5679 SPR090021 10 VCP U/S 1154 SPI130001 8 VCP	90 92.2 50 57				0 0	0.00			0 0 0.00			
2 6_No_Defect 1289	R021 3			2802 12801 MHQ100043 MHQ100008	B D/S 6335 SPQ100025 8 VCP	194 192.8				0 0				0 0			
3 6_No_Defect 1289 PPT 2 6_No_Defect 1290	41 25 R023 2	BLVD BETA AV	9/18/2007 9/7/2005 12	MHI130002 MHI130003 2607 12470 MHQ100030 MHQ100029	D/S SPI130002 8 VCP U/S 5584 SPQ100004 8 VCP	113 113 96 96.1				0 0	0.00			0 0 0.00			MHQ100029 IS CLEANOUT
3 6_No_Defect 1290 PPT	41 26		9/18/2007	MHI130003 MHI130004		274 274				0 0	0.00			0 0 0.00			
2 6_No_Defect 1291	R024 4	STRATHMORE DR GARDEN GROVE BLVD		726 11727 MHQ110017 MHQ110018 MHI130005 MHI130006	B D/S 6328 SPQ110051 8 VCP	350 360.2 344 344				0 0	0.00			0 0 0			
2 6_No_Defect 1292	R024 10	LAMPSON AV GARDEN GROVE	9/9/2005 11	714 12799 MHQ110005 MHQ100003	3 U/S 6333 SPQ110056 8 VCP	45 50.3				0 0				0 0			
3 6_No_Defect 1292 PPT 2 6_No_Defect 1293	44 17 R025 3	BLVD	9/27/2007 9/12/2005 11	MHI130006 MHI130007 712 11713 MHQ110003 MHQ110004	D/S SPI130006 8 VCP D/S 6218 SPQ110035 8 VCP	382 382 245 240.6				0 0	0.00	++-++++++++++++++++++++++++++++++++++++	+++++++	0 0 0.00	+++++++		
3 6_No_Defect 1293 PPT	44 18	GARDEN GROVE BLVD	9/27/2007	MHI130007 MHI130008	D/S SPI130012 8 VCP	288 288				0 0	0.00			0 0 0.00			
2 6_No_Defect 1294 3 6 No Defect 1294 PPT	R025 7 49 2	DUNGAN LN GARDEN GROVE BLVD			B D/S 6158 SPR120027 8 VCP U/S 1033 SPI130009 8 VCP	275 267.5 430 437			+++++++++++++++++++++++++++++++++++++++	0 0	0.00	+++++++++++++++++++++++++++++++++++++++	 	0 0 0 0 2	+++++++++++++++++++++++++++++++++++++++		
3 6_No_Defect 1294 PPT 2 6_No_Defect 1295	49 2 R025 9				0/S 1033 SPI130009 8 VCP	430 437 200 268.7				0 0	0.00			0 0 0.00 2			
3 6_No_Defect 1295 PPT 2 6_No_Defect 1296	49 1	BLVD		186 7185 MHI130012 MHI130011 674 11675 MHR110027 MHR110028	U/S 1034 SPI130010 8 VCP B D/S 5692 SPR110036 10 VCP	70 58 281 244.4				0 0	0.00			0 0 0.00		+	
3 6_No_Defect 1296 PPT	49 3	GARDEN GROVE BLVD	11/2/2007 71	186 7188 MHI130012 MHI130014	D/S 1035 SPI130011 8 VCP	66 25				0 0	0.00			0 0 0.00			
2 6_No_Defect 1297	R027 3	GARDEN GROVE			8 U/S 6331 SPQ110054 8 VCP	465 462.6				0 0				0 0			
3 6_No_Defect 1297 PPT 2 6_No_Defect 1298	R027 4	LAMPSON AV	9/16/2005 11		B D/S 5482 SPQ110002 8 VCP	100 91 295 285.9				0 0				0 0 0.00			
3 6_No_Defect 1298 PPT 2 6_No_Defect 1299	51 53 R027 5	ARROWHEAD LAMPSON AV		699 8700 MHJ100001 MHJ100002 2603 12521 MHQ110038 MHQ110039	D/S 1818 SPJ100001 8 VCP	160 160 95 91.3			++++++++++-	0 0	0.00	++++++++++++++++++++++++++++++++++++	++++++	0 0 0.00	+++++++		MHQ110039 IS BURIED MANHOLE.
3 6_No_Defect 1299 PPT					D/S 4761 SPQ110032 8 VCP U/S 1820 SPJ110017 8 VCP	95 91.3 352 242			+++++++++++++++++++++++++++++++++++++++	0 0	0.00		 	0 0 0.00	++++++++	- F	Pipe SPJ110011corrected to SPJ110017
2 6_No_Defect 1300	R027 6	LAMPSON AV	9/16/2005 12	2521 12523 MHQ110039 MHQ110041	D/S 4142 SPQ110018 8 VCP	65 60.5				0 0				0 0			
3 6_No_Defect 1300 PPT 2 6_No_Defect 1301		EASEMENT		697 8700 MHJ110016 MHJ100002 2523 12524 MHQ110041 MHQ110042	U/S 1819 SPJ100002 8 VCP D/S 6016 SPQ110020 8 VCP	385 373 300 213.0			+++++++++++++++++++++++++++++++++++++++	0 0	0.00	++-++++++++++++++++++++++++++++++++++++	 	0 0 0.00 1	+++++++		
3 6_No_Defect 1301 PPT		LAMPSON	6/28/2007 87	701 8702 MHJ110018 MHJ110019	D/S 1821 SPJ110018 8 VCP D/S 6015 SPQ110019 8 VCP	360 363 230 227.1				0 0	0.00			0 0 0.00			
	COUN				VI VOI												
3 6_No_Defect 1302 GGSD 2 6_No_Defect 1303	TY 3 A 2	MAC NAB	10/14/2007 10	1360 10359 MHK040002 MHK040003	8 U/S 4772 SPK040007 8 VCP 8 D/S 6017 SPQ110021 8 VCP	246 246				0 0	0.00			0 0 0.00			
2 6_No_Defect 1303	R027 9	LAMPSON AV	9/16/2005 12	2524 12525 MHQ110042 MHQ110043	5 D/S 6017 SPQ110021 8 VCP	85 84.9				0 0				0 0			
3 6_No_Defect 1303 GGSD 2 6_No_Defect 1304	COUN TY 3C 13	ATHENS CT			U/S 4675 SPK040005 8 VCP	124 127				0 0	0.00	<u> </u>		0 0 0.00			
2 6_No_Defect 1304	R028 3	WEST ST	9/19/2005 11	636 11637 MHR120001 MHR120002	2 D/S 5681 SPR120014 10 VCP	353 352.9				0 0				0 0			

				General				Structural	Defect Coding			Operational and Maintenance			Construction Features	9 T 7 T
		Ö,		Concida	E G	ipe	+	Citabiana	ad d p	aniure apair A Rating sfects	vepu	Operational and Maintenance		t Rating	SI S	ndoned
	No. ape No	Subsection Control	E	isting MH ID Previous MH ID	ewer ID	th (ft)	Crack Frac	ure Broken Hole	Deforme Collapse Surface	Sags Sags ck Struc	Deposits	Roots (R)	Infiltration Obstacles Ve	M Defect Index Main and Main a	Intruding Seal Seal Line Material ₩	or Surve
ase onity mking	pe No. 10 No. 10 Pection spection wersal I	nersal II			ection o esting S string S svious S svious S string	S Comn		ВН	J D X	AP Oui	D D Other Other	Fine (F) Tap (T) Medium (M) B	Other	M Defe A Defe	L IS M	S Identi
Co Ra Pri	Tag Ins	Street Name	CCTV Date St	art End Start End	Ma Siz	15 15 15 15 15 15 15 15 15 15 15 15 15 1	LCMSHLC	I S H SV VV SV VV	S M L S M L A V H P S L	F RP S & D D	AGS B % L % Z % E	3 L J C B L J C B L J C B	LJCGDRWCZ% C	R & P P 80 FD FL BI BD D	D L U R LD RD SRH SRB SRL Z SA CU MC	8
3 6_No_Defect 1304 GGSD	COUN TY 3C 7	MAC	10/13/2007 10	167 10364 MHK040008 MHK04	0006 D/S 4776 SPK040004 8 VCP	254 25				0 0	0.00			0 0 0.00		
2 6_No_Defect 1305	R028 6	9TH ST	9/19/2005 12	33 12534 MHP110028 MHQ11	0046 D/S 6545 SPQ110024 10 VCP	325 237	3			0 0				0 0		
	P															
3 6_No_Defect 1305 GGSD 2 6_No_Defect 1306	TY 3C 12 R028 9				0009 U/S 4770 SPK040003 8 VCP 0048 D/S 6578 SPQ110026 10 VCP		D			0 0	0.00			0 0 0.00		
	P COUN															
3 6_No_Defect 1306 GGSD 2 6_No_Defect 1307	TY 3C 12	SYRACUSE 9TH ST			0011 U/S 4674 SPK040001 8 VCP 0003 D/S 6542 SPQ120006 10 VCP		5			0 0	0.00			0 0 0.00		
3 6_No_Defect 1307 PPT 2 6_No_Defect 1308		BLOSSOM 9TH ST	6/25/2007 80	13 8012 MHK090006 MHK09	0005 U/S 1864 SPK090004 8 VCP 0025 D/S 6051 SPP110002 8 VCP	375 37				0 0	0.00			0 0 0.00 1		
3 6_No_Defect 1308 PPT	20 18	DITMORE	6/25/2007 80	14 8705 MHK090007 COK09	0002 U/S 1866 SPK090006 8 VCP	130 12				0 0	0.00			0 0 0.00 2		
2 6_No_Defect 1309 3 6_No_Defect 1309 PPT	R029 10 20 15	BLOSSOM			0036 U/S 5090 SPP110022 8 VCP 0006 U/S 1865 SPK090005 8 VCP					0 0	0.00			0 0 0.00		MHP110036 IS A CLEANOUT
2 6_No_Defect 1310 3 6_No_Defect 1310 PPT	R030 7 20 19	9TH ST DITMORE	6/25/2007 80	14 8022 MHK090007 MHK09	0008 D/S 5591 SPQ120010 8 CI 0014 D/S 1867 SPK090007 8 VCP					0 0	0.00			0 0 0.00 2		
2 6_No_Defect 1311 3 6_No_Defect 1311 PPT	R030 11 20 23	8TH ST AERO			0031 U/S 5270 SPP110018 4 VCP 1001 U/S 1868 SPK090008 8 VCP					0 0	0.00			0 0 0 0.00		MHP110031 IS BURIED
2 6_No_Defect 1312	R031 1	GARDEN GROVE BLVD	9/22/2005 13:	45 13244 MHR120027 MHR12	0026 U/S 6406 SPR120013 10 VCP	294 285	4			0 0				0 0		
3 6_No_Defect 1312 PPT		CALICO GARDEN GROVE			0009 D/S 1869 SPK090009 8 VCP			++++++++++++++++++++++++++++++++++++		0 0	0.00		++++++++++++++++++++++++++++++++++++	0 0 0.00 3		
2 6_No_Defect 1313 3 6_No_Defect 1313 PPT	R032 1 20 21	BLVD CALICO	9/23/2005 13: 6/25/2007 80	1324/ MHR120030 MHR12 16 8017 MHK090009 MHK09	0029 U/S 6405 SPR120009 10 VCP 0010 D/S 1870 SPK090010 8 VCP	330 330 265 26	4			0 0	0.00			0 0 0.00 1 1		
2 6_No_Defect 1314	R032 5	GARDEN GROVE BLVD	9/23/2005	MHR120033 MHR12						0 0		Π	\prod	0 0	\prod	
3 6_No_Defect 1314 PPT 2 6_No_Defect 1315	R037 13	CALICO	9/28/2005 12	74 12843 MHT090009 MHT09	0013 D/S 1871 SPK090011 8 VCP 1010 D/S 4028 SPT090027 8 VCP	180 179	2			0 0	0.00			0 0 0.00		
3 6_No_Defect 1315 PPT 2 6_No_Defect 1316	25 3 R038 4	BARR ALLEY	9/29/2005 12	31 12632 MHT090014 MHT09	0011 U/S 1873 SPK090012 8 VCP 0019 D/S 5259 SPT090006 8 VCP	165 167				0 0	0.00			0 0 0.00 3		
3 6_No_Defect 1316 PPT 2 6_No_Defect 1317	25 1 R038 5	DITMORE ALLEY			0013 D/S 1874 SPK090013 8 VCP 0020 D/S 6539 SPT090043 8 VCP					0 0	0.00		+	0 0 0.00		
3 6_No_Defect 1317 PPT 2 6_No_Defect 1318		DITMORE	7/13/2007 80	20 8018 MHK090012 MHK10	0037 U/S 1872 SPK100019 8 VCP 1015 U/S 4029 SPT090028 8 VCP	120 9				0 0	0.00			0 0 0.00		
3 6_No_Defect 1318 PPT	25 2	DITMORE	7/13/2007 80	21 8022 MHK090013 MHK09	0014 D/S 1875 SPK090014 8 VCP	85 8				0 0	0.00			0 0 0.00		
2 6_No_Defect 1319 3 6_No_Defect 1319 PPT	R039 3	NEWPORT ST DITMORE EASEMENT			018 D/S 4031 SPT090030 8 VCP 015 D/S 1876 SPK090015 8 VCP		•			0 0	0.00			0 0 0.00		
2 6_No_Defect 1320 3 6_No_Defect 1320 PPT	R039 6	ALLEY	9/30/2005 12	61 12660 MHT100043 MHT10	0042 U/S 3921 SPT100037 8 VCP 0038 U/S 1879 SPK090018 8 VCP	35 30				0 0				0 0		
2 6_No_Defect 1321	R040 2	LOMA ALLEY	10/3/2005 12	53 12655 MHT100035 MHT10	1037 D/S 3914 SPT100030 8 VCP	285 300				0 0	0.00			0 0 0.00		
3 6_No_Defect 1321 PPT 2 6_No_Defect 1322	R040 10	LOMA DAWN AV	10/3/2005 12	11 12612 MHT100007 MHT09	0016 U/S 1880 SPK090019 8 VCP 0001 D/S 5241 SPT100005 8 VCP	195 203	3			0 0	0.00			0 0 0.00		
3 6_No_Defect 1322 PPT 2 6_No_Defect 1323	23 7 R041 6	LOMA GREENTREE AV			0017 U/S 1881 SPK090020 8 VCP 1012 D/S 5361 SPT100021 8 VCP					0 0	0.00			0 0 0.00		
3 6_No_Defect 1323 PPT 2 6_No_Defect 1324	21 10 R041 9	HAGA GREENTREE AV		25 8524 MHK090019 MHK10 41 12640 MHT100010 MHT10	0039 U/S 2013 SPK090029 8 VCP 1009 U/S 4863 SPT100002 8 VCP		7			0 0	0.00			0 0 0.00		
3 6_No_Defect 1324 PPT 2 6_No_Defect 1325		BLANCHE GREENTREE AV	6/28/2007 85	26 8028 MHK090020 MHK09	0018 U/S 2415 SPK090046 8 VCP 1017 D/S 5250 SPT100012 8 VCP	320 31				0 0	0.00			0 0 0.00		
3 6_No_Defect 1325 PPT	21 9	HAGA	6/28/2007 85	26 8525 MHK090020 MHK09	0019 U/S 2014 SPK090030 8 VCP	350 35				0 0	0.00			0 0 0.00		
2 6_No_Defect 1326 3 6_No_Defect 1326 PPT	R041 14 21 6	GREENTREE AV BLANCHE			0017 U/S 5251 SPT100013 8 VCP 0022 D/S 2016 SPK090032 8 VCP					0 0	0.00			0 0 0.00		
2 6_No_Defect 1327 3 6_No_Defect 1327 PPT	R042 15 21 7	GARDEN GROVE BLVD BLANCHE			0046 D/S 4983 SPS120050 10 VCP 0023 D/S 2017 SPK090033 8 VCP					0 0	0.00			0 0 0 0.00 1		
2 6_No_Defect 1328	R043 4	HARBOR BLVD	10/25/2005 12	49 12748 MHS110003 MHS11	0002 U/S 6591 SPS110013 10 VCP	255 23	4			0 0	0.00			0 0		
3 6_No_Defect 1328 PPT 2 6_No_Defect 1329	R046 5		10/28/2005 12	67 12768 MHR140002 MHR14	0026 U/S 2416 SPK090047 8 VCP 0003 D/S 6476 SPR140003 8 VCP	135 134	4			0 0	0.00					
3 6_No_Defect 1329 PPT 2 6_No_Defect 1330	R046 6	HAGA RAINBOW ST	10/28/2005 12	74 12776 MHR130008 MHR13	0027 U/S 1800 SPK090035 8 VCP 0010 D/S 6483 SPR130008 8 VCP	295 296				0 0	0.00			0 0 0.00		
3 6_No_Defect 1330 PPT 2 6_No_Defect 1331	23 3 R046 10	DALE RAINBOW ST			0032 D/S 1804 SPK090039 8 VCP 0008 D/S 6481 SPR130006 8 VCP					0 0	0.00			0 0 0.00 1		
3 6_No_Defect 1331 PPT 2 6_No_Defect 1332		DALE ST PEARCE AV	12/28/2007 85	35 8536 MHK090032 MHK09	0033 D/S 1805 SPK090040 8 VCP 0003 U/S 6477 SPR140004 8 VCP	170 20				0 0				0 0 0.00 1		
3 6_No_Defect 1332 PPT 2 6_No_Defect 1333		BARR PEARCE AV	6/29/2007 86	91 8690 MHK090035 MHK09	0034 U/S 1810 SPK090042 8 VCP 0005 D/S 6478 SPR140005 8 VCP	65 12				0 0				0 0 0.00		
3 6_No_Defect 1333 PPT 2 6_No_Defect 1334	21 16	BARR	6/29/2007 86	93 8692 MHK090037 MHK09	0036 U/S 1812 SPK090044 8 VCP	269 23				0 0	0.00			0 0 0.00		
3 6_No_Defect 1334 PPT		DALE	6/29/2007 86	93 8683 MHK090037 MHK10	0025 D/S 3966 SPR130020 8 VCP	115 35				0 0	0.00			0 0 0 1		
2 6_No_Defect 1335 3 6_No_Defect 1335 PPT		ALLEY LOMA	7/6/2007 80	25 8024 MHK090038 MHK10	0003 U/S 4459 SPQ130024 8 VCP 0038 U/S 1878 SPK090017 8 VCP	150 15				0 0	0.00			0 0 0.00		
2 6_No_Defect 1336 3 6_No_Defect 1336 PPT	R048 4 19 33	EASEMENT DUDMAN			0021 U/S 3967 SPR130021 8 VCP 0005 D/S 3540 SPK100001 8 VCP			++++=		0 0	0.00	+++++	++++++++++++++++++++++++++++++++++++	0 0 0 0.00		
2 6_No_Defect 1337	R048 7	ROCKINGHORSE RD	11/1/2005 10	07 11435 MHQ130026 COQ13	0001 U/S 4462 SPQ130027 8 VCP	100 99	:			0 0				0 0		
3 6_No_Defect 1337 PPT 2 6_No_Defect 1338	19 39 R048 8	LORNA ROCKINGHORSE Y RD			0036 U/S 3247 SPK100018 8 VCP 0028 D/S 4463 SPQ130028 8 VCP					0 0	0.00	+	++++++++	0 0 0.00	+++++++++++++++++++++++++++++++++++++++	+++
3 6_No_Defect 1338 PPT		DITMORE ROCKINGHORSE	6/25/2007 90	B1 9082 MHK100002 MHK10	0003 D/S 3541 SPK100002 8 VCP	210 27				0 0	0.00			0 0 0.00		
2 6_No_Defect 1339 3 6_No_Defect 1339 PPT	R048 10 20 9	Y RD DITMORE		09 10910 MHQ130029 MHQ13 82 9083 MHK100003 MHK10	0031 D/S 4465 SPQ130030 8 VCP					0 0	0.00		++++++++	0 0 0 0.00	+++++++++++++++++++++++++++++++++++++++	+++
2 6_No_Defect 1340 3 6_No_Defect 1340 PPT	R049 4	BANNER DR DITMORE	11/2/2005 11	76 11980 MHR140025 MHR14	0027 D/S 3857 SPR140026 8 VCP 0005 D/S 3543 SPK100004 8 VCP	65 63				0 0	000			0 0		
3 6_No_Defect 1340 PPT 2 6_No_Defect 1341	20 10 R051 3	DITMORE HARBOR BLVD			0005 D/S 3543 SPK100004 8 VCP 0001 D/S 5782 SPS100037 10 VCP					0 0	0.00			0 0 0.00		Repeat inspection, DVD 19 -
3 6_No_Defect 1341 PPT 2 6_No_Defect 1342	53 12 R051 6	DUDMAN LAMPSON AV			0013 D/S 3544 SPK100005 8 VCP 0007 U/S 6036 SPS100054 8 VCP					0 0	0.00			0 0 0.00 1		Repeat inspection, DVD 19 - Section 34
3 6_No_Defect 1342 PPT	34 12		8/14/2007 91	03 9104 MHK100008 MHK10	0009 D/S 3547 SPK100008 8 VCP	123 12				0 0	0.00					
2 6_No_Defect 1343 3 6_No_Defect 1343 PPT	R053 11 20 13	RD PENTAGON		90 9091 MHK100013 MHK10	0007 D/S 4352 SPQ140029 8 VCP 0014 D/S 3552 SPK100013 12 VCP					0 0	0.00		++++++++	0 0 0.00 1		
2 6_No_Defect 1344	R053 12	ROCKINGHORSE RD			0006 U/S 4353 SPQ140030 8 VCP					0 0			 	0 0		
3 6_No_Defect 1344 PPT 2 6_No_Defect 1345	22 3 R054 6	ADELLE CORSAIR CR	7/2/2007 86	74 8673 MHK100017 MHK10	0016 U/S 1980 SPK100020 8 VCP 0004 U/S 4357 SPQ140034 8 VCP	306 30				0 0	0.00			0 0 0.00		
3 6_No_Defect 1345 PPT 2 6_No_Defect 1346	22 2	ADELLE	7/2/2007 86	75 8674 MHK100018 MHK10	0017 U/S 1981 SPK100021 8 VCP 0003 U/S 4359 SPQ140036 8 VCP	300 30				0 0				0 0 0.00		
2 0_140_Delect 1340	11004 0	BOOCAINEER CR	11///2005 10	02 11909 WING140010 COQ14	U/5 4000 OF Q140030 8 VCP	100 138	-			0 0				000		

				General					Structural Defect Cod	ing	5 1			Operational and Maintenance				Construction Feature	16	g G	
	0 6	, S			Pipe					sed Pipe	Repair Lot Ratin Defects	xepul					nt Rating		aneons	n Featur rey Abar	видонес
	Tape N	Location	Ex	isting MH ID Previous MH ID	of Cam Sewer II	gth (ft) ment)		acture Br	roken Hole J	Deform Collaps Surfac Damag	Sags ick Str	Depos	sits	Roots (R)	Infi	tration Obstacles Vermin	M Defecting Main (Independent of the control of the	ateral) Line	Intruding Seal S	structio for Sun	iffed Ab
iority anking	VD No.	WD Wat			disting S disting S evious : ze (in)	S Comingth (ff	C F		0	J D X	ACP Qu	3	AE Other	(F) Tap (T) Medium ((M) Ball (B)	I OB V	ACP Quatral O&h		IS M	otal Con	S Ident
3 6_No_Defect 1346 PPT	22 1	Street Name ADELLE	7/2/2007 86	art End Start End 77 8675 MHK100019 MHK100018	3 U/S 1982 SPK100022 8 VCP	300 305	L C M S H L C	M S H SV	V VV SV VV S M L	SMLAVHP S LF	RP S & P F		% Z % B L	J C B L J C B L J	CBLJCGE	RWCZ%CR	0 0 0.00	BI BD D L U R LD RD	SRH SRB SRL Z SA CU I	NC P Z	Comments Recommendations
2 6_No_Defect 1347 3 6_No_Defect 1347 PPT	R055 1 22 5	GLEN COVE DR ROBINET			D/S 5285 SPQ140001 8 VCP	285 284.3 260 263					0	0.00					0 0 0.00				
2 6_No_Defect 1348 3 6_No_Defect 1348 PPT	R056 6	NEWELL ST ADELLE	11/9/2005 114	451 11452 MHQ130006 MHQ130007	7 D/S 3810 SPQ130008 8 VCP 3 U/S 1983 SPK100023 8 VCP	300 300.1 225 226					0	0.00					0 0 0.00				
2 6_No_Defect 1349	R056 9	PALOMA AV	11/9/2005 114	453 11463 MHQ140002 MHQ140003	3 D/S 3812 SPQ140006 8 VCP	260 262.1					0						0 0				
3 6_No_Defect 1349 PPT 2 6_No_Defect 1350	R057 3	PALOMA AV	11/10/2005 114	464 11900 MHQ140004 MHP140004	2 D/S 1986 SPK100026 8 VCP 1 D/S 5423 SPP140022 8 VCP	250 254 325 329.7					0	0.00					0 0 0.00				
3 6_No_Defect 1350 PPT 2 6_No_Defect 1351	22 6 R059 1	ROBINET Y EASEMENT			B D/S 1988 SPK100028 8 VCP	260 266 150 156.4					0 0						0 0 0.00 1				
3 6_No_Defect 1351 PPT 2 6_No_Defect 1352		DALE BARNETT WY	6/29/2007 86	83 8684 MHK100025 MHK100026	3 D/S 1990 SPK100030 8 VCP 3 U/S 5356 SPP140005 12 VCP	291 293 180 180.7					0	0.00					0 0 0.00	1			
3 6_No_Defect 1352 PPT	21 14	DALE	6/29/2007 86	84 8685 MHK100026 MHK100027	7 D/S 1991 SPK100031 8 VCP	300 301					0	0.00					0 0 0.00	2			
2 6_No_Defect 1353 3 6_No_Defect 1353 PPT	R061 8 21 15	TRASK AV DALE			3 U/S 5353 SPQ150003 12 VCP 3 D/S 1992 SPK100032 8 VCP	470 452.6 300 302					0	0.00					0 0 0.00 1				
2 6_No_Defect 1354 3 6_No_Defect 1354 PPT	R062 8 23 29	NEWHOPE ST DALE			4 D/S 3713 SPQ130005 8 VCP 5 D/S 1993 SPK100033 8 VCP	330 339.4 303 306					0	0.00					0 0 0.00			3	26.5' NEW MANHOLE FOUND
2 6_No_Defect 1355 3 6_No_Defect 1355 PPT	R067 1	ALLEY HAGA	12/9/2005 121	114 12113 MHR100019 MHR090001	U/S 5774 SPR100002 8 VCP	200 198.6 253 253					0						0 0				
2 6_No_Defect 1356	R068 1	HARBOR BLVD	12/9/2005 132	236 13237 MHR130026 MHR130027	7 D/S 6395 SPR130026 10 VCP	327 328.1					0						0 0 0.00 2				
3 6_No_Defect 1356 PPT 2 6_No_Defect 1357	19 36 R068 5	HAGA HARBOR BLVD			0 U/S 3250 SPK100035 8 VCP 7 D/S 6399 SPR140039 10 VCP	252 252 165 168.3					0	0.00					0 0 0.00				
3 6_No_Defect 1357 PPT 2 6_No_Defect 1358		DUDMAN SUNGROVE ST	6/23/2007 91	10 9080 MHK100033 MHK100001	D/S 3253 SPK100039 8 VCP B D/S 6381 SPS110002 8 VCP	390 384 340 342.1					0	0.00					0 0 0.00				
3 6_No_Defect 1358 PPT	19 41	LORNA	6/23/2007 91	01 9100 MHK100035 MHK100034	U/S 3245 SPK100016 8 VCP	258 260					0						0 0 0.00				
2 6_No_Defect 1359 3 6_No_Defect 1359 PPT	\$002 7 19 40	SUNGROVE ST LORNA	6/23/2007 91	02 9101 MHK100036 MHK100035	7 D/S 6382 SPS110003 8 VCP 5 U/S 3246 SPK100017 8 VCP	90 88.9 259 261					0	0.00					0 0 0.00				
2 6_No_Defect 1360 3 6_No_Defect 1360 PPT	S002 9 20 45	ARLETTA CR LAMPSON			U/S 4588 SPT120030 8 VCP U/S 1809 SPK110043 8 VCP	74 82.6 372 368					0				++++		0 0 0.00			$+\Box$	
2 6_No_Defect 1361 3 6 No_Defect 1361 PPT	S002 11	ARLETTA CR LAMPSON	10/11/2005 123	381 12363 MHT120019 COT120001	U/S 5442 SPT120007 8 VCP	55 53.8 180 181					0						0 0 0.00	1			
2 6_No_Defect 1362	S002 12	ASPENWOOD AV	10/11/2005 123	381 12413 MHT120019 MHT120020	D/S 4589 SPT120031 8 VCP	210 216.4					0	0.00					0 0				
3 6_No_Defect 1362 PPT 2 6_No_Defect 1363	23 23 S003 3	LAMPSON AUDREY CR			3 U/S 3240 SPK110016 12 VCP 2 D/S 4087 SPT120019 8 VCP	255 256 222 220.8					0	0.00				+++++	0 0 0.00		 	+++	
3 6_No_Defect 1363 PPT 2 6 No Defect 1364	23 26 S003 10	LAMPSON BLUE SPRUCE AV			B D/S 3242 SPK110018 12 VCP D/S 4476 SPT110036 8 VCP	275 106 310 317.3					0						0 0 0.00				
3 6_No_Defect 1364 PPT	51 30	LOMAY ALLEY	12/26/2007 76	00 7004 MHK160001 MHK160016	3 D/S 647 SPK160027 8 VCP	40 53					0	0.00					0 0 0.00				
2 6_No_Defect 1365 3 6_No_Defect 1365 PPT	S004 4 51 28	ASPENWOOD AV		642 12683 MHS120013 MHS120015 02 7003 MHK160002 MHK160032	5 D/S 5649 SPS120026 8 VCP 2 D/S 332 SPK160002 8 VCP	160 158.8 325 326					0	0.00					0 0				Pipe SPK160003 corrected to SPK160002
2 6_No_Defect 1366	S005 1	HEATHER CR	10/14/2005 127	706 12707 MHS110010 MHS110011	D/S 6390 SPS110008 8 VCP	365 362.6					0	0.00					0 0				SFA100002
3 6_No_Defect 1366 PPT 2 6_No_Defect 1367	51 24 S005 8	LOMAY HASTER ST			7 D/S 275 SPK160030 8 VCP D/S 4478 SPT110038 8 VCP	200 192 345 348.3					0	0.00					0 0 0.00				
3 6_No_Defect 1367 PPT 2 6_No_Defect 1368	51 23 S006 1	YOCKEY CHAPARRAL DR			5 U/S 7902 SPK160005 8 VCP 5 D/S 5654 SPS120034 8 VCP	271 213 265 349.7					0	0.00					0 0 0.00	1			
3 6_No_Defect 1368 PPT	1 6	LARIAT SUNGROVE AV	3/20/2007 69	86 7008 MHK160005 MHK160031	D/S 327 SPK160006 8 VCP	80 48 210 218.0					0						0 0 0.00				
2 6_No_Defect 1369 3 6_No_Defect 1369 PPT		PURDY	3/20/2007 69	88 6987 MHK160008 MHK160006	2 D/S 4485 SPS120006 8 VCP B D/S 269 SPK160007 8 VCP	279 280					0	0.00					0 0 0.00				
3 6_No_Defect 1370 PPT 3 6_No_Defect 1371 PPT		PURDY RIATA			3 D/S 271 SPK160009 8 VCP 5 D/S 274 SPK160013 8 VCP	273 275 275 279					0 0	0.00					0 0 0.00				
3 6_No_Defect 1372 PPT 3 6_No_Defect 1373 PPT		LOMAY NEWLAND			9 D/S 281 SPK160018 8 VCP 5 D/S 278 SPK160015 8 VCP	238 242 160 161					0	0.00					0 0 0.00				
3 6_No_Defect 1374 PPT 3 6_No_Defect 1375 PPT	51 33	NEWLAND GARO	12/27/2007 69	96 6994 MHK160018 MHK160014	D/S 280 SPK160017 8 VCP U/S 279 SPK160016 8 VCP	306 309 191 193					0 0						0 0 0.00				
3 6_No_Defect 1376 PPT		LOMAY		01 6987 MHK160026 MHK160006		30 31					0	0.00					0 0 0.00				Pipe SPK160031 corrected to SPK160014B
3 6_No_Defect 1377 PPT	51 26	LOMAY EASEMENT	12/26/2007 70	01 7003 MHK160026 MHK160032	D/S 333 SPK160029 8 VCP	162 164					0	0.00					0 0 0.00				
3 6_No_Defect 1378 PPT 3 6_No_Defect 1379 PPT		LOMAY LARIAT			3 D/S 330 SPK160014 8 VCP 2 D/S 646 SPK160035 8 VCP	195 201 186 188					0 0	0.00					0 0 0.00				
3 6_No_Defect 1380 PPT	1 8	LARIAT	3/20/2007	0 MHK160030 MHK160011	D/S 339 SPK160033 8 VCP D/S 273 SPK160011 8 VCP	350 354					0	0.00					0 0 0.00				
3 6_No_Defect 1381 PPT 3 6_No_Defect 1382 PPT	1 14	PURDY RIATA	3/20/2007 70	11 6992 MHK160036 MHK160013	3 D/S 341 SPK160038 8 VCP	150 153 280 281					0 0	0.00					0 0 0.00				
3 6_No_Defect 1383 PPT 3 6_No_Defect 1384 PPT		GARO LOMAY			3 D/S 270 SPK160008 8 VCP 1 D/S 336 SPK160032 8 VCP	152 172 240 239					0 0										
3 6_No_Defect 1385 PPT 3 6_No_Defect 1386 PPT		GILBERT GILBERT			D/S 3704 SPL050036 8 VCP D/S 4160 SPL060003 10 VCP	364 371 275 289					0 0	0.00					0 0 0.00			H	
3 6_No_Defect 1386 PPT 3 6_No_Defect 1387 PPT 3 6_No_Defect 1389 PPT	46 17	GILBERT	10/16/2007 101	111 10110 MHL060005 MHL060004	U/S 4163 SPL060006 10 VCP U/S 4164 SPL060007 10 VCP						0	0.00					0 0 0.00		1		MSA = Bends
3 6_No_Defect 1388 PPT 3 6_No_Defect 1389 PPT	46 11	GILBERT	10/16/2007 101	112 10075 MHL060006 MHL070045	D/S 4165 SPL060008 10 VCP	286 292					0 1	0.00					0 0 0.00	3			
3 6_No_Defect 1390 PPT 3 6_No_Defect 1391 PPT	39 12 46 12	SHANNON GILBERT	10/16/2007 100	075 10076 MHL070045 MHL070046	D/S 5194 SPL070009 8 VCP D/S 3780 SPL070002 10 VCP	330 331 290 306					0 0					+++++	0 0 0.00	3	 	+ + +	
3 6_No_Defect 1391 PPT 3 6_No_Defect 1392 PPT 3 6_No_Defect 1393 PPT	46 13 46 14	GILBERT GILBERT			D/S 3781 SPL070003 10 VCP B D/S 3782 SPL070004 10 VCP	235 237 325 332					0 0	0.00					0 0 0.00	2			
3 6_No_Defect 1394 PPT 3 6_No_Defect 1395 PPT	46 15	GILBERT GILBERT	10/16/2007 100	090 13906 MHL070048 MHL070049	D/S 7506 SPL070005 10 VCP D/S 7505 SPL080006 10 VCP	290 293 370 374					0 0	0.00					0 0 0.00	3			
3 6_No_Defect 1395 PPT 3 6_No_Defect 1396 PPT 3 6_No_Defect 1400 PPT		GILBERT	10/16/2007 139	904 13903 MHL080002 MHL080003	B D/S 7492 SPL080002 10 VCP	225 181					0 0						0 0 0.00	2			
3 6_No_Defect 1401 PPT	20 35	MERCEDES CIR CORVETTE			5 U/S 3524 SPL090029 8 VCP 2 D/S 3525 SPL090030 8 VCP	114 114 330 336					0 0				+++++	+++++	0 0 0.00		- 	+ + +	+ +
3 6_No_Defect 1402 PPT	25 7	CUNNINGHAM FERRARI			U/S 3528 SPL090031 8 VCP U/S 3531 SPL090033 8 VCP	109 110 95 112					0 0	0.00					0 0 0.00			H	
3 6_No_Defect 1404 PPT 3 6_No_Defect 1405 PPT	21 22	MAGNOLIA	6/29/2007 90	74 9075 MHL090032 MHL090033	B D/S 3535 SPL090035 8 VCP D/S 3537 SPL100046 8 VCP	327 331					0	0.00					0 0 0.00	2			
3 6_No_Defect 1406 PPT 3 6_No_Defect 1406 PPT		MAGNOLIA CORVETTE			U/S 3504 SPL100018 8 VCP	215 224 90 92					0	0.00		- 		++++++	0 0 0.00		 		Pipe SPL1000018 corrected to SPL100018
3 6_No_Defect 1407 PPT		SHERLOCK		39 9038 MHL100008 MHL100007		330 333					0	0.00					0 0 0.00		 		Pipe SPL1000019 corrected to SPL100019
3 6_No_Defect 1408 PPT 3 6_No_Defect 1409 PPT	22 18	MARLENE MARLENE	7/3/2007 90	43 9041 MHL100012 MHL100010	U/S 3508 SPL100022 8 VCP	255 257 158 160					0 0						0 0 0.00				
3 6_No_Defect 1410 PPT	22 16	MARLENE	7/3/2007 90	46 9044 MHL100015 MHL100013	U/S 3511 SPL100025 8 VCP	158 159					0 0	0.00					0 0 0.00				
3 6_No_Defect 1411 PPT 3 6_No_Defect 1412 PPT 3 6_No_Defect 1413 PPT	22 13 22 14	MARLENE MARLENE	7/3/2007 90	47 9051 MHL100016 MHL100020	5 D/S 3513 SPL100027 8 VCP 0 D/S 3514 SPL100028 8 VCP	189 190 190 198					0 0						0 0 0.00				
3 6_No_Defect 1413 PPT 3 6_No_Defect 1414 PPT	21 21 21 19	SHERLOCK MAGNOLIA			U/S 3515 SPL100029 8 VCP D/S 3516 SPL100030 8 VCP						0 0	0.00			+		0 0 0.00			\mathbf{H}	
3 6_No_Defect 1415 PPT	21 20	MAGNOLIA	6/29/2007 90	50 9051 MHL100019 MHL100020	D/S 3517 SPL100031 8 VCP	309 317					0	0.00					0 0 0.00	1			
3 6_No_Defect 1417 PPT 3 6_No_Defect 1417 PPT 3 6_No_Defect 1418 PPT	24 31 24 30	MAGNOLIA MAGNOLIA	7/11/2007 90	54 9053 MHL100023 MHL100022	U/S 3519 SPL100033 8 VCP 2 U/S 3520 SPL100034 8 VCP	80 91					0 0						0 0 0.00	2			
3 6_No_Defect 1418 PPT	34 9	LORALEEN	8/14/2007 95	92 9589 MHL100026 MHL110029	D/S 3316 SPL100008 8 VCP	382 379					0	0.00					0 0 0.00				

Column C					General				Structural Defe	act Coding	1 1 15		Operational and Maintenance			Construction Features	9 7 T	
					Geriala	Pij	oe .		Structural Dele	Ed Barrell	Rating Pacts	×	Operational and Maintenance		Sating	S	Aband	
		2	8c. N			er ID.	(E) t			ormed lapsec face mage	nt Rep Js Struct al Defe	ect In			Maint I slects slect S ndex	Intruding Seal	Survey Aban	
The content will be content with the content will be content wit	20 20	o o o o	Location a DVC	<u> </u>	Existing MH ID Previous MH ID	- Sew B Sew	angth (fi)	Crack Fracture		Joint D X	Andrew Tructur	Deposits D Fi	Roots (R) ine (F) Tap (T) Medium (M) Ba		V S S S Tap (Lateral)	Line Material ∑ L IS M	onstru is for §	
Column C	hase riority ankin	ape N	Severs Severs Severs Severs	CCTV Data	Start End Start Er	zisting zisting reviou	oint L		H 8V 10/ 8V 10/ 8	O S I	AACP otal S otal S	AE AE Other		Other	ACP otal O	D I III P I D PD SPH SPR SPI 7 SA CII	Ceasor Seasor Sis Ide	Comments Recommendations
Column C								L C M S H L C M S	H SV VV SV VV S	THE COMPANIES OF	0 0			JCG D R W C Z %		D E O R ED RO SRA SRB SRE Z SA CO	WC F E O	Comments Recommendations
Column C											0 0	0.00						
Control Cont	3 6_No_Defect 1422 PPT	20 31	HEALEY	6/26/2007	9072 9073 MHL100044 MHL10	0045 D/S 3533 SPL100044 8 VCP	235 235				0 0	0.00						
Column C											0 0	0.00			0 0 0.00			
Column C	3 6_No_Defect 1425 PPT	23 17	LAMPSON	7/7/2007	9582 9588 MHL110022 MHL1	0028 D/S 4244 SPL110024 12 VCP	200 216				0 0	0.00						
Column C				7/7/2007	9111 9033 MHL110030 MHL1: 9033 9034 MHL110031 MHL1:	0031 D/S 4251 SPL110059 15 VCP 0032 D/S 4248 SPL110037 15 VCP					0 0	0.00			0 0 0.00			
State Stat	3 6_No_Defect 1428 PPT	23 21		7/7/2007	9034 9035 MHL110032 MHL1	0033 D/S 4249 SPL110038 15 VCP	266 271				0 0	0.00			0 0 0.00			
											0 0	0.00						MSA = Sichon
A	3 6_No_Defect 1431 PPT	1 23		3/22/2007	0596 10394 MHL150016 COL15	0001 U/S 2595 SPL150008 8 VCP	106 108				0 0	0.00			0 0 0.00			
											0 0	0.00						
Section Sect	3 6_No_Defect 1434 PPT	1 19	MAYS	3/22/2007	0598 10599 MHL150019 MHL15	0020 D/S 2597 SPL150010 8 VCP	317 319				0 0	0.00			0 0 0.00			
No. 1											0 0	0.00			0 0 0.00			
Column C											0 0	0.00			0 0 0.00			
Column C											0 0	0.00			0 0 0.00			
Control Cont	3 6_No_Defect 1440 PPT	1 6	LA VAUGHN	3/22/2007	0604 10605 MHL150026 MHL1	0002 D/S 2603 SPL150014 8 VCP	350 354				0 0	0.00						
Column C	3 6_No_Defect 1442 PPT	1 13		3/22/2007	0609 11034 MHL160004 MHL1	0017 D/S 2608 SPL160007 8 VCP		+++++		+++++++++++++++++++++++++++++++++++++++	0 0	0.00		 			+++	
The content of the	3 6_No_Defect 1443 PPT	11 2									0 0	0.00						
Part	3 6_No_Defect 1445 PPT	1 15	INGRAM	3/22/2007	0611 11031 MHL160012 MHL1	0014 D/S 2610 SPL160009 8 VCP	256 258				0 0	0.00						
1											0 0	0.00			0 0 0.00		$\Box\Box$	
Control Cont	3 6_No_Defect 1448 PPT	1 14	YOAK	3/22/2007	1034 11035 MHL160017 MHL1	0018 D/S 2615 SPL160014 8 VCP	300 302				0 0	0.00			0 0 0.00			
Control Cont								++++	HHT	+++++++	0 0	0.00		++++++++++++++++++++++++++++++++++++			$++\mp$	
	3 6_No_Defect 1451 PPT	32 12	ALDGATE	8/9/2007	0246 9941 MHM050002 MHM0	0001 U/S 3698 SPM050031 8 VCP	156 157				0 0	0.00			0 0 0.00			
											0 0	0.00						
	3 6_No_Defect 1454 PPT	32 13		8/9/2007	9719 10248 MHM050006 MHM0	0007 D/S 4998 SPM050044 8 VCP					0 0	0.00						
1 1 1 1 1 1 1 1 1 1											0 0	0.00			0 0 0.00 1			
Value Valu	3 6_No_Defect 1457 PPT	34 2	DEWEY	8/14/2007	0252 10253 MHM050013 MHM0	0014 D/S 4539 SPM050025 8 VCP	300 304				0 0	0.00						
Mary State											0 0	0.00						
Column C			GARDENAIRE	8/27/2007 1	0256 10257 MHM050017 MHM0	0018 D/S 4544 SPM050030 8 VCP	125 125				0 0	0.00			0 0 0.00			
No. 10 10 10 10 10 10 10 10	3 6_No_Defect 1461 PPT	35 36									0 0	0.00						
	3 6_No_Defect 1463 PPT	35 33									0 0	0.00						
											0 0	0.00			0 0 0.00			
No. 10. No.											0 0	0.00			0 0 0.00			
Total Control Total Total Control Total Total Control Total Contro											0 0	0.00						
	3 6_No_Defect 1469 PPT	37 6		8/28/2007	0038 9677 MHM050035 COM0	0003 U/S 4085 SPM050039 8 VCP					0 0	0.00						
Table Tabl											0 0	0.00			0 0 0.00			
	3 6_No_Defect 1472 PPT	37 8	ENDRY	8/28/2007	0040 10041 MHM050037 MHM0	0038 D/S 4181 SPM050042 8 VCP	358 352				0 0	0.00			0 0 0.00			
1 1 1 1 1 1 1 1 1 1											0 0	0.00				1		/ISA = Bulkhead
	3 6_No_Defect 1475 PPT	34 13		8/15/2007	0350 10349 MHM050042 MHN0	0034 U/S 4886 SPM050016 8 VCP	182 182				0 0	0.00			0 0 0.00			
\$ 1 A. D. D. A. D.											0 0	0.00						
\$ \$\ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \	3 6_No_Defect 1481 PPT	36 8	BISCAYNE	8/24/2007	0006 10007 MHM060009 MHM0	0010 D/S 5536 SPM060011 8 VCP	295 298				0 0	0.00			0 0 0.00			
2 1 1 1 2 2 3 3 4 4 4 4 4 4 4 4	3 6_No_Defect 1483 PPT	36 15									0 0	0.00						
2 S. A. Cale Color	3 6_No_Defect 1484 PPT	36 10									0 0	0.00						
1 1 1 1 2 2 3 4 2 3 4 3 4 3 4 4	2 C No Defect 1400 DDT	26 46	BARCLAY	8/24/2007 1	0091 10092 MHM060017 MHM0	0018 D/S 4686 SPM060031 8 VCP	333 336				0 0	0.00						
\$\frac{1}{2}\$ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \	3 6_No_Defect 1487 PPT 3 6 No_Defect 1488 PDT	36 18 36 10									0 0	0.00					+	
\$ \$\ \$\ \chan\$ \ \chan\$ \chan\$ \ \chan\$ \ \chan\$ \ \chan\$ \chan\$ \ \chan\$ \chan\$ \ \chan\$ \ch	3 6 No Defect 1489 PPT	36 20	LARKIN	8/24/2007	0096 10097 MHM060021 MHM0	0068 D/S 4691 SPM060035 8 VCP	250 250					0.00			0 0 0.00			
3 P.N. Deel 100 PT 30 S 2	2 6 No Defect 1401 DDT	26 20						+++++			0 0	0.00		++++++		+++++++	+++	
1	3 6_No_Defect 1492 PPT	36 22	PARLIAMENT	8/27/2007	0021 10023 MHM060024 MHM0	0026 D/S 3688 SPM060020 8 VCP	182 154				0 0	0.00			0 0 0.00			
3 S. N. Device 100 PFT 100 S. N. Device 100 PFT S. N. Device PFT S. N. De	3 6 No Defect 1494 PPT	36 25								+++++++				 			+++	
3 6, N. Decke 1498 PPT 5 8 7	3 6_No_Defect 1495 PPT	36 34	GARDENAIRE	8/27/2007	0028 10029 MHM060031 MHM0	0032 D/S 3695 SPM060027 8 VCP	380 382				0 0	0.00			0 0 0.00			
3 6.R. R.	3 6_No_Defect 1497 PPT	36 27						+++++		+++++++++++++++++++++++++++++++++++++++	0 0	0.00		 		+++++++++++++++++++++++++++++++++++++++	+++	
3 6 No. Delect 1901 PPT 38 38 1	3 6_No_Defect 1498 PPT	36 36		8/28/2007 1	0101 10102 MHM060036 MHM0	0037 D/S 4697 SPM060038 8 VCP	290 302					0.00			0 0 0.00			
3 6.No. Defect 1502 PPT 36 41 VONS 4020007 1076 1070 PMR-050001 DS 8702 SPM-050001 DS 9702 SPM-050001 DS 970	3 6_No_Defect 1500 PPT	36 38		8/28/2007	0103 10108 MHM060038 MHL0	0002 D/S 4699 SPL060002 8 VCP	300 301				0 0	0.00	 					
3 6.No. Defect 1504 PPT 5 6 42	3 6 No Defect 1501 PPT	36 41									0 0	0.00					$\Box\Box$	
3 6_No_Defect 1505 PPT 38 7	3 6_No_Defect 1503 PPT	38 10	CANARY	8/30/2007	9605 9606 MHM070003 MHM0	0014 D/S 4650 SPM070009 8 VCP	290 291				0 0	0.00			0 0 0.00			
3 6_No_Defect 1506 PPT 37 20	3 6_No_Defect 1504 PPT	51 42 38 7									0 0	0.00					+	
3 6_No_Defect 1508 PPT 51 43	3 6_No_Defect 1506 PPT	37 20	BLUE JAY	8/29/2007	9613 9614 MHM070005 MHM0	0020 D/S 4658 SPM080024 8 VCP	250 239				0 0	0.00						
3 6_No_Defect 1509 PPT 37 16 SWALLOW 8/29/2007 998 998 M+M070016 IS 5143 SPM070016 8 VCP 395 399 M+M070017 IS 5143 SPM070017 B VCP 190 200 1									HHT	+++++++	0 0	0.00		++++++++++++++++++++++++++++++++++++			$++\mp$	
3 6_No_Defect 1511 PPT 37 19 BLUE_JAY 829/2007 999 9613 MHM070015 DIS 5145 SPM070018 8 VCP 200 212 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	3 6_No_Defect 1509 PPT	37 16	SWALLOW	8/29/2007	9989 9988 MHM070014 MHM0	0013 U/S 5143 SPM070016 8 VCP	395 399				0 0	0.00			0 0 0.00			
3 6,No,Defect 1512 PPT 35 29 OF ROYAL PALM 8/17/2007 9992 9991 MHM/070016 US 5146 SPM/070029 8 VCP 346 350 0 0 0.00 0 0 0 0 0 0 0 0 0 0 0 0 0 0	3 6_No_Defect 1510 PPT 3 6 No_Defect 1511 PPT	37 18 37 19						+++++		+++++++-	0 0	0.00	 	+++++		+++++++	+++7	
3 6_NO_Defect 1513 PPT 35 26 ROYAL PALM 8/17/2007 9992 10031 MHM070018 MHM070017 US 5147 SPM070020 8 VCP 44 44			ALLEYWAY OFF					+		 	0 0	0.00		 				
3 6_No_Defect 1514 PPT 35 25	3 6_No_Defect 1513 PPT	35 26	ROYAL PALM	8/17/2007	9992 10031 MHM070018 MHM0	0017 U/S 5147 SPM070020 8 VCP	44 44				0 0	0.00			0 0 0.00			
3 (6.No.Defect 1515) PPT 35 28 LEONHARDT 8172007 9994 9993 MHM070009 IUS 5149 SPN070022 8 VCP 140 225 10.001	3 6_No_Defect 1514 PPT 3 6_No_Defect 1515 PPT	35 25 35 28						+++++			0 0	0.00		+++++	0 0 0.00	++++++++	+++	
3 6_No_Defect 1516 PPT 35 24 ROYAL PALM 8/17/2007 9996 9994 MHM070022 MHM070022 MHM070022 MHM070022 MHM070022 MHM070022 MHM070023 8 VCP 258 259											0 0	0.00						

				General		Po-					Structura	al Defect Coding	1 181 1	;	Bu oog		Operationa	al and Maintenance			ē .		Construction Feature	es	9	and.		
	Š	No.				ar Ol II	£	£					ormed apsed Pip age	ng Failure nt Repair	itruct Rati	act Index					faint Rati			late of an Oarl	sellaneous	urvey Aba		
y wastor	No. No. ction No.	Natched Pocation Pocation	Е	xisting MH ID Pr	evious MH ID	ion of Ca	ength (f	h (f) Length	Crack C	Fracture F	Broken Hole B H	Joint J	X Collin	Sag Poir	Structure	Deposits D	Fine (F)	Roots (R) Tap (T) Medium (M)	Ball (B)	Itration Obstacles Vermin	O&M De	ap (Lateral) T	Line L	Intruding Seal Material IS	M Misc	ons for S dentified	ı	
3 6_No_Defect 1517 PPT	ade	Street Name CAROLEEN	CCTV Date S	Start End Star	End	U/S 5151 SPM070024 8 VCP	Joint GIS C	263 264	C M S H	L C M S I	H SV VV SV V	V S M L S	M L A V H P S L	F RP S	PACP D Total	AE AE Other AGS B % L % Z %	B L J C B	LJCBLJC	BLJCG	Other ORWCZ%CF	O O O O O O O O O O O O O O O O O O O	FL BI BD	L U R LD RD	SRH SRB SRL Z S	SA CU MC	Reason GIS k	Comments	Recommendations
3 6_No_Defect 1518 PPT 3 6_No_Defect 1519 PPT 3 6_No_Defect 1519 PPT	35 20	ROYAL PALM	8/17/2007 9	996 9997 MHM070	022 MHM070023	D/S 5152 SPM070025 8 VCP D/S 5153 SPM070026 8 VCP		262 273 330 332							0 0	00					0 0 0.00							
3 6_No_Defect 1520 PPT 3 6_No_Defect 1521 PPT	35 22	ROYAL PALM ROYAL PALM	8/17/2007 9	998 9999 MHM070	024 MHM070025	D/S 5154 SPM070027 8 VCP D/S 5155 SPM070028 8 VCP		152 258 100 282							0 0	00					0 0 0.00							
3 6_No_Defect 1522 PPT 3 6_No_Defect 1523 PPT	35 17	HIBISCUS HIBISCUS	8/17/2007 1	0000 10001 MHM070	027 MHM070028	D/S 5156 SPM070029 8 VCP D/S 5157 SPM070030 8 VCP		380 362 335 353							0 0	00					0 0 0.00	Ш						
3 6_No_Defect 1524 PPT 3 6_No_Defect 1525 PPT	39 25	BART BART	9/6/2007 1	0067 10066 MHM070	032 MHM070031	U/S 4196 SPM070039 8 VCP U/S 4195 SPM070038 8 VCP		90 88 140 145							0 0	00 00					0 0 0.00							
3 6_No_Defect 1526 PPT 3 6_No_Defect 1527 PPT		BART ROYAL PALM				U/S 4197 SPM070040 8 VCP D/S 4198 SPM070041 8 VCP		150 159 275 279							0 0	00 00					0 0 0.00							
3 6_No_Defect 1528 PPT 3 6_No_Defect 1529 PPT		ROYAL PALM ELLERY				D/S 4199 SPM070042 8 VCP U/S 4200 SPM070043 8 VCP		175 178 230 231							0 0	00 00					0 0 0.00							
3 6_No_Defect 1530 PPT 3 6_No_Defect 1531 PPT		ROYAL PALM ROYAL PALM				D/S 4201 SPM070044 8 VCP D/S 4202 SPM070045 8 VCP		180 181 70 71							0 0	00 00					0 0 0.00							
3 6_No_Defect 1532 PPT 3 6_No_Defect 1533 PPT		ROYAL PALM SWALLOW				D/S 4204 SPL070001 8 VCP D/S 4582 SPM070049 8 VCP		285 286 300 303							0 0	00					0 0 0.00	1						
3 6_No_Defect 1534 PPT 3 6_No_Defect 1535 PPT		SWALLOW SWALLOW				U/S 4676 SPM070050 8 VCP D/S 4677 SPM070051 8 VCP		95 89 290 298							0 0	.00					0 0 0.00							
3 6_No_Defect 1536 PPT 3 6_No_Defect 1537 PPT	37 36	CAPRI BARCLAY	8/30/2007 10	0085 10084 MHM076	048 MHM070047	U/S 4678 SPM070052 8 VCP U/S 4680 SPM070054 8 VCP		105 87 235 235							0 0	00					0 0 0.00							
3 6_No_Defect 1538 PPT 3 6_No_Defect 1539 PPT	39 17	SHANNON SHANNON	9/6/2007 10	0088 10089 MHM070	051 MHL070049	D/S 4681 SPM070055 8 VCP D/S 4684 SPL070006 8 VCP		300 299 286 288							0 0	00 00					0 0 0.00				2			
3 6_No_Defect 1540 PPT 3 6_No_Defect 1544 PPT	46 30	CAPRI ROSELEE	10/16/2007 10	0224 10225 MHM070	058 MHM070059	U/S 4679 SPM070053 8 VCP D/S 4047 SPM070006 8 VCP		360 363 90 102							0 0	00					0 0 0.00							
3 6_No_Defect 1545 PPT 3 6_No_Defect 1548 PPT		ROSELEE ORANGEWOOD ALLEY				U/S 4046 SPN070048 8 VCP U/S 5159 SPM060010 8 VCP		170 162 295 296							0 0	00					0 0 0.00							
3 6_No_Defect 1549 PPT 3 6_No_Defect 1550 PPT	36 3		8/23/2007 10	0005 10008 MHM070	061 MHM070062	D/S 5160 SPM070031 8 VCP D/S 5538 SPM070032 8 VCP		150 149 190 182	+++	+ + +		+ + + +			0 0	00 00					0 0 0.00	3 2						
3 6_No_Defect 1551 PPT 3 6_No_Defect 1552 PPT	36 5		8/23/2007 10	0009 10011 MHM070	063 MHM070064	D/S 5539 SPM070033 8 VCP D/S 5541 SPM070034 8 VCP		95 99 237 237	HH	+					0 0	00 00					0 0 0.00	HH						
3 6_No_Defect 1553 PPT 3 6_No_Defect 1554 PPT	37 9	ORANGEWOOD ORANGEWOOD				D/S 5544 SPM070036 8 VCP D/S 4688 SPM070058 8 VCP		280 280 315 313							0 0	00 00					0 0 0.00	3						
3 6_No_Defect 1555 PPT 3 6_No_Defect 1556 PPT		ORANGEWOOD ORANGEWOOD				D/S 4692 SPM070059 8 VCP D/S 5542 SPM070035 8 VCP		160 161 53 55							0 0	00 00					0 0 0.00	1						
3 6_No_Defect 1561 PPT 3 6_No_Defect 1562 PPT		FLAMINGO ALLEY COCKATOO				U/S 4645 SPM080008 8 VCP U/S 5505 SPM080011 10 VCP		252 256 658 662							0 0	00					0 0 0.00	1					Repeat inspection, DVD 38 - Section 4	
3 6_No_Defect 1563 PPT 3 6_No_Defect 1564 PPT 3 6_No_Defect 1564 PPT	48 10	PEACOCK HUMMINGBIRD	10/17/2007 10	0273 9615 MHM08	012 MHM080021	D/S 5507 SPM080014 10 VCP D/S 4649 SPM080016 8 VCP		316 318 240 252							0 0	00					0 0 0.00	2			1			
3 6_No_Defect 1565 PPT 3 6_No_Defect 1566 PPT 3 6_No_Defect 1566 PPT	38 14	HUMMINGBIRD BLUEJAY	8/30/2007 9	608 9610 MHM08	016 MHM080018	D/S 4653 SPM080019 8 VCP U/S 4654 SPM080020 6 VCP		200 200 100 105							0 0	00					0 0 0.00							
3 6_No_Defect 1567 PPT 3 6_No_Defect 1568 PPT	51 40	SKYLARK SKYLARK	12/27/2007 9	614 9615 MHM08	020 MHM080021	D/S 4659 SPM080025 8 VCP D/S 5508 SPM080026 10 VCP		175 178 153 161							0 0	00					0 0 0.00							
3 6_No_Defect 1569 PPT 3 6_No_Defect 1570 PPT	49 44	SKYLARK SKYLARK	11/9/2007 9	617 9616 MHM08	023 MHM080022	U/S 5036 SPM080027 8 VCP D/S 4166 SPM080043 10 VCP		90 91 264 266							0 0	00					0 0 0.00							
3 6_No_Defect 1571 PPT 3 6_No_Defect 1572 PPT	49 43	SKYLARK SKYLARK	11/9/2007 10	0053 10052 MHM080	025 MHM080024	U/S 4191 SPM080036 8 VCP D/S 5510 SPM080037 10 VCP		90 81 350 353							0 0	00 00					0 0 0.00							
3 6_No_Defect 1573 PPT 3 6_No_Defect 1574 PPT		SKYLARK SKYLARK				U/S 4192 SPM080038 8 VCP U/S 4193 SPM080040 8 VCP		90 82 90 82							0 0	00					0 0 0.00							
3 6_No_Defect 1575 PPT		BROOKHURST ALLEY CHAPMAN SHOP		619 9618 MHM08				143 145							0 0	00					0 0 0.00	2						
3 6_No_Defect 1576 PPT 3 6_No_Defect 1577 PPT		CENTER CHAPMAN SHOP CENTER				D/S 5039 SPM080030 8 VCP D/S 4194 SPM080042 8 VCP		241 241 382 385							0 0	.00					0 0 0.00							
3 6_No_Defect 1578 PPT		CHAPMAN SHOP CENTER	8/15/2007 9	622 9623 MHM08	036 MHM080037	D/S 5041 SPM080032 8 VCP		74 76							0 0	00					0 0 0.00				2			
3 6_No_Defect 1579 PPT 3 6_No_Defect 1580 PPT	35 15		8/16/2007 1	0258 9963 MHM09	005 MHM090004	U/S 4989 SPM090002 8 VCP U/S 3699 SPM090015 10 PVC		172 177 200 229							0 0	00					0 0 0.00							
3 6_No_Defect 1581 PPT 3 6_No_Defect 1582 PPT	35 9	CHAPMAN	8/16/2007 1	0259 10260 MHM09	006 MHM090007	U/S 4546 SPM090006 10 PVC D/S 4547 SPM090007 10 PVC		300 276 95 183							0 0	.00					0 0 0.00							
3 6_No_Defect 1583 PPT 3 6_No_Defect 1584 PPT	35 11	CHAPMAN CHAPMAN	8/16/2007 1	0261 10262 MHM09	008 MHM090009	D/S 4548 SPM090008 10 PVC D/S 4549 SPM090009 10 PVC		220 215 350 350							0 0						0 0 0.00							
3 6_No_Defect 1585 PPT 3 6_No_Defect 1586 PPT	35 13	CHAPMAN	8/16/2007 1	0043 10044 MHM09	010 MHM090011	D/S 3744 SPM090035 10 PVC D/S 4183 SPM090016 10 PVC		350 353 335 347							0 0	00					0 0 0.00							
3 6_No_Defect 1587 PPT 3 6_No_Defect 1588 PPT	49 31	CHAPMAN CHAPMAN	11/8/2007 1	0263 9956 MHM09	012 MHM090035	D/S 4184 SPM090017 8 VCP U/S 4169 SPM090001 15 VCP		335 335							0 0	.00					0 0 0.00	1						
3 6_No_Defect 1589 PPT 3 6_No_Defect 1590 PPT 3 6_No_Defect 1591 PPT	45 41	CHAPMAN CHAPMAN CHAPMAN	10/8/2007 1	0264 10265 MHM09	013 MHM090014	U/S 4281 SPM090010 15 VCP D/S 4282 SPM090011 15 VCP D/S 4283 SPM090012 15 VCP		175 173 165 169 240 275							0 0						0 0 0.00	-						
3 6_No_Defect 1591 PPT 3 6_No_Defect 1592 PPT 3 6_No_Defect 1593 PPT	45 43	CHAPMAN CHAPMAN	10/8/2007 1	0266 10267 MHM09	015 MHM090016	D/S 4283 SPM090012 15 VCP D/S 4550 SPM090013 15 VCP D/S 3745 SPM090036 15 VCP									0 0	00 00					0 0 0.00 0 0 0.00 0 0 0.00							
3 6_No_Defect 1594 PPT 3 6_No_Defect 1595 PPT	45 45	CHAPMAN CHAPMAN	10/8/2007 1	0045 10046 MHM09	017 MHM090018	D/S 4185 SPM090018 15 VCP D/S 4186 SPM090019 15 VCP		335 334							0 0	.00					0 0 0.00				2			
3 6_No_Defect 1596 PPT 3 6_No_Defect 1597 PPT	51 38	CHAPMAN CHAPMAN	12/27/2007 1	0049 9671 MHM09	021 COM090001	U/S 4188 SPM090021 8 VCP D/S 4190 SPM090023 8 VCP		160 182 40 42							0 0	00					0 0 0.00							
3 6_No_Defect 1598 PPT 3 6_No_Defect 1599 PPT	46 2	CHAPMAN BROOKHURST	10/9/2007 1	0050 10051 MHM09	022 MHL090035	D/S 4284 SPM090024 15 VCP U/S 3192 SPM100001 8 VCP		415 412 176 179							0 0	.00					0 0 0.00							
3 6_No_Defect 1600 PPT	48 13	BROOKHURST BROOKHURST	10/17/2007 9	456 9457 MHM10	001 MHM100002	D/S 3193 SPM100002 8 VCP D/S 3194 SPM100003 8 VCP		130 118 160 183							0 0						0 0 0.00				1			
3 6_No_Defect 1601 PPT 3 6_No_Defect 1602 PPT 3 6_No_Defect 1603 PPT	48 15 48 16	BROOKHURST BROOKHURST	10/17/2007 9 10/17/2007	458 9459 MHM10i 0 0 MHM10i	003 MHM100004 004 MHM100005	D/S 3195 SPM100004 8 VCP D/S 3196 SPM100005 8 VCP		330 340 205 255							0 0	00 00					0 0 0.00							
3 6_No_Defect 1604 PPT 3 6_No_Defect 1605 PPT	48 18 49 39	BROOKHURST LAMPSON	10/17/2007	0 0 MHM100 445 9479 MHM110	006 MHM110051 051 MHM110003	D/S 3198 SPM100007 8 VCP D/S 3428 SPM110028 8 VCP		310 319 185 62							0 0	00					0 0 0.00				1 1		MSA = MCU	
3 6_No_Defect 1606 GGSE 3 6_No_Defect 1607 GGSE		MALLARD Y MALLARD	10/5/2004 1	0536 10535 MHM150	008 MHM150007	U/S 2025 SPM150003 8 VCP U/S 2026 SPM150004 8 VCP		142 139 328 328							0 0						0 0 0.00							
3 6_No_Defect 1608 GGSE 3 6_No_Defect 1609 GGSE	24 812	ERIN TEAL	10/6/2004 1	0540 10539 MHM150	014 MHM150012	U/S 2028 SPM150006 8 VCP U/S 2030 SPM150008 8 VCP		280 281 260 252		$+$ $+$ \mp					0 0	00			$HH\overline{H}$		0 0 0.00 0 0 0.00	$+\Box$			$oxed{\Box}$			
3 6_No_Defect 1610 GGSE 3 6_No_Defect 1611 GGSE		TEAL CORK				U/S 2453 SPM150022 8 VCP U/S 2034 SPM150012 8 VCP		318 317 210 211							0 0						0 0 0.00	Ш						
																_											GIS shows CO @ 143' (COM150001). DVD doesn"t have any CO between MHM150018 to	
3 6_No_Defect 1612 GGSE 3 6_No_Defect 1613 GGSE	24 802		10/14/2004 1	0545 10544 MHM150	019 MHM150018	U/S 2033 SPM150011 8 VCP U/S 2036 SPM150014 8 VCP D/S 2314 SPM160015 8 VCP		143 348 328 330							0 0							1			$\pm \pm$		MHM150015	
3 6_No_Defect 1614 PPT 3 6_No_Defect 1615 PPT 3 6_No_Defect 1616 PPT	2	DEODARA DEODARA	3/23/2007 1	0588 10589 MHM16	002 MHM160003	D/S 2315 SPM160016 8 VCP		243 268 237 240							0 0	00					0 0 0.00							
3 6_No_Defect 1616 PPT	2 3	DEODARA	3/23/2007 1	20590 MHM16	UU3 MHM160004	D/S 2316 SPM160017 8 VCP		300 301							0 0	00			шШ		0 0 0.00					$\perp \perp \perp \perp$		

				General				Structural D	tefect Codina	1 5 1 1 5	T T	Operational and Maintenance			Construction Features	1 % 1 1 0	T
		9 6			Pipe				pe did pe	spair A Rating afects	×	.,		t Rating	snoou	Feature y Aban	par opu
	No. VD No	Spec. Coation	E-	isting MH ID Previous MH ID	rwer ID	ent Jth (ft)	Crack Fracture	Broken Hole	Seformo Collapse Surface Surface	Sags Sags Kruck Katural Du tural Du tural Du	Deposite	Posts (D)	Infiltration Obstacles	remin 2 Defe 2 Main.	Intruding Seal	ruction r Surve	Ped Abs
rity king tractor	no. No. or no. ection ersal T. ersal D. ersal D.	Watch		assuing will TID	ction of cti	Comm gth (ft)	C F	B H	J D X O S I	Struc SP Quik	E D D Other	Fine (F) Tap (T) Medium (M) E	all (B) I OB Other	V O S W W T T T T T T T T T T T T T T T T T	L IS M	I Cons	A Centification
3 6_No_Defect 1617 PPT	Tap Tap Tap Rev Rev Rev	Street Name	CCTV Date S	art End Start End	e D/S 2317 SPM160018 8 VCP	320 288	L C M S H L C M	S H SV VV SV VV	SMLSMLAVHPS	F RP S A 10 1	AGS B % L % Z %	B L J C B L J C B L J C B	LJCGDRWCZ%	C R 4 10 10 80 FD FL BI BD	D L U R LD RD SRH SRB SRL Z SA CU	WC H S	© Comments Recommendations
3 6_No_Defect 1618 GGSD	24 815	BLAKE	10/19/2004 10	548 10547 MHM160006 MHM160008	U/S 2194 SPM160002 8 VCP	300 299				0 0	0.00			0 0 0.00			
3 6_No_Defect 1619 GGSD 3 6_No_Defect 1620 GGSD	25 833	MANSOR INGRAM			U/S 2197 SPM160005 8 VCP U/S 2200 SPM160008 8 VCP	260 259 135 138				0 0	0.00			0 0 0.00			
3 6_No_Defect 1621 GGSD 3 6_No_Defect 1622 GGSD					U/S 2202 SPM160010 8 VCP	281 280 345 339				0 0				0 0 0.00			
3 6_No_Defect 1623 GGSD	25 833	INGRAM	10/25/2004 10	557 10556 MHM160018 MHM160016	U/S 2204 SPM160012 8 VC	345 345				0 0	0.00			0 0 0.00		2	
3 6_No_Defect 1624 GGSD		Y ERIN		557 10558 MHM160018 MHM160019		310 308				0 0	0.00			0 0 0.00		1	
3 6_No_Defect 1625 PPT 3 6_No_Defect 1626 PPT		OASIS AVE OASIS AVE			P. D/S 2207 SPM170006 8 VCP D/S 2208 SPM170007 8 VCP	376 381 377 376				0 0	0.00			0 0 0.00			
3 6_No_Defect 1627 PPT 3 6_No_Defect 1628 PPT	2 7	KERRY KERRY			U/S 2209 SPM170008 8 VCP	50 47 271 273				0 0	0.00			0 0 0.00			
3 6_No_Defect 1629 PPT	2 5	KERRY	3/26/2007 10	564 10563 MHM170015 MHM170014	U/S 2211 SPM170010 8 VCP	270 274				0 0				0 0 0.00			
3 6_No_Defect 1630 PPT 3 6_No_Defect 1631 PPT		OASIS AVE OASIS AVE			5 D/S 2221 SPM170020 8 VCP 5 D/S 2458 SPM170038 8 VCP	270 270 265 268				0 0	0.00			0 0 0.00			
3 6_No_Defect 1632 PPT		WESTMINSTER			D/S 2589 SPM170030 8 VCP	365 244				0 0	0.00			0 0 0.00	1		MSA = Surcharge
3 6_No_Defect 1633 PPT 3 6_No_Defect 1634 PPT		ALLEY BUSHARD		574 10592 MHM170028 MHM170029 592 10593 MHM170029 MHM170033	D/S 2459 SPM170039 8 VCP D/S 2590 SPM170031 8 VCP	315 317 150 153				0 0	0.00			0 0 0.00			
3 6_No_Defect 1635 PPT 3 6_No_Defect 1636 PPT		SUTHERLAND BUSHARD			2 D/S 2460 SPM170040 8 VCP 5 D/S 2591 SPM170032 8 VCP	332 334 280 282				0 0	0.00			0 0 0.00			
3 6_No_Defect 1637 PPT	2 9	MIRAGE	3/23/2007 10	577 11040 MHM170033 MHM170034	D/S 2224 SPM170023 8 VCP	256 269				0 0	0.00			0 0 0.00			
3 6_No_Defect 1638 PPT 3 6_No_Defect 1639 PPT	2 16	MIRAGE BUSHARD	3/26/2007 10	594 10595 MHM170035 MHM170039	5 D/S 2461 SPM170041 8 VCP D/S 2592 SPM170033 8 VCP	267 268 280 283				0 0	0.00			0 0 0.00			
3 6_No_Defect 1640 PPT 3 6_No_Defect 1641 PPT		READING AVE READING AVE			B D/S 2462 SPM170042 8 VCP D/S 2593 SPM170034 8 VCP	260 270 265 268	$+++++\mp\mp$	+		0 0	0.00		++++++++++++++++++++++++++++++++++++	0 0 0.00		$+ \Box$	
3 6_No_Defect 1642 PPT 3 6_No_Defect 1643 PPT	2 17	BUSHARD 13TH	3/26/2007 10	595 10399 MHM170039 MHM170040	D/S 2594 SPM170035 8 VCP	270 204 479 353				0 0	0.00			0 0 0.00			
3 6_No_Defect 1644 PPT	3 7	11TH	3/27/2007 69	04 6905 MHM180002 MHM180003	B D/S 198 SPM180001 8 VCP	158 161				0 0	0.00			0 0 0.00			
3 6_No_Defect 1645 GGSD 3 6_No_Defect 1646 PPT		Y KERN HAZARD AVE	3/29/2007 69		D/S 203 SPM190005 8 VCP	425 404 130 146	 		 	0 0	0.00		 	0 0 0.00			
3 6_No_Defect 1647 PPT 3 6_No_Defect 1648 PPT		HAZARD AVE HAZARD AVE			D/S 205 SPM190007 8 VCP D/S 206 SPM190008 8 VCP	40 38 279 291				0 0	0.00			0 0 0.00			
3 6_No_Defect 1649 PPT	3 13	CORK ST.	3/27/2007 69	16 6914 MHM190007 MHM190008	U/S 207 SPM190009 8 VCP	278 267				0 0	0.00			0 0 0.00			
3 6_No_Defect 1650 PPT 3 6_No_Defect 1651 PPT	3 11		3/27/2007 69	16 6918 MHM190007 MHM190008	U/S 208 SPM190010 8 VCP D/S 209 SPM190011 8 VCP	149 150 266 268				0 0	0.00			0 0 0.00			
3 6_No_Defect 1652 PPT					3 U/S 210 SPM190012 8 VCP	149 150				0 0	0.00			0 0 0.00			MHM190010 corrected to
3 6_No_Defect 1653 PPT 3 6_No_Defect 1654 PPT		CORK ST. SABRE		18 6920 MHM190009 MHM190011 19 6920 MHM190010 MHM190011	D/S 211 SPM190013 8 VCP D/S 212 SPM190014 8 VCP	258 259 128 260				0 0	0.00			0 0 0.00			MHM190011
3 6_No_Defect 1655 PPT 3 6_No_Defect 1656 PPT		SABRE DONEGAL			B D/S 213 SPM190015 8 VCP B D/S 214 SPM190016 8 VCP	401 404 137 137				0 0	0.00			0 0 0.00			
3 6_No_Defect 1657 PPT 3 6_No_Defect 1658 PPT	3 5	SINCLAIR CIR SINCLAIR CIR	3/28/2007 69	23 6782 MHM190014 COM190002	U/S 216 SPM190018 8 VCP	123 120 300 304				0 0				0 0 0.00			
3 6_No_Defect 1659 PPT	3 3	DONEGAL	3/28/2007 69	24 6938 MHM190015 MHM200008	D/S 231 SPM190020 8 VCP	265 266				0 0	0.00			0 0 0.00			
3 6_No_Defect 1660 PPT 3 6_No_Defect 1661 PPT		MADISON CIR MADISON CIR			D/S 53 SPM190002 8 VCP B D/S 52 SPM190001 8 VCP	248 248 243 243				0 0	0.00			0 0 0.00			
3 6_No_Defect 1662 PPT 3 6_No_Defect 1663 PPT		10 MADISON ALLEY MADISON			D/S 51 SPM200004 8 VCP U/S 530 SPM200005 8 VCP	130 130 124 123				0 0	0.00			0 0 0.00	2 1		MSA = High water level. Redo Inspection
3 6_No_Defect 1664 PPT	3 1	KENNEDY WAY KENNEDY WAY	3/29/2007 67	88 6787 MHM200002 MHM200003	B D/S 50 SPM200003 8 VCP B D/S 49 SPM200002 8 VCP	291 291 60 60				0 0	0.00			0 0 0.00			
3 6_No_Defect 1665 PPT 3 6_No_Defect 1666 PPT	3 6	MADISON	3/28/2007 69	38 6926 MHM200005 MHM20000	U/S 531 SPM200006 8 VCP	300 303				0 0	0.00			0 0 0.00			
3 6_No_Defect 1667 PPT 3 6_No_Defect 1668 PPT		DONEGAL YERMO			B D/S 230 SPM200016 8 VCP B U/S 220 SPM200007 8 VCP	265 267 124 123				0 0				0 0 0.00			
3 6_No_Defect 1669 PPT 3 6_No_Defect 1670 PPT		YERMO DONEGAL			B D/S 221 SPM200008 8 VCP D/S 222 SPM200009 8 VCP	300 303 263 267				0 0	0.00			0 0 0.00			
3 6_No_Defect 1671 PPT 3 6_No_Defect 1672 PPT	3 10	LEXINGTON LEXINGTON	3/28/2007 69	30 6931 MHM200009 MHM200010	D/S 223 SPM200010 8 VCP D/S 224 SPM200011 8 VCP	257 259 264 203				0 0	0.00			0 0 0.00			
3 6_No_Defect 1673 PPT	3 9	LEXINGTON	3/29/2007 69	32 6933 MHM200011 MHM200012	2 D/S 225 SPM200012 8 VCP	130 137				0 0	0.00			0 0 0.00			
3 6_No_Defect 1674 PPT 3 6_No_Defect 1675 PPT		DONEGAL	3/29/2007 69 3/29/2007 69	33 6934 MHM200012 MHM200013 34 6935 MHM200013 MHM200016	B D/S 226 SPM200013 8 VCP B D/S 227 SPM200014 8 VCP	371 386 86 76				0 0	0.00			0 0 0.00			
3 6_No_Defect 1676 PPT		WASHINGTON ALLEY			5 D/S 232 SPM200017 8 VCP	208 304				0 0	0.00			0 0 0.00 2			
3 6_No_Defect 1677 PPT 3 6_No_Defect 1678 PPT 3 6_No_Defect 1679 PPT	3 13 28 20	PALMWOOD	7/25/2007 98	30 9831 MHN050001 MHN060003	2 D/S 229 SPM210001 8 VCP 5 D/S 3754 SPN060004 8 VCP	52 44 283 278	 			0 0		- 	++++++++	0 0 0.00		-	
3 6_No_Defect 1679 PPT 3 6_No_Defect 1680 PPT	29 20 29 16	ELENAOR DALLAS			U/S 3760 SPN050035 8 VCP U/S 3763 SPN050038 8 VCP	319 323 265 270				0 0				0 0 0.00			
3 6_No_Defect 1681 PPT 3 6_No_Defect 1682 PPT	29 11	DEWEY	7/30/2007 99	08 9658 MHN050008 CON050004	U/S 4604 SPN050031 8 VCP	130 131 342 341				0 0	0.00			0 0 0.00 1			
3 6_No_Defect 1682 PPT 3 6_No_Defect 1683 PPT 3 6_No_Defect 1684 PPT	29 9	FAVE	7/30/2007 97	00 9699 MHN050010 MHN050009	U/S 4557 SPN050012 8 VCP	255 256				0 0	0.00			0 0 0.00 1			
3 6_No_Defect 1685 PPT	29 10	FAVE DEWEY	7/30/2007 98	35 9908 MHN050012 MHN050008	U/S 4558 SPN050013 8 VCP U/S 4873 SPN050042 8 VCP	275 279				0 0				0 0 0.00			
3 6_No_Defect 1686 PPT 3 6_No_Defect 1687 PPT	29 7	FAVE BETTES			U/S 5004 SPN050052 8 VCP	344 348 280 282				0 0				0 0 0.00		\blacksquare	
3 6_No_Defect 1688 PPT 3 6_No_Defect 1689 PPT		DALLAS DALLAS	7/31/2007 96	94 9646 MHN050017 CON050003	U/S 4561 SPN050016 8 VCP	96 97				0 0	0.00			0 0 0.00			
3 6_No_Defect 1690 PPT	33 18	BECCA	8/13/2007 97	08 9706 MHN050022 MHN050020	U/S 4566 SPN050021 8 VCP	150 152				0 0	0.00			0 0 0.00 1			
3 6_No_Defect 1691 PPT 3 6_No_Defect 1692 PPT	33 16	BECCA	8/13/2007 97	08 9710 MHN050022 MHN050024	U/S 4567 SPN050022 8 VCP D/S 4568 SPN050023 8 VCP	94 111 282 283				0 0				0 0 0.00			
3 6_No_Defect 1693 PPT 3 6_No_Defect 1694 PPT	28 23 33 20	TIBBS FYNN	7/25/2007 96 8/13/2007 97	84 9683 MHN050023 MHN050022 10 9709 MHN050024 MHN050023	U/S 4457 SPO050008 8 VCP	213 216 91 100				0 0				0 0 0.00			
3 6_No_Defect 1695 PPT 3 6_No_Defect 1696 PPT	31 2		8/3/2007 97	13 9712 MHN050027 MHN050026	U/S 4573 SPN050028 8 VCP U/S 4575 SPM050004 8 VCP	369 369 100 99				0 0	0.00			0 0 0.00 1			
3 6_No_Defect 1697 PPT	31 3	BECCA	8/3/2007 97	14 9711 MHN050028 MHN050025	U/S 4572 SPN050027 8 VCP	220 227				0 0	0.00			0 0 0.00			
3 6_No_Defect 1698 PPT 3 6_No_Defect 1699 PPT	31 6 30 40 53	BECCA S 17 SONGISH	8/2/2007 97	16 9715 MHN050030 MHN050029	D/S 5007 SPN050055 8 VCP U/S 4576 SPN050030 8 VCP	270 275 319 319				0 0			 	0 0 0.00			
3 6_No_Defect 1700 PPT 3 6_No_Defect 1701 PPT	30 38	ALDGATE			U/S 4882 SPN050043 8 VCP D/S 4883 SPN050044 8 VCP	95 97				0 0				0 0 0.00			
3 6_No_Defect 1702 PPT	30 36	ALDGATE	8/2/2007 10	347 10348 MHN050032 MHN050033	D/S 4884 SPN050045 8 VCP D/S 4564 SPN050019 8 VCP	200 305				0 0	0.00			0 0 0.00			
3 6_No_Defect 1703 PPT 3 6_No_Defect 1704 PPT	30 24	STRATFORD	8/1/2007 96	98 9838 MHN050037 MHN050038	D/S 5009 SPN050057 8 VCP					0 0	0.00			0 0 0.00			
3 6_No_Defect 1705 PPT 3 6_No_Defect 1706 PPT	31 14	BROOKSIDE STRATFORD			U/S 3765 SPN050040 8 VCP U/S 3766 SPN050041 8 VCP	120 2 102 103				0 0			+++++	0 0 0.00		+	MSA = Deadline
3 6_No_Defect 1707 PPT	31 11	DEWEY	8/6/2007 99	43 9944 MHN050042 MHN050043	B D/S 4887 SPN050047 8 VCP B D/S 4610 SPN050032 8 VCP	330 331				0 0	0.00			0 0 0.00			
3 6_No_Defect 1708 PPT 3 6_No_Defect 1709 PPT	28 19				D/S 4611 SPN050033 8 VCP	243 251				0 0				0 0 0.00			

0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0	Pipe (i) (ii) (ii) (iii) (Structural Defect Coding Image Page Page Page Page Page Page Page P	Construction Features Simulation of Apara Cloud Construction Features Simulation of Apara Cloud Construction Features Light Apara Cloud Construction Features
Presented Pres	Existing S Size (in) Phrevious: S Size (in) Phrevious: S Size (in) CCTV Lev (in) T T CTV Lev (in)	C Canal Fracture Broken Hole Joint \$\delta\$ 8 \$\delta\$ 8 <th< th=""><th> To Deposits</th></th<>	To Deposits
3 6_No_Defect 1711 PPT 33 11 PALMWOOD 8/13/2007 9819 981	3. MHN060057 MHN050058 DIS 4283 SPN050011 8 VCP 285 102 3. MHN060002 MHN060001 UIS 5604 SPN060002 8 VCP 110 111 7. MHN060002 MH0060014 UIS 5603 SP0060019 8 VCP 350 353		0 0 0.00 0 0 0.00 0 0 0 0 0 0 0 0 0 0 0
3 6_No_Defect 1714 PPT 28 21 PALMWOOD 7/25/2007 9831 983	MHN060002 MH00600015 D/S 5605 SPO060020 8 VCP 345 334 MHN060003 MHN060004 D/S 3755 SPN060005 8 VCP 279 281 MHN060011 MHN060010 U/S 6132 SPN060015 8 VCP 111 110		Pipe SPOGROZ Corrected to SPOGROZO. Inspection stops 11 ft short of DFS MHL High water level. Clean pipe 0 0.00 0 0.00 0 0.00 0 0.00 0 0 0.00 0 0 0.00 0 0 0.00 0 0 0.00 0 0 0 0.00 0 0 0 0.00 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
3 6.No_Defect 1717 PPT 33 441 GERALDINE 8/14/2007 9891 985 3 6.No_Defect 1718 PPT 33 444 PARK 8/14/2007 10227 966 3 6.No_Defect 1719 PPT 33 43 PARK 8/14/2007 10228 1022	MHN060012 MHN060011 UIS 6133 SPN060016 8 VCP 330 333 333 3 MHN060013 CON060004 UIS 4048 SPN060039 8 VCP 112 113 7 MHN060014 MHN060013 UIS 4049 SPN060040 8 VCP 330 332 332		0 0 0.00 0 0 0.00 0 0 0 0 0 0 0 0 0 0 0
3 6_No_Defect 1721 PPT 32 36 LANEY 8/11/2007 9932 992 3 6_No_Defect 1722 PPT 31 9 BALLARD 8/3/2007 9933 986 3 6_No_Defect 1723 PPT 31 8 BALLARD 8/3/2007 9894 986	M.HN060015 CON68003 UIS 4051 SPN060042 8 VCP 110 109 J. M.HN060019 M.HN060018 UIS 4877 SPN060034 8 VCP 132 130 2 M.HN060020 M.HN060019 UIS 6138 SPN060019 8 VCP 197 201 3 M.HN060021 M.HN060020 UIS 6137 SPN060020 8 VCP 300 304		0 0 0.00 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
3 6.No.Defect 1726 PPT 39 4 DALLAS 9/42007 9895 989 3 6.No.Defect 1726 PPT 30 26 NAMHOE 8/1/2007 9921 990	b MHN060022 MHN060021 UIS 6138 SPN060021 8 VCP 320 330 5 MHN060023 MHN060022 DIS 6139 SPN060022 8 VCP 145 136 7 MHN060025 MHN050003 UIS 4603 SPN060001 8 VCP 310 311		0 0 0.00
3 6, No, Defect. 1730 PPT 31 24 DALLAS 8/7/2007 9004 986 3 6, No, Defect. 1733 PPT 33 22 SONGISH 8/13/2007 9004 386 3 6, No, Defect. 1737 PPT 33 22 SONGISH 8/13/2007 10230 102 1 6, No, Defect. 1737 PPT 33 25 LOCKHAVEN 8/13/2007 10230 102	Minho60026 Minho60025 UIS 3758 SPN060008 8 VCP 310 314 15 Minho60032 Minho60032 UIS 4865 SPN060024 8 VCP 1155 111 115 111 115 Minho60032 Minho60032 UIS 5011 SPN060046 8 VCP 195 199 19 19 19 19 19		0 0 000 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
3 6_No_Defect 1739 PPT 31 17 BROOKSIDE 8/6/2007 9948 994 3 6_No_Defect 1740 PPT 30 6 GERALDINE 8/1/2007 9914 980 3 6_No_Defect 1741 PPT 30 7 FAYE 8/1/2007 9868 965	2 Mi-NN600044 Mi-NN600043 UIS 3767 SPN6060009 8 VCP 96 94 ji Mi-NN600046 Mi-NN600047 DIS 4891 SPN600037 8 VCP 350 352 ji Mi-NN070001 UIS 4874 SPN070024 8 VCP 140 141 ji Mi-NN070003 CON070005 UIS 5883 SPN070001 8 VCP 90 95		0 0 00 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
3 6_No_Defect 1743 PPT 30 1 FAYE 8/1/2007 9868 986 3 6_No_Defect 1744 PPT 40 29 HILL 9/12/2007 9869 966	I MHN070003 MHN070002 UIS 5884 SPN070002 8 VCP 315 317 9 MHN070003 MHN070004 DIS 5885 SPN070003 8 VCP 380 366 3 MHN070004 CON070004 UIS 5886 SPN070004 8 VCP 115 122 3 MHN070004 MHN070005 DIS 5887 SPN070005 8 VCP 173 174		0 0 0.00 0 0 0.00 0 0 0 0 0 0 0 0 0 0 0
3 6_No_Defect 1747 PPT 30 17 STEPHANIE 8/1/2007 9917 991 3 6_No_Defect 1748 PPT 30 19 PATRICIA 8/1/2007 9918 980	5 MHN070008 MHN070007 UIS 6079 SPN070008 8 VCP 296 298 5 MHN070009 MHN070009 UIS 6111 SPN070009 8 VCP 295 298 3 MHN070011 MHN070010 UIS 4875 SPN070025 8 VCP 95 91		0 0 0.00 0 0 0.00 0 0 0 0 0 0 0 0 0 0 0
3 6,No,Defect 1750 PPT 31 33 HILL 8/8/2007 9876 987 3 6,No,Defect 1751 PPT 31 31 HILL 8/8/2007 9877 987 3 6,No,Defect 1752 PPT 31 32 HILL 8/8/2007 9878 1011	8 Mi-NO70013 Mi-NO70012 DIS 6114 SPNO70012 8 VCP 130 134 5 Mi-NO70014 Mi-NO70016 8 VCP 222 224 8 Mi-NO70016 8 NOP 222 224 9 Mi-NO70016 8 9 CP 190 190 1 Mi-NO70016 Mi-NO70017 DIS 6120 SPN070017 8 VCP 209 213		0 0 0.00 Section 21 0 0 0.00 Section 21 0 0 0.00 Section 21
3 6_No_Defect 1754 PPT 32 23 PARK 8/10/2007 10200 101: 3 6_No_Defect 1755 PPT 32 22 GERALDINE 8/10/2007 10200 102:	E MHN070019 MHN070021 DIS 6122 SPN070019 8 VCP 277 280 9 MHN070025 MHN070024 UIS 5387 SPN070026 8 VCP 249 252 1 MHN070025 MHN070026 DIS 5388 SPN070027 8 VCP 280 282 5 MHN070026 CON070002 UIS 5389 SPN070028 8 VCP 130 154		0 0 0.00 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
3 6,No_Defect 1758 PPT 37 31 ROADS END 8/30/2007 10207 1023 3 6,No_Defect 1759 PPT 37 33 HARMONY 8/30/2007 10208 966	4 MHN070030 MHN070036 DIS 5487 SPN0700303 8 VCP 246 251 6 MHN070031 MHN070032 UIS 5489 SPN070035 8 VCP 117 116 1 MHN070032 CON070001 UIS 5488 SPN070034 8 VCP 119 121 7 MHN070031 UIS 5490 SPN070036 8 VCP 300 303		0 0 0.00 0 0 0.00 0 0 0 0 0 0 0 0 0 0 0
3 6_No_Defect 1762 PPT 31 38 McMiCHAEL 8/8/2007 10216 102 3 6_No_Defect 1763 PPT 31 41 McMiCHAEL 8/8/2007 10219 102	8 Mi-N070032 Mi-N070033 DIS 4035 SPN070037 8 VCP 259 259 7 Mi-N070035 Mi-N070036 DIS 4038 SPN070040 8 VCP 310 298 4 Mi-N070038 Mi-N070038 DIS 4041 SPN070043 8 VCP 170 158 2 Mi-N070041 Mi-N070042 DIS 4044 SPN070046 8 VCP 328 328		0 0 0.00 0 0 0.00 0 0 0 0 0 0 0 0 0 0 0
3 6_No_Defect 1765 PPT 31 36 ROSELEE 8/8/2007 10222 102	3 MiNN070042 MiNN070043 DIS 4045 SPN070047 8 VCP 340 331 MINN080003 MiNN080002 UIS 4143 SPN080001 8 VCP 202 201 MiNN080003 MiNN080005 DIS 4145 SPN080003 8 VCP 300 300 304 MINN080003 MiNN080047 UIS 6116 SPN080007 8 VCP 130 131 MINN080003 MINN080047 UIS 6116 SPN080027 8 VCP 130 131		0 0 0.00
3 6.No.Defect 1776 PPT 40 31 AZALEA 9/12/2007 9853 985 3 6.No.Defect 1770 PPT 30 10 FAYE 8/12/2007 9853 985 3 6.No.Defect 1777 PPT 32 39 STEPHANE 8/11/2007 9912 9919	E MHN080007 MHN0800006 UIS 4148 SPN080006 8 VCP 122 126 5 MHN080007 MHN080013 DIS 5863 SPN080007 8 VCP 300 302 1 MHN080010 MHN080009 UIS 5865 SPN080009 8 VCP 300 302		0 0 0.00 0 0 0.00 0 0 0.00 0 0 0 0.00 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
3 6, No, Defect. 1773 PPT 32 42 RAMONA 8/11/2007 9654 965 3 6, No, Defect. 1774 PPT 37 23 SEACREST 8/202007 9657 965 3 6, No, Defect. 1775 PPT 31 29 MORRIE 8/8/2007 9861 9861	MHN080012 MHN080013 D/S 5868 SPN080012 8 VCP 200 201		0 0 0.00 0 0 0.00 0 0 0 0 0 0 0 0 0 0 0
3 6.No_Defect 1777 PPT 31 26 MORRIE 8/8/2007 9862 986 3 6.No_Defect 1178 PPT 46 36 PAR 10/16/2007 9865 986 3 6.No_Defect 1179 PPT 46 37 MORRIE 10/16/2007 9865 986	MH-N080020 MH-N080019 U/S 5875 SPN080019 8 VCP 297 298		0 0 0.00 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
3 6.No_Delect 1781 PPT	9 MHN080027 MHN080026 U/S 4223 SPN080048 8 VCP 1449 146 MHN080029 MHN080027 U/S 5369 SPN080028 8 VCP 1000 116 MHN080028 MHN080028 U/S 5370 SPN080029 8 VCP 1550 150 MHN080033 MHN080031 U/S 5373 SPN080029 8 VCP 127 131		0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
3 6_No_Defect 1785 PPT 32 4 EDGEWOOD 8/8/2007 9969 997 3 6_No_Defect 1786 PPT 37 27 MELODY PARK 8/30/2007 9979 998	0 MHN080033 MHN080032 UIS 4224 SPN080049 8 VCP 172 170 MHN080034 MHN080034 DIS 5374 SPN080033 8 VCP 185 177 MHN080034 MHN080044 DIS 5384 SPN080043 8 VCP 186 186 177 BMH0080043 MHN080044 DIS 5384 SPN080043 8 VCP 186 186 186 186 186 186 186 186 186 186		0 0 0.00 0 0 0.00 1 0 0 0 0 0 0 0 0 0 0
3 6.No, Defect 1788 PPT 30 13 FAYE 81/2007 9874 987 3 6.No, Defect 1789 PPT 23 40 JULIANA 7/9/2007 9874 987 3 6.No, Defect 1790 PPT 23 35 MORRIE 7/9/2007 9414 941	MHN080047 MHN070013 UIS 6115 SPN070013 8 VCP 125 129 MHN090002 CON890006 UIS 2996 SPN090000 8 VCP 180 174 MHN090002 MHN090002 DIS 2997 SPN090007 8 VCP 120 177 MHN090004 MHN090032 UIS 3179 SPN090033 8 VCP 330 330		0 0 0.00 0 0 0.00 0 0 0 0 0 0 0 0 0 0 0
3 6,No,Defect 1792 PPT 45 49 CHAPMAN 10/8/2007 10672 984 3 6,No,Defect 1793 PPT 45 50 CHAPMAN 10/8/2007 9844 984 3 6,No,Defect 1794 PPT 46 6 CHAPMAN 10/15/2007 9847 984	MinNo90006 MinNo90006 DIS 4274 SPN090034 15 VCP 273 276		0 0 0.00
3 6.No.Defect 1799 PPT 46 8 CHAPMAN 10/15/2007 9951 010 3 6.No.Defect 1799 PPT 46 8 CHAPMAN 10/15/2007 9952 995	MinNosori		0 0 0.00 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
3 6.No.Defect 1800 PPT 46 10 Y CHAPMAN 10/15/2007 9955 995 3 6.No.Defect 1801 PPT 23 37 MORRIE 7/9/2007 9437 943	5 MHN090015 MHM090035 DIS 4280 SPN090039 15 VCP 250 151 5 MHN090026 MHN090025 UIS 3018 SPN090023 8 VCP 200 305		0 0 0.00 1 1 1 1 1 MSA = Debris (none seen on video). Reverse inspection needed.
3 6, No, Defect 1802 PPT 23 38 KATY 7/9/2007 9438 940 3 6, No, Defect 1803 PPT 23 36 MORRIE 7/9/2007 9438 942 3 6, No, Defect 1804 PPT 23 33 MORRIE 7/9/2007 9438 943 3 6, No, Defect 1806 PPT 23 33 MORRIE 7/9/2007 9439 943 3 6, No, Defect 1806 PPT 23 30 GENEVA 7/9/2007 9439 943	Mi-Ni090027 CON090004 U/S 3171 SPN090025 8 VCP 170 171		0 0 0.00 0 0 0.00 0 0 0 0 0 0 0 0 0 0 0
3 6_No_Defect 1807 PPT 26 1 JOAN 7/17/2007 9442 940	MHN090028 MHN090002 D/S 3174 SPN090028 8 VCP 260 261 MHN090031 CON090002 U/S 3177 SPN090031 8 VCP 260 258		0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0

				General				Structural Defect	Coding		<u> </u>	Operational and Maintenance			Construction Features	w ti	
		9 6			Pipe				allure	apair x Rating afects	×	.,		t Rating		neous Feature	llow.
	No.	OVD No nspec. 1	Fv	isting MH ID Previous MH ID	wer ID	h (ft)	Crack Fracti	e Broken Hole	Deforme Collapse Surface Damage	Sags Sags X Struc Aural Du	Denosits	Roots (R)	Infiltration Obstacles	Vermin Vo Vermin Tap (Lateral)	Intruding Sea Line Material	Miscella fruction or Surve	190
rity king	e No.	ersal D Watch		Surig Will 10	ction of cti	Comm Comm TV Lens	C F	B H	J D X	Struc Struc	D D AE AE Other	Fine (F) Tap (T) Medium (M)	Ball (B) I OB Other	V 36 88 88 T	L IS	N M M	No.:
3 6_No_Defect 1809 PPT	23 42	Street Name ARKLEY	CCTV Date St	art End Start End	9.	960 363	C M S H L C M	S H SV VV SV VV S I	M L S M L A V H P S LF	RP S A STOLE	AGS B % L % Z % E	B L J C B L J C B L J C E	LJCGDRWCZ%	C R 4	D L U R LD RD SRH SRB SRI	Z SA CU MC F S	25 Comments Recommendations
3 6_No_Defect 1810 PPT	23 47	PARK	7/9/2007 94	62 9406 MHN090035 CON090001	1 U/S 3201 SPN090042 8 VCP	140 142				0 0 0	.00			0 0 0.00			
3 6_No_Defect 1811 PPT 3 6_No_Defect 1812 PPT		PARK PARK			5 U/S 3553 SPN090043 8 VCP 7 D/S 3554 SPN090044 8 VCP	170 162 388 391				0 0 0	.00			0 0 0.00		 	+
3 6_No_Defect 1813 PPT 3 6_No_Defect 1814 PPT		PARK SHERIDAN			3 D/S 3555 SPN090045 8 VCP 0 D/S 3557 SPN090047 8 VCP	389 392 309 312				0 0 0	.00			0 0 0.00			
3 6_No_Defect 1815 PPT	24 2	SHERIDAN	7/9/2007 94	67 9468 MHN090040 MHN090041	1 D/S 3558 SPN090048 8 VCP	309 312				0 0 0	.00			0 0 0.00			
3 6_No_Defect 1816 PPT 3 6_No_Defect 1817 PPT		SHERIDAN SHERIDAN			2 D/S 3559 SPN090049 8 VCP 3 U/S 3556 SPN090046 8 VCP	309 310 160 149				0 0 0	.00			0 0 0.00			
3 6_No_Defect 1818 PPT		SHERIDAN MADRAS			2 U/S 3560 SPN090050 8 VCP	67 64				0 0 0	.00			0 0 0.00			
3 6_No_Defect 1819 PPT 3 6_No_Defect 1820 PPT		EASEMENT BROOKHAVEN		70 9448 MHN090043 MHN100026 71 9472 MHN090044 MHN090045	5 D/S 3561 SPN100048 8 VCP 5 D/S 3562 SPN090051 8 VCP	234 237 300 303				0 0 0	.00			0 0 0.00 1			
3 6_No_Defect 1821 PPT 3 6_No_Defect 1822 PPT	24 42	BROOKHAVEN	7/12/2007 94	72 9473 MHN090045 MHN090046	3 D/S 3563 SPN090052 8 VCP 7 D/S 3564 SPN090053 8 VCP	300 302				0 0 0	.00			0 0 0.00 1			
3 6_No_Defect 1823 PPT	23 41	BROOKHAVEN ARKLEY	7/9/2007 90	32 9031 MHN090047 MHN090034	4 U/S 3200 SPN090041 8 VCP	300 302 360 364				0 0 0	.00			0 0 0.00 1			
3 6_No_Defect 1824 PPT 3 6_No_Defect 1825 PPT	46 43 46 44	CHAPMAN CHAPMAN			9 D/S 4221 SPN090059 8 VCP 0 D/S 4893 SPN090055 8 VCP	310 232 350 443				0 0 0	.00			0 0 0.00			
3 6_No_Defect 1826 PPT	46 45	CHAPMAN	10/17/2007 99	58 9959 MHN090050 MHN090051	1 D/S 4987 SPN090056 8 VCP	310 313				0 0 0	.00			0 0 0.00			
3 6_No_Defect 1827 PPT 3 6_No_Defect 1828 PPT	25 44	CHAPMAN BROWNING	7/17/2007 94	16 9398 MHN100010 CON100003	4 D/S 4988 SPN090057 8 VCP 3 U/S 2999 SPN100011 8 VCP	234 234 110 106				0 0 0	.00			0 0 0.00			
3 6_No_Defect 1829 PPT 3 6_No_Defect 1830 PPT		MORRIE BROWNING			3 U/S 2998 SPN100010 8 VCP 1 U/S 3001 SPN100013 8 VCP	160 119 155 195				0 0 0	.00			0 0 0.00 1			
3 6_No_Defect 1831 PPT 3 6_No_Defect 1832 PPT	25 42	MORRIE	7/17/2007 94	18 9419 MHN100012 MHN100013	3 D/S 3002 SPN100014 8 VCP	300 279				0 0 0	.00			0 0 0.00			
3 6_No_Defect 1833 PPT	22 29	BONSER MOVIUS	7/5/2007 94	22 9421 MHN100015 MHN100014	3 U/S 3003 SPN100015 8 VCP 4 U/S 3005 SPN100016 8 VCP	195 208 265 271				0 0 0	.00			0 0 0.00 2			
3 6_No_Defect 1834 PPT 3 6_No_Defect 1835 PPT	25 45 25 40	BROWNING MORRIE			3 U/S 3006 SPN100017 8 VCP 3 U/S 3008 SPN100019 8 VCP	230 227 110 91				0 0 0	.00			0 0 0.00			
3 6_No_Defect 1836 PPT 3 6_No_Defect 1837 PPT	25 39	MORRIE MORRIE	7/17/2007 94	27 9426 MHN100020 MHN100019	9 U/S 3009 SPN100020 8 VCP 0 U/S 3010 SPN100021 8 VCP	220 227 180 178				0 0 0	.00			0 0 0.00			
3 6_No_Defect 1838 PPT	25 34	TYHURST	7/17/2007 94	28 9429 MHN100021 MHN100022	2 D/S 3011 SPN100022 8 VCP	260 262				0 0 0	.00			0 0 0.00 2			
3 6_No_Defect 1839 PPT 3 6_No_Defect 1840 PPT		TYHURST BONSER			3 D/S 3012 SPN100023 8 VCP 7 D/S 3182 SPN100036 8 VCP	290 279 300 284				0 0 0	.00			0 0 0.00 3			
3 6_No_Defect 1841 PPT 3 6_No_Defect 1842 PPT	24 5	MADRAS	7/10/2007 94	48 9449 MHN100026 MHN100027	7 D/S 3183 SPN100037 8 VCP	170 178 200 169				0 0 0	.00			0 0 0.00			
3 6_No_Defect 1843 PPT	25 14	BONSER MORRIE			5 D/S 3184 SPN100038 8 VCP 2 U/S 3014 SPN100025 8 VCP	200 169 190 185				0 0 0	.00			0 0 0.00			
3 6_No_Defect 1844 PPT 3 6_No_Defect 1845 PPT	25 15 25 10	MORRIE MALINDA			3 U/S 3013 SPN100024 8 VCP 0 D/S 3015 SPN100026 8 VCP	205 203 205 210				0 0 0	.00			0 0 0.00			
3 6_No_Defect 1846 PPT	25 11	MALINDA	7/13/2007 94	33 9434 MHN100030 MHN100031	1 D/S 3016 SPN100027 8 VCP	140 144				0 0 0	.00			0 0 0.00			
3 6_No_Defect 1847 PPT 3 6_No_Defect 1848 PPT		MALINDA BONSER	7/5/2007 94	52 9453 MHN100035 MHN100036	2 D/S 3017 SPN100028 8 VCP 6 D/S 3187 SPN100041 8 VCP	335 329 240 236				0 0 0	.00			0 0 0 0.00 3 1			
3 6_No_Defect 1849 PPT 3 6_No_Defect 1850 PPT		BONSER BONSER			7 D/S 3189 SPN100043 8 VCP 3 D/S 3190 SPN100044 8 VCP	170 166 110 116				0 0 0	.00			0 0 0.00 1			
3 6_No_Defect 1851 PPT		BONSER EASEMENT		54 9476 MHN100037 MHN100049		220 198				0 0 0	.00			0 0 0.00			
3 6_No_Defect 1852 PPT 3 6_No_Defect 1853 PPT	49 38	LAMPSON MALLARD			1 D/S 3180 SPN110040 8 VCP 4 U/S 2464 SPN150037 8 VCP	226 255 355 357				0 0 0	.00			0 0 0.00			
3 6_No_Defect 1854 PPT	7 34	FLOWER	4/25/2007 104	82 10483 MHN150017 MHN150019	D/S 2229 SPN150011 8 VCP	300 302				0 0 0	.00			0 0 0.00			
3 6_No_Defect 1855 PPT 3 6_No_Defect 1856 PPT		RIDGLEY FLOWER			9 D/S 2466 SPN150039 8 VCP 6 D/S 2230 SPN160010 8 VCP	355 359 325 321				0 0 0	.00			0 0 0.00 1			
3 6_No_Defect 1857 PPT 3 6_No_Defect 1858 PPT		DAWSON DAWSON			2 U/S 2233 SPN150014 8 VCP 3 U/S 2234 SPN150015 8 VCP	160 153 325 276				0 0 0	.00			0 0 0.00			
3 6_No_Defect 1859 PPT	8 17	HOPE	4/27/2007 104	194 10496 MHN150030 MHN150032	2 D/S 2241 SPN150021 8 VCP	186 187				0 0 0	.00			0 0 0.00			
3 6_No_Defect 1860 PPT 3 6_No_Defect 1861 PPT	8 18	TRAYLOR BOWEN ST	5/3/2007 104 4/27/2007	96 10495 MHN150032 MHN150031 MHN150035 MHN150034	1 U/S 2242 SPN150022 8 VCP 4 U/S SPN150024 8 VCP	150 140 296 296				0 0 0	.00			0 0 0.00		1	MSA = Plug
3 6_No_Defect 1862 PPT 3 6_No_Defect 1863 PPT		BOWEN ST BOWEN			7 D/S 2245 SPN150026 8 VCP B D/S 2246 SPN150027 8 VCP	218 222 175 183				0 0 0	.00			0 0 0.00			
3 6_No_Defect 1864 PPT		WOODBURY EASEMENT		169 10389 MHN160001 CON160001		126 103				0 0 0	.00			0 0 0.00	1	1	MSA = Bends
3 6_No_Defect 1865 PPT	51 12	WOODBURY WOODBURY	12/26/2007 104	170 10469 MHN160002 MHN160001	1 U/S 2181 SPN160001 8 VCP	270 272				0 0 0	.00			0 0 0.00			
3 6_No_Defect 1866 PPT 3 6_No_Defect 1867 PPT	51 8	EASEMENT WOODBURY			4 U/S 2184 SPN160004 8 VCP 5 D/S 2185 SPN160005 8 VCP	300 302 80 89				0 0 0	.00			0 0 0.00			
3 6_No_Defect 1868 PPT 3 6_No_Defect 1869 PPT	51 11	WOODBURY	12/26/2007 104	171 10470 MHN160005 MHO160002	2 U/S 2182 SPN160002 8 VCP	190 187				0 0 0	.00			0 0 0.00			
3 6_No_Defect 1870 PPT	51 17	DAWSON DAWSON	12/26/2007 104	174 10473 MHN160008 MHN160007	6 U/S 2186 SPN160006 8 VCP 7 U/S 2187 SPN160007 8 VCP	220 232 60 53				0 0 0				0 0 0.00 1			
3 6_No_Defect 1871 PPT 3 6_No_Defect 1872 PPT	51 14 51 16	DAWSON DAWSON			9 D/S 2188 SPN160008 8 VCP 3 U/S 2264 SPN160021 8 VCP	185 190 300 300		$++++\mp\mp$		0 0 0			$HHHH\overline{H}$	0 0 0.00	+++++		+ -
3 6_No_Defect 1873 PPT	51 15	DAWSON	12/26/2007 10	175 10468 MHN160009 MHN170001	1 D/S 2189 SPN160009 8 VCP 9 U/S 2265 SPN160022 8 VCP	130 130				0 0 0	.00			0 0 0.00			
3 6_No_Defect 1874 PPT 3 6_No_Defect 1875 PPT	9 19	DAWSON CYPRESS	5/4/2007 105	504 10503 MHN160011 MHN160010	U/S 2248 SPN160014 8 VCP	275 281 110 453				0 0 0				0 0 0.00			
3 6_No_Defect 1876 PPT 3 6_No_Defect 1877 PPT	9 20	DAWSON DAWSON			2 U/S 2250 SPN160016 8 VCP 4 D/S 2251 SPN160017 8 VCP	260 268 195 200		+++++		0 0 0	.00	+++++++++		0 0 0.00 1	+++++	+++++	-
3 6_No_Defect 1878 PPT 3 6_No_Defect 1879 PPT	9 12	TRAYLOR TRAYLER	5/3/2007 105	508 10509 MHN160015 MHN160016	B D/S 2253 SPN160019 8 VCP 7 D/S 2467 SPN160027 8 VCP	282 286 220 228				0 0 0				0 0 0.00			
3 6_No_Defect 1880 PPT					3 D/S 2271 SPN160023 8 VCP	208 208				0 0 0							
																	Pipe SPM160025 corrected to SPN160900. U/S MHN160020 corrected to MHN160900. D/S
3 6_No_Defect 1881 PPT	50 4	BROOKHURST	11/12/2007 113	867 11361 MHN160020 MHN170903	3 D/S 3070 SPN160900 15 VCP	372 379					.00			0 0 0.00			COTFECTED TO MINITAGE U. D/S MHN170005 corrected to MHN170903.
																	Pipe SPN160024 corrected to SPN160902. U/S MHN160019
																	corrected to MHN160901. D/S MHN160018 corrected to
3 6_No_Defect 1882 PPT 3 6_No_Defect 1883 PPT	11 23	BROOKHURST WESTMINSTER			2 U/S 3072 SPN160902 15 VCP 2 D/S 8166 SPN170008 12 VCP	364 374 330 111	+++++	+++++		0 0 0	.00	++++++++		0 0 0.00	++++++	+++++	MHN160902
3 6_No_Defect 1884 PPT 3 6_No_Defect 1885 PPT	50 1	WESTMINSTER FLOWER	11/12/2007 5/14/2007 105	MHN170007 MHN170006 513 10512 MHN170014 MHN170013	6 U/S SPN170029 18 VCP 3 U/S 2256 SPN170013 8 VCP	356 356 370 25				0 0 0	.00			0 0 0.00 1	1 1	1	MSA = Bends
3 6_No_Defect 1886 PPT	10 27	15th ST	5/14/2007 105	513 10514 MHN170014 MHN170015	5 D/S 2257 SPN170014 8 VCP	75 78				0 0 0				0 0 0.00			
3 6_No_Defect 1887 PPT 3 6_No_Defect 1888 PPT		15th ST			7 D/S 2259 SPN170016 8 VCP 9 D/S 2468 SPN170042 8 VCP	90 60 350 286				0 0 0		 		0 0 0.00		2 2	<u>+</u>
3 6_No_Defect 1889 PPT		BROOKHURST EASEMENT	11/12/2007		9 D/S 2019 SPN170032 8 VCP	477 482				0 0 0	.00			0 0 0.00 1			
3 6_No_Defect 1890 PPT 3 6_No_Defect 1891 PPT		BROOKHURST FLOWER	11/12/2007 5/16/2007 69	MHN170020 MHN170006 69 6968 MHN170022 MHN170021	3 D/S SPN170034 8 VCP 1 U/S 253 SPN170017 8 VCP	354 354 132 136	+++++			0 0 0		 	++++++	0 0 0.00	+++++	++++	+
3 6_No_Defect 1892 PPT	11 25	15th ST	5/16/2007 69	70 6971 MHN170023 MHN170024	4 D/S 255 SPN170019 8 VCP 3 D/S 257 SPN170021 8 VCP	135 130 148 157				0 0	.00			0 0 0.00			
3 6_No_Defect 1893 PPT 3 6_No_Defect 1894 PPT	6 29	HOPE ST HOPE ST	4/12/2007 69	74 6975 MHN170027 MHN170028	3 D/S 259 SPN170023 8 VCP	103 141				0 0 0	.00			0 0 0.00			
3 6_No_Defect 1895 PPT 3 6_No_Defect 1896 PPT	6 30				3 D/S 46 SPN170002 8 VCP 3 D/S 135 SPN170005 8 VCP	390 358 258 265			+++++++-	0 0 0				0 0 0.00 2		++++	+
													 				

				General				Structural Defect C	Coding	1 - 1 1 5	T	Operational and Maintenance			Construction Features	m v	
		. 9			Pipe				od Pipe	apair A Rating Sfects	xapu	.,		t Rating	snoou	Feature by Aban	пфи пфи
	o N	NO OV	Fried	ing MH ID Previous MH ID	wer ID wer ID wer IC	ath (ft)	Crack Fracture	Perken Hele	beforme collapse curface hamage	oint Re ags k Struc tural De tural De	Decesite Decesite	Reete (R)	Infiltration Obstacles Vermal	W Main W T Index 1 Index 1 Index	Intruding Seal SS	ruction r Surve	ed Aba
se rity king tractor	a No.	ersal T ersal In Watch	LAISI	ING WITTED PROVIDES WITTED	ting Se rial	Comm 7 Leng	C F	B H	J D X	Struc Struc	D D AE AE Other	Fine (F) Tap (T) Medium (M) B	all (B) I OB V	M M M M M M M M M M M M M M M M M M M	L IS M	I Cons	Months.
3 6_No_Defect 1897 PPT	de 1 ds u	Street Name FORSYTH	CCTV Date Start	End Start End	© SSX	9 5 5 L	C M S H L C M S	H SV VV SV VV S M	LSMLAVHP S LF	RP S A L D	g AGS B % L % Z % E	B L J C B L J C B L J C B	LJCGDRWCZ% C	R 4 5 5 5 FD FL BI BD	D L U R LD RD SRH SRB SRL Z SA CU M	Tota Rea	© Comments Recommendations
3 6_No_Defect 1898 PPT	3 5	13TH	3/27/2007 6894	6895 MHN180002 MHN180003	D/S 190 SPN180030 8 VCP	350 352				0 0	0.00			0 0 0.00 3			
3 6_No_Defect 1899 PPT 3 6_No_Defect 1900 PPT		13TH BROOKHURST			D/S 191 SPN180031 8 VCP D/S 192 SPN180032 8 VCP	350 351 90 120				0 0	0.00			0 0 0.00		+++	+
3 6_No_Defect 1901 PPT 3 6_No_Defect 1902 PPT		11th ST DEANANN			D/S 195 SPN180035 8 VCP D/S 140 SPN180003 8 VCP	47 68 122 127				0 0	0.00			0 0 0.00			
3 6_No_Defect 1903 PPT	7 2	DEANANN	4/18/2007 7268	7269 MHN180014 MHN180015	D/S 141 SPN180004 8 VCP	146 152				0 0	0.00			0 0 0.00			
3 6_No_Defect 1904 PPT 3 6_No_Defect 1905 PPT		DEANANN Y DEANANN			D/S 142 SPN180005 8 VCP D/S 143 SPN180006 8 VCP	278 285 277 283				0 0	0.00			0 0 0.00			
3 6_No_Defect 1906 PPT 3 6_No_Defect 1907 GGSD		ORREY JENNRICH		7254 MHN180016 MHO180010 7276 MHN180019 MHN180018	U/S 385 SPO180033 8 VCP U/S 145 SPN180008 8 VCP	385 390 295 295				0 0	0.00			0 0 0.00			
3 6_No_Defect 1908 GGSE	15 249	JENNRICH JENNRICH	3/29/2004 7278	7277 MHN180020 MHN180019	U/S 146 SPN180009 8 VCP	295 295 295 290 285				0 0	0.00			0 0 0.00			
3 6_No_Defect 1909 GGSE 3 6_No_Defect 1910 GGSE	15 248	Y LYNDON LYNDON		7281 MHN180022 MHN180023 7294 MHN180023 MHN180036	D/S 149 SPN180012 8 VCP D/S 150 SPN180013 8 VCP	316 315 320 315				0 0	0.00			0 0 0.00		+++	
3 6_No_Defect 1911 GGSE		FLOWER	3/22/2004 7283	7282 MHN180025 MHN180024	U/S 151 SPN180014 8 VCP	270 270				0 0	0.00			0 0 0.00			
3 6_No_Defect 1912 GGSE 3 6_No_Defect 1913 GGSE		FLOWER HARRINGTON		7283 MHN180026 MHN180025 7285 MHN180028 MHN180027		275 273 270 270				0 0	0.00			0 0 0.00			_
3 6_No_Defect 1914 GGSE 3 6_No_Defect 1915 GGSE		HARRINGTON HOPE		7286 MHN180029 MHN180028 7288 MHN180031 MHN180030	U/S 155 SPN180018 8 VCP U/S 375 SPN180020 8 VCP	275 273 270 265				0 0	0.00			0 0 0.00			
3 6_No_Defect 1916 GGSE	15 242	HOPE	3/24/2004 7290	7289 MHN180032 MHN180031	U/S 376 SPN180021 8 VCP	275 275				0 0	0.00			0 0 0.00			
3 6_No_Defect 1917 GGSE 3 6_No_Defect 1918 GGSE		HOPE HARRINGTON		7290 MHN180033 MHN180032 7287 MHN180034 MHN180029	U/S 377 SPN180022 8 VCP U/S 1 SPN180019 8 VCP	275 273 275 272				0 0	0.00			0 0 0.00		+++	+
3 6_No_Defect 1919 GGSD 3 6_No_Defect 1920 GGSD	15 245	JOHANNAH FLOWER	3/25/2004 7292		U/S 378 SPN180023 8 VCP	258 259 275 273				0 0	0.00			0 0 0.00			
3 6_No_Defect 1921 GGSE	15 245	JOHANNAH	3/25/2004 7293	7292 MHN180035 MHN180034	U/S 379 SPN180024 8 VCP	256 254				0 0				0 0 0.00			
3 6_No_Defect 1922 GGSD		JOHANNAH		7294 MHN180035 MHN180036		258 255 152 166		 		0 0	0.00		++++++++	0 0 0.00		+ + +	MHN190004 corrected to
3 6_No_Defect 1923 GGSD 3 6_No_Defect 1924 PPT	28 9	LYNDON CLARISSA	7/24/2007 9937	7561 MHN180036 MHN190010 9938 MHO050002 MHO050003	D/S 4596 SPO050029 8 VCP	152 166 75 85				0 0	0.00			0 0 0.00			MHN190010
3 6_No_Defect 1925 PPT 3 6_No_Defect 1926 PPT		CLARISSA MOUNT		9939 MHO050003 MHO060017 9822 MHO050004 MHO060019		235 233 315 315				0 0	0.00			0 0 0.00		$+\Box$	
3 6_No_Defect 1927 PPT	29 5	RUGH	7/30/2007 9824	9825 MHO050005 MHO060021	D/S 3748 SPO060024 8 VCP	313 310				0 0	0.00			0 0 0.00 1			
3 6_No_Defect 1928 PPT 3 6_No_Defect 1929 PPT		FULMER CLARISSA		9828 MHO050006 MHO060023 1 9923 MHO050012 MHO050013	D/S 3751 SPO060027 8 VCP D/S 5569 SPO050027 8 VCP	322 313 225 227				0 0	0.00			0 0 0.00 1		+++	+
3 6_No_Defect 1930 PPT 3 6_No_Defect 1931 PPT		CLARISSA MOUNT		9937 MHO050013 MHO050002 2 9821 MHO050014 MHO050004		225 229 190 202				0 0	0.00			0 0 0.00			
3 6_No_Defect 1932 PPT	29 4	RUGH	7/30/2007 1066	3 9824 MHO050015 MHO050005	D/S 4606 SPO050032 8 VCP	120 130				0 0	0.00			0 0 0.00			
3 6_No_Defect 1933 PPT 3 6_No_Defect 1934 PPT		OVERMAN FULMER		5 10664 MHO050017 MHO050016 6 9827 MHO050018 MHO050006	U/S 4607 SPO050033 8 VCP D/S 4609 SPO050035 8 VCP	266 266 253 259				0 0	0.00			0 0 0.00			+ -
3 6_No_Defect 1935 PPT 3 6_No_Defect 1936 PPT		OVERMAN TIBBS ALLEY		6 10665 MHO050018 MHO050017 9680 MHO050020 MHO050019		265 270 291 292				0 0	0.00			0 0 0.00			
3 6_No_Defect 1937 PPT	32 31	TIBBS ALLEY	8/11/2007 9681	9684 MHO050020 MHO050023	D/S 4080 SPO050006 8 VCP	170 164				0 0	0.00			0 0 0.00			
3 6_No_Defect 1938 PPT 3 6_No_Defect 1939 PPT		TIBBS		9682 MHO050022 MHO050021 9685 MHO050024 MHN050054	U/S 4456 SPO050007 8 VCP U/S 4552 SPO050010 8 VCP	213 213 180 181				0 0	0.00			0 0 0.00 1			
3 6_No_Defect 1940 PPT 3 6_No_Defect 1941 PPT		TIBBS PALMWOOD		9684 MHO050024 MHO050023 9690 MHO050024 MHO050029		156 154 234 237				0 0	0.00			0 0 0.00			
3 6_No_Defect 1942 PPT	28 12	ALDERSON	7/24/2007 9703	9687 MHO050025 MHO050026	D/S 4565 SPO050019 8 VCP	261 269				0 0	0.00			0 0 0.00			
3 6_No_Defect 1943 PPT 3 6_No_Defect 1944 PPT		ALDERSON ALDERSON			D/S 4554 SPO050012 8 VCP D/S 4555 SPO050013 8 VCP	266 267 346 348				0 0	0.00			0 0 0.00			
3 6_No_Defect 1945 PPT 3 6_No_Defect 1946 PPT		ALDERSON PALMWOOD		9690 MHO050028 MHO050029 1 10352 MHO050029 MHN050055	D/S 4556 SPO050014 8 VCP D/S 5010 SPO050036 8 VCP	112 115 157 158				0 0	0.00			0 0 0.00			
3 6_No_Defect 1947 PPT	32 27	PALMWOOD	8/11/2007 9126	9125 MHO050031 MHO050030	U/S 4261 SPO050015 8 VCP	213 215				0 0	0.00			0 0 0.00			
3 6_No_Defect 1948 PPT 3 6_No_Defect 1949 PPT		ORANGEWOOD DOLAN		9652 MHO060005 COO060001 9934 MHO060005 MHO060004	U/S 4880 SPO060030 8 VCP U/S 5218 SPO060009 8 VCP	150 152 202 203				0 0	0.00			0 0 0.00			
3 6_No_Defect 1950 PPT	33 1	ORANGEWOOD	8/13/2007 9935	9811 MHO060005 MHO060007	D/S 5219 SPO060010 8 VCP	255 267				0 0	0.00			0 0 0.00			Pipe SPO0600013 corrected to
3 6_No_Defect 1951 PPT 3 6_No_Defect 1952 PPT		BAGGETT ORANGEWOOD	01.01.000	9811 MHO060006 MHO060007 9813 MHO060007 MHO060009	D/S 5220 SPO060011 8 VCP D/S 5221 SPO060012 8 VCP	324 324 255 266				0 0	0.00			0 0 0.00			SPO060011
3 6_No_Defect 1953 PPT	33 13	TOBIE	8/13/2007 9814	9815 MHO060010 MHO060011	D/S 5599 SPO060015 8 VCP	324 330				0 0	0.00			0 0 0.00			
3 6_No_Defect 1954 PPT 3 6_No_Defect 1955 PPT	33 10	PERRIN			D/S 5600 SPO060016 8 VCP U/S 5601 SPO060017 8 VCP	275 274 351 353				0 0	0.00			0 0 0.00			
3 6_No_Defect 1956 PPT 3 6_No_Defect 1957 PPT					U/S 5602 SPO060018 8 VCP D/S 5606 SPN060003 8 VCP	350 351 130 135				0 0	0.00			0 0 0.00 1			
3 6 No Defect 1958 PPT	33 38	PAI MWOOD	8/14/2007 9820	10676 MHO060015 MHO070025	U/S 4710 SPO070025 8 VCP	315 325				0 0				0 0 0.00			
3 6_No_Defect 1959 PPT 3 6_No_Defect 1960 PPT	28 1	PARLIAMENT	7/24/2007 9940	9823 MHO060018 MHO060020	U/S 4220 SPO060005 8 VCP D/S 4881 SPO060031 8 VCP	134 143 265 267				0 0	0.00		 	0 0 0.00		$\pm \Box$	
3 6_No_Defect 1961 PPT 3 6_No_Defect 1962 PPT	29 3 28 2	MOUNT PARLIAMENT			D/S 3746 SPO060022 8 VCP D/S 3747 SPO060023 8 VCP	2.2				0 0				0 0 0.00		H	
3 6_No_Defect 1963 PPT 3 6_No_Defect 1964 PPT	28 3	PARI IAMENT	7/24/2007 9826	9829 MHO060022 MHO060024	D/S 3750 SPO060026 8 VCP D/S 3753 SPO060029 8 VCP	266 267				0 0				0 0 0.00			
3 6_No_Defect 1965 PPT	27 1	VERNA	7/19/2007 1062	3 10624 MHO070001 MHO070002	D/S 5570 SPO070001 8 VCP	266 267 264 264				0 0	0.00			0 0 0.00			
3 6_No_Defect 1966 PPT 3 6_No_Defect 1967 PPT		ELIZABETH LA DONA			U/S 5572 SPO070003 8 VCP D/S 5573 SPO070004 8 VCP			++++		0 0		+++++++++	++++++	0 0 0.00 2		+ + +	
3 6_No_Defect 1968 PPT		VERNA EAZEMENT			D/S 5574 SPO070005 8 VCP	140 157				0 0	0.00			0 0 0.00			
3 6_No_Defect 1969 PPT 3 6_No_Defect 1970 PPT	26 21	STEELE	7/18/2007 1063	0 10634 MHO070008 MHO070013	D/S 3715 SPO070008 8 VCP U/S 4600 SPO070019 8 VCP	135 138 258 266				0 0	0.00			0 0 0.00		Ш	
3 6_No_Defect 1971 PPT	26 6	VICKERS	7/18/2007 1063	2 10631 MHO070011 MHO070010	U/S 3716 SPO070009 8 VCP	256 257				0 0	0.00			0 0 0.00 1		Ш	
3 6_No_Defect 1972 PPT 3 6_No_Defect 1973 PPT	26 5 26 8	VICKERS VICKERS			U/S 3717 SP0070010 8 VCP D/S 3719 SP0070012 8 VCP	295 298 250 265	+++++	++++		0 0	0.00	+	++++++	0 0 0.00 1		+	_
3 6_No_Defect 1974 PPT 3 6_No_Defect 1975 PPT	26 11	MEDINA	7/18/2007 9926	9925 MHO070015 MHO070014	U/S 3720 SP0070013 8 VCP D/S 4100 SP0070015 8 VCP	297 298 300 301				0 0				0 0 0.00 1			
3 6_No_Defect 1976 PPT	26 16	STEELE	7/18/2007 1063	6 10647 MHO070017 MHO080015	D/S 4101 SPO080007 8 VCP	283 286				0 0	0.00			0 0 0.00 1			
3 6_No_Defect 1977 PPT 3 6_No_Defect 1978 PPT	26 33 26 34	DANBERRY DANBERRY			U/S 4601 SPO070020 8 VCP U/S 4103 SPO070017 8 VCP	239 240 267 269		$++++\mp$		0 0	0.00		++++++	0 0 0.00 1		$+\!\!+\!\!\!\top$	+
3 6_No_Defect 1979 PPT 3 6_No_Defect 1980 PPT	32 35	GERALDINE	8/11/2007 1067	3 9654 MHO070022 COO070002	U/S 4613 SPO070021 8 VCP D/S 4707 SPO070022 8 VCP	150 152				0 0	0.00			0 0 0.00			
3 6_No_Defect 1981 PPT	32 33	GERALDINE	8/11/2007 1067	4 10675 MHO070023 MHO070024	D/S 4708 SPO070023 8 VCP	223 225				0 0				0 0 0.00			
3 6_No_Defect 1982 PPT 3 6_No_Defect 1983 PPT	32 34	GERALDINE DOLAN			D/S 4709 SPO070024 8 VCP U/S 4711 SPO070026 8 VCP	345 330 215 198				0 0	0.00			0 0 0.00			
3 6_No_Defect 1984 PPT 3 6_No_Defect 1985 PPT	27 39	DOLAN	7/24/2007 1067	7 9932 MHO070029 MHO070027	U/S 4712 SPO070027 8 VCP	170 185				0 0				0 0 0.00			
3 6_No_Defect 1986 PPT	27 36	LA DONA	7/24/2007 1067	7 9778 MHO070029 MHO070030	U/S 4879 SPO070044 8 VCP D/S 4713 SPO070028 8 VCP					0 0		- 	++++++++	0 0 0.00		+ + +	+
3 6_No_Defect 1987 PPT 3 6_No_Defect 1988 PPT	27 37	LA DONA			D/S 4714 SPO070029 8 VCP D/S 4716 SPO070031 8 VCP	280 281 275 278				0 0	0.00			0 0 0.00		+ + +	
3 6_No_Defect 1989 PPT	27 34	PALMWOOD	7/23/2007 9782	9653 MHO070034 COO070001	U/S 4718 SPO070033 8 VCP	55 62				0 0	0.00			0 0 0.00			
3 6_No_Defect 1990 PPT	27 33	PALMWOOD	7/23/2007 9782	9781 MHO070034 MHO070033	U/S 4717 SP0070032 8 VCP	290 291				0 0	0.00			0 0 0.00			

				General				Structural Defec	t Coding	1 1 5		Operational and Maintenance			Construction Features	- I g I -	ri l
		ġ .		General	Pipe			Structural Delec	p dd en	Rating fect Sox	xepx	Operational and Maintenance		Rating	Construction Federales	reous	doned doned
	o age	VD No.	_	isting MH ID Previous MH ID	Camer ID wer ID	ent (ft)	On the State of	B-1	eforme ollapse urface amage	ags R Struc ural De	pefect II	D (D)	Leftenia Charles Versia	N Maint Defect T Index	Intruding Seal	liscellar	ed Aban
ity ting ractor	No.	Watch Draw Tocation	E	isting MH ID Previous MH ID	ting Ser (in)	Comme Comme (1)	Crack Fracture	Broken Hole	Joint D X	P Quio	Deposits D Fine AE AE Other	ne (F) Tap (T) Medium (M) Bal	(B) I OB V Other	Tap (Latera	al) Line Material L IS	Const	Identifis
3 6_No_Defect 1991 PPT	28 40	Street Name	CCTV Date S	art End Start En	035 U/S 4720 SP0070035 8 VCP	9 5 5 10 125 119	C M S H L C M	S H SV VV SV VV S	M L S M L A V H P S LF	RP S PAC Tota	g AGS B % L % Z % B L	L J C B L J C B L J C B L	JCGDRWCZ%CR	0 0 0.00 FD FL BI E	BD D L U R LD RD SRH SRB SRL Z SA	CO WC E	© Comments Recommendations
3 6_No_Defect 1992 PPT	28 38	GARY	7/27/2007 97	86 9785 MHO070038 MHO07	037 U/S 5098 SPO070037 8 VCP	294 293				0 0	0.00			0 0 0.00			
3 6_No_Defect 1993 PPT 3 6_No_Defect 1994 PPT		PALMWOOD PALMWOOD			040 D/S 5102 SPO070038 8 VCP 031 D/S 5104 SPO080033 8 VCP	253 256 363 364				0 0	0.00			0 0 0.00			
3 6_No_Defect 1995 PPT 3 6_No_Defect 1996 PPT		EASY OLD FASHION			031 U/S 5216 SP0070043 8 VCP 043 U/S 5210 SP0070041 8 VCP	300 303 300 303				0 0	0.00			0 0 0.00			
3 6_No_Defect 1997 PPT	26 10	MEDINA	7/18/2007 99	27 9926 MHO080004 MHO07	015 U/S 4096 SP0070014 8 VCP	300 302				0 0	0.00			0 0 0.00			
3 6_No_Defect 1998 PPT 3 6_No_Defect 1999 PPT	26 12	MEDINA MEDINA	7/18/2007 99	28 9929 MHO080005 MHO08	006 D/S 4098 SPO080005 8 VCP	301 304 299 302				0 0	0.00			0 0 0.00			
3 6_No_Defect 2000 PPT 3 6_No_Defect 2001 PPT		MEDINA PATRICIA			025 D/S 4099 SPO080006 8 VCP 007 U/S 4602 SPO080029 8 VCP	299 301 227 226				0 0	0.00			0 0 0.00 1			
3 6_No_Defect 2002 PPT 3 6_No_Defect 2003 PPT		PATRICIA DINO			009 U/S 4106 SPO080009 8 VCP 014 D/S 4107 SPO080010 8 VCP	227 231 250 252				0 0	0.00			0 0 0.00			
3 6_No_Defect 2004 PPT	26 26	POINDEXTER	7/18/2007 10	45 10646 MHO080013 MHO08	014 D/S 4110 SPO080013 8 VCP	290 288				0 0	0.00			0 0 0.00			
3 6_No_Defect 2005 PPT 3 6_No_Defect 2006 PPT		STEELE STEELE			016 D/S 4112 SPO080015 8 VCP 022 D/S 4113 SPO080016 8 VCP	168 168 306 248				0 0	0.00			0 0 0.00			
3 6_No_Defect 2007 PPT 3 6_No_Defect 2008 PPT		WOODWARD WOODWARD			018 U/S 4115 SPO080018 8 VCP 019 U/S 4116 SPO080019 8 VCP	300 303 125 125				0 0	0.00			0 0 0.00			
3 6_No_Defect 2009 PPT	26 41	WOODWARD	7/19/2007 10	53 10652 MHO080021 MHO08	020 U/S 4117 SPO080020 8 VCP	220 213				0 0	0.00			0 0 0.00 1			
3 6_No_Defect 2010 PPT 3 6_No_Defect 2011 PPT	46 22	STEELE STEELE			023 U/S 4213 SPO080023 8 VCP 025 D/S 4214 SPO080024 8 VCP	240 241 245 252				0 0	0.00			0 0 0.00			
3 6_No_Defect 2012 PPT 3 6_No_Defect 2013 PPT		HARRIS HARRIS			026 U/S 4216 SPO080026 8 VCP 027 U/S 4217 SPO080027 8 VCP	245 244 200 209	+++++	++++		0 0	0.00	 	++++++	0 0 0.00 1	 	++	
3 6_No_Defect 2014 PPT 3 6_No_Defect 2015 PPT	28 37	GARY GARY	7/27/2007 97	9786 MHO080029 MHO0	038 U/S 5099 SPO080030 8 VCP 030 D/S 5100 SPO080031 8 VCP	290 296 265 267				0 0	0.00			0 0 0.00			
3 6_No_Defect 2016 PPT	28 42	GARY	7/27/2007 97	88 9795 MHO080030 MHO08	034 D/S 5101 SPO080032 8 VCP	265 269				0 0				0 0 0.00			
3 6_No_Defect 2017 PPT 3 6_No_Defect 2018 PPT	27 32	PALMWOOD PALMWOOD	7/23/2007 97	93 9794 MHO080032 MHO08	032 D/S 5105 SPO080034 8 VCP 033 D/S 5106 SPO080035 8 VCP	264 265 263 264				0 0	0.00			0 0 0.00			
3 6_No_Defect 2019 PPT 3 6_No_Defect 2020 PPT		VEGAS VEGAS			001 U/S 5107 SPO080036 8 VCP 0034 D/S 5108 SPO080037 8 VCP	50 49 265 270				0 0	0.00	 		0 0 0.00			
3 6_No_Defect 2021 PPT	28 43	GARY	7/27/2007 97	95 9796 MHO080034 MHO08	035 D/S 5109 SPO080038 8 VCP	277 280				0 0	0.00			0 0 0.00			
3 6_No_Defect 2022 PPT 3 6_No_Defect 2023 PPT	28 31	EASY EASY	7/27/2007 97	99 9800 MHO080037 MHO08	036 U/S 5206 SPO080040 8 VCP 038 D/S 5207 SPO080041 8 VCP	345 340 315 326				0 0	0.00			0 0 0.00			
3 6_No_Defect 2024 PPT 3 6_No_Defect 2025 PPT		OLD FASHION OLD FASHION			040 U/S 5212 SPO080044 8 VCP 042 D/S 5213 SPO080045 8 VCP	345 341 324 326				0 0	0.00			0 0 0.00			
3 6_No_Defect 2026 PPT 3 6_No_Defect 2027 PPT	27 23	OLD FASHION	7/23/2007 98	06 9807 MHO080042 MHO08	043 D/S 5214 SPO080046 8 VCP	326 327 305 309				0 0	0.00			0 0 0.00			
3 6_No_Defect 2028 PPT	24 24	ALLEN ALLEN	7/10/2007 12	134 12333 MHO090005 MHO09	003 D/S 5434 SPO090020 6 VCP 004 U/S 4938 SPO090003 8 VCP	300 303				0 0	0.00			0 0 0.00			
3 6_No_Defect 2029 PPT 3 6_No_Defect 2030 PPT		ALLEN ALLEN			005 U/S 4939 SPO090004 8 VCP 006 U/S 5436 SPO090039 8 VCP	335 340 240 232				0 0	0.00	- 		0 0 0.00			
3 6_No_Defect 2031 PPT 3 6_No_Defect 2032 PPT		NELSON NELSON			032 U/S 5433 SPO090019 8 VCP 003 D/S 4940 SPO100003 8 VCP	275 278 370 334				0 0	0.00			0 0 0.00 4			
3 6_No_Defect 2033 PPT	25 24	CHAPMAN	7/16/2007 10	21 10620 MHO090014 MHO09	013 U/S 4171 SPO090006 15 VCP	269 272				0 0	0.00			0 0 0.00			
3 6_No_Defect 2034 PPT		CHAPMAN	10/8/2007	70 10672 MHO090019 MHN08	005 D/S 4176 SPO090028 15 VCP	405 419				0 0				0 0 0.00		1 2 1	
3 6_No_Defect 2035 PPT	52 33	CHAPMAN AVE	12/28/2007 10	71 10669 MHO090020 MHO09	018 D/S 4612 SPO090029 8 VCP	60 61				0 0	0.00			0 0 0.00			
3 6_No_Defect 2036 PPT	22 21	CHAPMAN AVE DIANE MARIAN	7/3/2007 12	145 12334 MHO090028 MHO09	005 D/S 5429 SPO090015 8 VCP	60 61 360 329 310 315				0 0				0 0 0.00			
3 6_No_Defect 2036 PPT 3 6_No_Defect 2037 PPT 3 6_No_Defect 2038 PPT	22 21 22 22 24 21	DIANE MARIAN NELSON	7/3/2007 12 7/3/2007 12 7/10/2007 12	H45 12334 MHO090028 MHO09 H45 12342 MHO090028 MHO09 H48 12347 MHO090031 MHO09	005 D/S 5429 SPO090015 8 VCP 025 U/S 5426 SPO090012 8 VCP 030 U/S 5431 SPO090017 8 VCP	360 329 310 315 291 293								0 0 0.00 0 0 0.00 0 0 0.00 6			
3 6_No_Defect 2036 PPT 3 6_No_Defect 2037 PPT 3 6_No_Defect 2038 PPT 3 6_No_Defect 2039 PPT	22 21 22 22 24 21 24 20	DIANE MARIAN NELSON NELSON	7/3/2007 12 7/3/2007 12 7/10/2007 12 7/10/2007 12	45 12334 MHO090028 MHO09 45 12342 MHO090028 MHO09 48 12347 MHO090031 MHO09 49 12348 MHO090032 MHO09	0005 D/S 5429 SPO090015 8 VCP 0025 U/S 5426 SPO090012 8 VCP 030 U/S 5431 SPO090017 8 VCP 031 U/S 5432 SPO090018 8 VCP	360 329 310 315 291 293 291 293								0 0 0.00			MSA = High water level. Reverse insection needed.
3 6_No_Defect 2036 PPT 3 6_No_Defect 2037 PPT 3 6_No_Defect 2038 PPT 3 6_No_Defect 2039 PPT 3 6_No_Defect 2039 PPT 3 6_No_Defect 2040 PPT 3 6_No_Defect 2040 PPT	22 21 22 22 24 21 24 20 24 27 24 36	DIANE MARIAN NELSON NELSON Y NELSON LESLEY	7/3/2007 12 7/3/2007 12 7/10/2007 12 7/10/2007 12 7/10/2007 12 7/11/2007 12	45 12334 MHO090028 MHO08 45 12342 MHO090028 MHO08 48 12347 MHO090031 MHO08 49 12348 MHO090032 MHO08 36 12358 MHO100003 MHO18 38 12337 MHO100005 MHO18	0005 D/S 5429 SPO090015 8 VCP 025 U/S 5426 SPO090012 8 VCP 030 U/S 5431 SPO090017 8 VCP 031 U/S 5432 SPO090018 8 VCP 013 D/S 4941 SPO100004 8 VCP 004 U/S 4942 SPO100005 8 VCP	360 329 310 315 291 293 291 293 290 60 227 229								0 0 0.00 0 0 0.00 0 0 0.00 0 0 0.00 0 0 0.00 0 0 0.00	1		
3 6.No.Defect 2036 PPT 3 6.No.Defect 2037 PPT 3 6.No.Defect 2039 PPT 3 6.No.Defect 2039 PPT 3 6.No.Defect 2040 PPT 3 6.No.Defect 2041 PPT 3 6.No.Defect 2042 PPT 3 6.No.Defect 2043 PPT	22 21 22 22 24 21 24 20 24 27 24 36 24 35 24 32	DIANE MARIAN NELSON NELSON Y NELSON LESLEY LESLEY HOLLY	7/3/2007 12 7/3/2007 12 7/10/2007 12 7/10/2007 12 7/10/2007 12 7/11/2007 12 7/11/2007 12 7/11/2007 12	445 12334 MHO090028 MHO01 445 12342 MHO090028 MHO01 449 12347 MHO090031 MHO01 449 12348 MHO090032 MHO01 336 12358 MHO1000005 MHO11 331 12337 MHO1000005 MHO11 551 12338 MHO1000006 MHO11 551 12354 MHO1000006 MHO10	0005 D/S 5429 SPO090015 8 VCP 025 US 5426 SPO090012 8 VCP 030 US 5431 SPO090017 8 VCP 031 US 5432 SPO090016 8 VCP 013 DS 4941 SPO100004 8 VCP 004 US 4942 SPO100005 8 VCP 005 US 4943 SPO100007 8 VCP 009 DIS 4944 SPO100007 8 VCP	360 329 310 315 291 293 291 293 290 60 227 229 300 302 310 314								0 0 0.00 0 0 0.00 0 0 0.00 0 0 0.00 0 0 0.00 3	1		
3 6.No_Defect 2036 PPT 3 6.No_Defect 2037 PPT 3 6.No_Defect 2038 PPT 3 6.No_Defect 2039 PPT 3 6.No_Defect 2040 PPT 3 6.No_Defect 2040 PPT 3 6.No_Defect 2042 PPT 3 6.No_Defect 2042 PPT	22 21 22 22 24 21 24 20 24 27 24 36 24 35 24 35 24 37	DIANE MARIAN NELSON NELSON Y NELSON LESLEY LESLEY	7/3/2007 12 7/3/2007 12 7/10/2007 12 7/10/2007 12 7/10/2007 12 7/11/2007 12 7/11/2007 12 7/11/2007 12 7/11/2007 12 7/11/2007 12	1234	0005 D/S 5429 SPO090015 8 VCP 025 U/S 5426 SPO090012 8 VCP 030 U/S 5431 SPO090017 8 VCP 031 U/S 5432 SPO090018 8 VCP 013 D/S 4941 SPO100004 8 VCP 004 U/S 4942 SPO100006 8 VCP 005 U/S 4943 SPO100006 8 VCP	360 329 310 315 291 293 291 293 290 60 227 229 300 302								0 0 0.00 0 0 0.00 0 0 0.00 0 0 0.00 0 0 0.00 0 0 0.00 0 0 0.00	1		
3 6.No.Defect 2036 PPT 3 6.No.Defect 2037 PPT 3 6.No.Defect 2039 PPT 3 6.No.Defect 2039 PPT 3 6.No.Defect 2040 PPT 3 6.No.Defect 2041 PPT 3 6.No.Defect 2042 PPT 3 6.No.Defect 2044 PPT 3 6.No.Defect 2044 PPT 3 6.No.Defect 2044 PPT 3 6.No.Defect 2046 PPT	22 21 22 22 24 21 24 20 24 27 24 36 24 35 24 35 24 37 24 33 24 34	DIANE MARIAN NELSON NELSON Y NELSON LESLEY LESLEY HOLLY ELLEN HOLLY HOLLY HOLLY	7/3/2007 12 7/3/2007 12 7/10/2007 12 7/10/2007 12 7/10/2007 12 7/11/2007 12 7/11/2007 12 7/11/2007 12 7/11/2007 12 7/11/2007 12 7/11/2007 12	1234	0005 D/S 5429 SPO090015 8 VCP 025 US 5426 SPO090012 8 VCP 030 US 5431 SPO090017 8 VCP 031 US 5432 SPO090016 8 VCP 004 US 4941 SPO100006 8 VCP 004 US 4942 SPO100006 8 VCP 005 US 4343 SPO100007 8 VCP 008 D/S 4944 SPO100008 8 VCP 008 D/S 4945 SPO100008 8 VCP 012 D/S 4946 SPO100013 8 VCP 015 D/S 4947 SPO100013 8 VCP	360 329 310 315 291 293 291 293 290 60 227 229 300 302 310 314 227 230 310 314 312 330 337				0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0				0 0 0.00	1		
3 6.No.Defect 2036 PPT 3 6.No.Defect 2037 PPT 3 6.No.Defect 2039 PPT 3 6.No.Defect 2039 PPT 3 6.No.Defect 2040 PPT 3 6.No.Defect 2041 PPT 3 6.No.Defect 2041 PPT 3 6.No.Defect 2042 PPT 3 6.No.Defect 2043 PPT 3 6.No.Defect 2044 PPT 3 6.No.Defect 2045 PPT 3 6.No.Defect 2046 PPT 3 6.No.Defect 2046 PPT 3 6.No.Defect 2046 PPT 3 6.No.Defect 2047 PPT 3 6.No.Defect 2048 PPT	22 21 22 22 24 21 24 20 24 27 24 36 24 35 24 35 24 37 24 33 24 34 27 6	DIANE MARIAN NELSON NELSON Y NELSON LESLEY LESLEY HOLLY FLIEN HOLLY HOLLY NELSON NELSON NELSON	7/3/2007 12 7/3/2007 12 7/3/2007 12 7/10/2007 12 7/10/2007 12 7/11/2007 12 7/11/2007 12 7/11/2007 12 7/11/2007 12 7/11/2007 12 7/11/2007 12 7/11/2007 12 7/11/2007 12 7/19/2007 12 7/19/2007 12	485 12334 MHO090028 MHO090028 461 12342 MHO090028 MHO090034 461 12347 MHO090031 MHO09034 462 12348 MHO090032 MHO09034 463 12348 MHO100003 MHO100003 464 12378 MHO100000 MHO100005 465 12338 MHO100000 MHO10000 467 12338 MHO100000 MHO10000 468 12456 MHO100000 MHO100000 469 12357 MHO100000 MHO100000 469 12358 MHO100000 MHO100000 469 12358 MHO100000 MHO100000 469 12360 MHO100001 MHO100010 469 12360 MHO100001 MHO100010	0005 DIS 5429 SPO090015 8 VCP 025 UIS 5426 SPO090012 8 VCP 025 UIS 5431 SPO090017 8 VCP 031 UIS 5432 SPO090018 8 VCP 031 UIS 5432 SPO100006 8 VCP 004 UIS 4942 SPO100006 8 VCP 005 UIS 4943 SPO100006 8 VCP 009 DIS 4944 SPO100007 8 VCP 0012 DIS 4944 SPO100001 8 VCP 012 DIS 4947 SPO100010 8 VCP 013 DIS 4950 SPO100013 8 VCP 014 DIS 4950 SPO100013 8 VCP 015 OIS 4962 SPO100015 8 VCP	360 329 310 315 291 293 291 293 291 293 290 60 227 229 300 302 310 314 227 230 310 314 327 330 310 317 340 337				0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.0			0 0 0.00 0.00 0.00 0.00 0.00 0.00 0.00			
3 6.No.Defect 2036 PPT 3 6.No.Defect 2037 PPT 3 6.No.Defect 2039 PPT 3 6.No.Defect 2039 PPT 3 6.No.Defect 2040 PPT 3 6.No.Defect 2041 PPT 3 6.No.Defect 2042 PPT 3 6.No.Defect 2044 PPT 3 6.No.Defect 2045 PPT 3 6.No.Defect 2045 PPT 3 6.No.Defect 2045 PPT 3 6.No.Defect 2045 PPT 3 6.No.Defect 2047 PPT 3 6.No.Defect 2047 PPT	22 21 22 22 24 21 24 20 24 27 24 36 24 35 24 35 24 32 24 37 24 33 24 34 27 6 27 7	DIANE MARIAN NELSON NELSON Y NELSON LESLEY LESLEY HOLLY HOLLY HOLLY NELSON	7/3/2007 12 7/3/2007 12 7/10/2007 12 7/10/2007 12 7/10/2007 12 7/11/2007 12 7/11/2007 12 7/11/2007 12 7/11/2007 12 7/11/2007 12 7/11/2007 12 7/11/2007 12 7/11/2007 12 7/11/2007 12 7/19/2007 12 7/19/2007 12 7/19/2007 12 7/19/2007 12 7/19/2007 12 7/19/2007 12 7/19/2007 12	MF-000028 MF-0000028 MF-00000028 MF-000000000000000000000000000000000000	0005 DIS 5420 SPO090015 8 VCP 025 UIS 5428 SPO090012 8 VCP 025 UIS 5428 SPO090012 8 VCP 031 UIS 5432 SP0090018 8 VCP 013 UIS 54941 SP0100006 8 VCP 004 UIS 4942 SP0100006 8 VCP 009 UIS 4944 SP0100006 8 VCP 009 UIS 4944 SP0100007 8 VCP 012 DIS 4945 SP0100007 8 VCP 012 DIS 4947 SP0100010 8 VCP 013 DIS 4950 SP0100015 8 VCP 015 DIS 4962 SP0100015 8 VCP 005 DIS 4962 SP0100015 8 VCP 005 DIS 4963 SP01100	360 329 310 315 291 293 290 60 227 229 300 302 310 314 227 230 310 314 227 230 310 312 340 337 75 73				0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.0			0 0 0.00	1		
3 6.No.Defect 2036 PPT 3 6.No.Defect 2037 PPT 3 6.No.Defect 2039 PPT 3 6.No.Defect 2039 PPT 3 6.No.Defect 2040 PPT 3 6.No.Defect 2041 PPT 3 6.No.Defect 2044 PPT 3 6.No.Defect 2044 PPT 3 6.No.Defect 2044 PPT 3 6.No.Defect 2046 PPT 3 6.No.Defect 2046 PPT 3 6.No.Defect 2047 PPT 3 6.No.Defect 2047 PPT 3 6.No.Defect 2047 PPT 3 6.No.Defect 2048 PPT 3 6.No.Defect 2048 PPT 3 6.No.Defect 2048 PPT	22 21 22 22 24 21 24 20 24 27 24 36 24 35 24 35 24 37 24 33 24 34 27 6 27 7 27 7	DIANE MARIAN NELSON NELSON Y NELSON LESLEY LESLEY HOLLY ELLEN HOLLY NELSON NELSON LESLESON LAMPSON	7/3/2007 12 7/3/2007 12 7/3/2007 12 7/10/2007 12 7/10/2007 12 7/11/2007 12 7/11/2007 12 7/11/2007 12 7/11/2007 12 7/11/2007 12 7/11/2007 12 7/11/2007 12 7/11/2007 12 7/11/2007 12 7/11/2007 12 7/11/2007 12 7/19/2007 12 7/19/2007 12 7/23/2007 12 7/23/2007 12 7/23/2007 12	1234	0005 D/S 5429 SPO090015 8 VCP 0025 US 5426 SPO090012 8 VCP 0030 US 5431 SPO090017 8 VCP 0031 US 5432 SPO090016 8 VCP 0013 D/S 4941 SPO100006 8 VCP 004 US 4942 SPO100006 8 VCP 005 US 4943 SPO100007 8 VCP 008 D/S 4944 SPO100007 8 VCP 008 D/S 4944 SPO100008 8 VCP 0012 D/S 4944 SPO100001 8 VCP 013 D/S 4950 SPO100013 8 VCP 014 D/S 4951 SPO100014 8 VCP 015 D/S 4952 SPO100015 8 VCP	360 329 310 315 291 293 291 293 290 60 227 229 300 302 310 314 227 230 340 337 75 73 370 374 185 183 190 194 130 1142				0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.0			0 0 0.00 0.00 0 0 0 0 0 0	1		
3 6,No, Defect 2036 PPT 3 6,No, Defect 2037 PPT 3 6,No, Defect 2039 PPT 3 6,No, Defect 2040 PPT 3 6,No, Defect 2040 PPT 3 6,No, Defect 2041 PPT 3 6,No, Defect 2043 PPT 3 6,No, Defect 2043 PPT 3 6,No, Defect 2044 PPT 3 6,No, Defect 2046 PPT 3 6,No, Defect 2059 PPT 3 6,No, Defect 2059 PPT 3 6,No, Defect 2059 PPT 3 6,No, Defect 2051 PPT 3 6,No, Defect 2051 PPT 3 6,No, Defect 2053 PPT	22 21 22 22 24 21 24 20 24 27 24 36 24 35 24 35 24 32 24 33 24 34 27 6 27 7 27 21 27 17 27 18 11 34	DIANE MARIAN NELSON NELSON Y NELSON LESLEY LESLEY HOLLY ELLEN HOLLY HOLLY HOLLY LAMPSON LAMPSON LAMPSON LAMPSON LAMPSON TAFT	7/3/2007 12 7/3/2007 12 7/3/2007 12 7/3/2007 12 7/10/2007 12 7/10/2007 12 7/10/2007 12 7/11/2007 12 7/11/2007 12 7/11/2007 12 7/11/2007 12 7/13/2007 12 7/22/2007 12 7/22/2007 12 7/22/2007 12 5/17/2007 12	485 12334 MH-0090028 MH-009028 445 12422 MH-0090028 MH-0090034 445 12424 MH-0090031 MH-039031 449 12348 MH-0090032 MH-039032 489 12348 MH-0100003 MH-010005 51 12338 MH-0100006 MH-011005 51 12338 MH-0100006 MH-0105 52 12354 MH-0100007 MH-016 54 12357 MH-0100007 MH-016 57 12388 MH-0100007 MH-016 58 12390 MH-0100001 MH-016 58 12380 MH-0100001 MH-016 58 12380 MH-0100014 MH-010014 59 12380 MH-0100024 MH-01024 202 12320 MH-010024 MH-010024 202 12300 MH-010024 MH-010024 202 12380 MH-010024 MH-010024 202 12380 MH	0005 DIS 5420 SPO090015 8 VCP 025 US 5426 SPO090012 8 VCP 033 US 5431 SPO090017 8 VCP 031 US 5432 SP0090018 8 VCP 013 US 5432 SP0100006 8 VCP 004 US 4941 SP0100006 8 VCP 006 US 4943 SP0100006 8 VCP 009 US 4944 SP0100007 8 VCP 001 DIS 4964 SP0100001 8 VCP 012 DIS 4967 SP0100010 8 VCP 013 DIS 4969 SP0100013 8 VCP 014 DIS 4962 SP0100015 8 VCP 015 DIS 4933 SP0110016 8 VCP 0025 DIS 4933 SP0110016	360 329 310 315 291 293 291 293 290 60 227 229 300 302 310 314 227 310 312 340 337 75 73 370 374 185 183 190 194 130 142 160 160 160				0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.0			0 0 0.00 0.00 0.00 0.00 0.00 0.00 0.00			
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ъ	n No.	DAD Location		Existing MH	H ID Previous MH ID	Sewe Sewe	ingth (f	Crack Fracture	Broken Hole	Surf Collis	Saga uctura	Deposits		Infiltration Obstacles	Vermin X Q Q T Tap (Lateral)	Intruding Seal S	nstruc for S	tiffied
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3 6_No_Defect 2086 PPT	8 1 0 Ta	Street Name MERELLO	CCTV Date 5	Start E	End Start End	U/S 2169 SPO160036 8 VCP	330 331	C M S H L C M S	H SV VV SV VV	SMLSMLAVHP S LF	RP S & D D	E AGS B % L % Z % B	LJCBLJCBLJCB	JCGDRWCZ%	C R 4 P P 0 FD FL BI BD D	D L U R LD RD SRH SRB SRL Z SA CU	MC P &	Comments Recommendations
3 6_No_Defect 2087 PPT	9 38	MERELLO	5/4/2007 1	10449 10	0448 MHO160013 MHO160012	U/S 2170 SPO160037 8 VCP	320 323		 		0 0	0.00	 		0 0 0.00			
3 6_No_Defect 2088 PPT 3 6_No_Defect 2089 PPT	9 35	RANNEY BOWEN				D/S 2171 SPO160038 8 VCP D/S 2172 SPO160039 8 VCP	300 302 393 395				0 0	0.00			0 0 0.00			
		WOODBURY					60 53				0 0	0.00			0 0 0.00			
3 6_No_Defect 2090 PPT 3 6_No_Defect 2091 PPT	51 10 10 5	EASEMENT BLAKE			0458 MHO160017 MHO160016 0985 MHO160029 MHO160027	U/S 2174 SPO160041 8 VCP U/S 6008 SPO160004 8 VCP	60 53 148 147		++++		0 0	0.00			0 0 0.00	1		
3 6_No_Defect 2092 PPT	10 6	HOWARD			0986 MHO160029 MHO160028		200 201				0 0	0.00			0 0 0.00 1			
3 6_No_Defect 2093 PPT 3 6_No_Defect 2094 PPT		HEIDI BLAKE				U/S 6011 SPO160007 8 VCP D/S 6012 SPO160008 8 VCP	200 203 283 284				0 0	0.00			0 0 0.00			
3 6_No_Defect 2095 PPT	10 8	BARNEY CIR	5/7/2007 1	10991 10	0990 MHO160033 MHO160032	U/S 6013 SPO160009 8 VCP	200 201				0 0	0.00			0 0 0.00			
3 6_No_Defect 2096 PPT 3 6_No_Defect 2097 PPT		BLAKE BLAKE			0992 MHO160033 MHO160034 0993 MHO160034 MHO160035		210 168 10 8		+		0 0	0.00			0 0 0.00			MSA = Droo
3 6_No_Defect 2098 PPT		LINNELL			0413 MHO160039 MHO160040		300 302				0 0	0.00			0 0 0.00			MON - DIOP
3 6_No_Defect 2099 PPT 3 6_No_Defect 2100 PPT		BARNEY ST. BARNEY ST.			0414 MHO160044 MHO160042 0415 MHO160044 MHO160043		230 232 170 177				0 0	0.00			0 0 0.00			
3 6_No_Defect 2101 PPT		RANNEY			0418 MHO160044 MHO160046		286 289		++++		0 0	0.00			0 0 0.00			
3 6_No_Defect 2102 PPT		HEIDI			0418 MHO160045 MHO160046		320 323				0 0	0.00			0 0 0.00			
3 6_No_Defect 2103 PPT 3 6_No_Defect 2104 PPT		HOWARD RANNEY				D/S 2148 SPO160019 8 VCP D/S 2270 SPO160050 8 VCP	320 320 283 287				0 0	0.00			0 0 0.00			
3 6_No_Defect 2105 PPT		RANNEY				D/S 2180 SPO160046 8 VCP	175 271				0 0	0.00			0 0 0.00			
3 6_No_Defect 2106 PPT		WARD			0465 MHO160050 MHO160041		300 302				0 0	0.00			0 0 0.00 2		$\perp \perp \downarrow \downarrow \downarrow ^{-}$	MHO160049 corrected to MHO160050
3 6_No_Defect 2107 PPT 3 6_No_Defect 2108 PPT		WARD TAFT				U/S 2179 SPO160045 8 VCP U/S 4616 SPO160021 8 VCP	250 253 95 163				0 0	0.00			0 0 0.00 4		\Box	
3 6_No_Defect 2109 PPT	13 18	TAFT	5/31/2007 1	10996 10	0997 MHO160053 MHO160054	D/S 4617 SPO160022 8 VCP	95 163 10 10	++++++			0 0	0.00	 	++++++	0 0 0.00		+++	
3 6_No_Defect 2110 PPT		WESTMINSTER			0 MHO170002 MHO170003		30 29				0 0	0.00			0 0 0.00			
3 6_No_Defect 2111 PPT 3 6_No_Defect 2112 PPT	11 19 11 20	WESTMINSTER WESTMINSTER			0 MHO170003 MHO170004 0 MHO170004 MHO170005		270 267 120 124	++++++	++++	 	0 0	0.00	++++++++++	+++++++	0 0 0.00		+	
3 6 No Defect 2113 PPT	52 34	WESTMINSTER AVE			0 MHO170005 MHO160020		110 113				0.0	0.00			0 0 0.00			
3 6_No_Defect 2114 PPT	11 22	WESTMINSTER	5/16/2007 1	10456 10	0468 MHO170006 MHN170001	D/S 2311 SPN170024 12 VCP	320 332				0 0	0.00			0 0 0.00			
3 6_No_Defect 2115 PPT 3 6 No_Defect 2116 PPT		WESTMINSTER WESTMINSTER			0421 MHO170008 MHO170007 0 MHO170009 MHO170008		300 291 330 332	+++++	+		0 0	0.00	+++++++++	++++++	0 0 0.00 1		+++	
3 6_No_Defect 2117 PPT	6 7	KEEL	4/12/2007	6941 69	942 MHO170011 MHO170012	D/S 234 SPO170019 8 VCP	260 259				0 0	0.00			0 0 0.00 1			
3 6_No_Defect 2118 PPT						D/S 235 SPO170020 8 VCP	260 262	++++++++++++++++++++++++++++++++++++	$+++\mp$	+++++++	0 0	0.00		$+++++ \overline{+} \overline{+} \overline{+}$	0 0 0.00		\Box	COO170003 corrected to
3 6_No_Defect 2119 PPT 3 6_No_Defect 2120 PPT		LAKE KEEL			0 MHO170015 MHO170013	U/S 236 SPO170021 8 VCP U/S 237 SPO170022 8 VCP	95 82				0 0	0.00			0 0 0.00			MHO170013
3 6_No_Defect 2121 PPT 3 6_No_Defect 2121 PPT		LAKE			8946 MHO170015 MHO170016		236 239 63 64				0 0	0.00			0 0 0.00 1			
3 6_No_Defect 2122 PPT	5 10	LAKE	4/11/2007	6947 68	8803 MHO170017 MHO170024	D/S 39 SPO170001 8 VCP	388 394				0 0	0.00			0 0 0.00			
3 6_No_Defect 2123 PPT 3 6_No_Defect 2124 PPT		TAFT TAFT			948 MHO170019 MHO170018 949 MHO170020 MHO170019		356 357 355 357				0 0	0.00			0 0 0.00			
3 6_No_Defect 2125 PPT	5 4	MORNINGSIDE	4/10/2007	6801 68	8802 MHO170020 MHO170023	D/S 65 SPO170008 8 VCP	260 262				0 0	0.00			0 0 0.00			
3 6_No_Defect 2126 PPT 3 6_No_Defect 2127 PPT		PLEASANT MORNINGSIDE			8951 MHO170021 MHO170022 8803 MHO170023 MHO170024	D/S 241 SPO170026 8 VCP D/S 66 SPO170009 8 VCP	257 260 260 263				0 0	0.00			0 0 0.00			
3 6_No_Defect 2128 PPT	5 6	MORNINGSIDE	4/10/2007	6803 68	8884 MHO170024 MHO170025	D/S 171 SPO170015 8 VCP	372 375				0 0	0.00			0 0 0.00 1			
3 6_No_Defect 2129 PPT 3 6_No_Defect 2130 PPT		MORNINGSIDE TAFT EASEMENT			6781 MHO170026 MHO170047 6954 MHO170028 MHO170029		130 107 299 306				0 0	0.00			0 0 0.00 2			
	8 14	COMMERCE ST					380 382				0 0	0.00			0 0 0.00			
3 6_No_Defect 2131 PPT 3 6_No_Defect 2132 PPT		EASEMENT ALLEY E/HOPE			954 MHO170030 MHO170029 MHO170031 MHO170032		380 382 287 283				0 0	0.00			0 0 0.00			
3 6_No_Defect 2133 PPT		16th ST.			958 MHO170033 MHO170034		292 295				0 0	0.00			0 0 0.00 2			
3 6_No_Defect 2134 PPT 3 6_No_Defect 2135 PPT		16th ST. ALLEY W/BOWEN			8973 MHO170035 MHN170026 8784 MHO170037 COO170002		292 291 236 283				0 0	0.00			0 0 0.00			
3 6_No_Defect 2136 PPT	7 25	BOWEN	4/25/2007	6962 69	963 MHO170038 MHO170039	D/S 250 SPO170041 8 VCP	270 272				0 0	0.00			0 0 0.00			
3 6_No_Defect 2137 PPT 3 6 No Defect 2138 PPT		BOWEN MORNINGSIDE			7239 MHO170039 MHO170040 7240 MHO170040 MHO170043		270 271 256 257		++++		0 0	0.00			0 0 0.00 1			
3 6_No_Defect 2139 PPT	6 21	STENGEL	4/12/2007	7240 69	965 MHO170043 MHO170042	U/S 44 SPO170006 8 VCP	275 277				0 0	0.00			0 0 0.00 1			
3 6_No_Defect 2140 PPT 3 6_No_Defect 2141 PPT		MORNINGSIDE BOONY				D/S 28 SPO170013 8 VCP D/S 45 SPO170007 8 VCP	256 258 275 276				0 0	0.00			0 0 0.00			
3 6_No_Defect 2142 PPT		COMMERCE ST EASEMENT				U/S 67 SPO180001 8 VCP	380 383		 		0 0	0.00	 		0 0 0.00			
3 6 No Defect 2143 PPT	7 8	JENNRICH	4/18/2007	6805 68	8804 MHO180002 MHO180001	U/S 68 SPO180002 8 VCP	32 29				0 0	0.00			0 0 0.00			
3 6_No_Defect 2144 PPT 3 6_No_Defect 2145 PPT	7 4	JENNRICH JENNRICH				D/S 69 SPO180003 8 VCP D/S 126 SPO180022 8 VCP	310 309 270 373				0 0	0.00			0 0 0.00			
3 6_No_Defect 2146 PPT	7 10	JENNRICH JENNRICH	4/18/2007	7248 72	7249 MHO180004 MHO180005	D/S 127 SPO180023 8 VCP	270 373 370 373				0 0	0.00	+++++++++	++++++	0 0 0.00 1		+++	
3 6_No_Defect 2147 PPT 3 6_No_Defect 2148 PPT	7 11	JENNRICH M.O.U.BE	4/18/2007	7249 72	267 MHO180005 MHO180013	D/S 383 SPO180031 8 VCP D/S 128 SPO180024 8 VCP	450 352				0 0				0 0 0.00			
3 6_No_Defect 2148 PPT 3 6_No_Defect 2149 PPT		McCLURE BOWEN				D/S 128 SPO180024 8 VCP D/S 132 SPO180028 8 VCP	325 322 213 214	+++++		 	0 0	0.00	 	+++++++	0 0 0.00	+++++++++++++++++++++++++++++++++++++++	+++	
3 6_No_Defect 2150 PPT	7 5	JENNRICH	4/18/2007	6806 68	8807 MHO180016 MHO180017	D/S 70 SPO180004 8 VCP	361 322				0 0	0.00			0 0 0.00			
3 6_No_Defect 2151 PPT 3 6_No_Defect 2152 PPT		JENNRICH WARD ST				D/S 172 SPO180035 8 VCP D/S 29 SPO180018 8 VCP	315 324 290 292		++++		0 0	0.00	+++++++++	+++++++	0 0 0.00		+	
3 6 No Defect 2153 PPT	6 15	WARD ST	4/12/2007	7243 72	244 MHO180020 MHO180021	D/S 30 SPO180019 8 VCP	270 269				0 0	0.00			0 0 0.00			
3 6_No_Defect 2154 PPT 3 6_No_Defect 2155 PPT 3 6_No_Defect 2156 PPT	6 16	WARD ST TAFT	4/12/2007	7244 72	7245 MHO180021 MHO180034 8809 MHO180023 MHO180022	D/S 31 SPO180020 8 VCP U/S 72 SPO180006 8 VCP	270 276 350 353	+++++	+++		0 0	0.00	 	+++++	0 0 0.00	++++++	+H	
3 6_No_Defect 2156 PPT	4 14	TAFT	4/4/2007	6811 68	810 MHO180024 MHO180023	U/S 73 SPO180007 8 VCP	350 353				0 0	0.00			0 0 0.00			
3 6_No_Defect 2157 PPT 3 6_No_Defect 2158 PPT	4 10	KERN PLEASANT				D/S 74 SPO180008 8 VCP D/S 75 SPO180009 8 VCP					0 0				0 0 0.00			
3 6_No_Defect 2159 PPT	5 2	PLEASANT				D/S 76 SPO180009 8 VCP	350 351 350 353	++++++	++++		0 0	0.00	+++++++++	++++++	0 0 0.00		+++	
3 6_No_Defect 2160 PPT 3 6_No_Defect 2161 PPT	5 3	LAKE	4/9/2007	6815 68	8816 MHO180028 MHO180029	D/S 78 SPO180012 8 VCP	350 355				0 0				0 0 0.00			
3 6_No_Defect 2162 PPT	5 3	KERN JESSICA	4/10/2007	6819 68	820 MHO180032 MHO180033	D/S 80 SPO180014 8 VCP D/S 82 SPO180016 8 VCP	285 286 350 351		++++		0 0		++++++++++	+++++++	0 0 0.00 2		+	
3 6_No_Defect 2163 PPT	6 17	WARD ST	4/12/2007	7245 72	7246 MHO180034 MHO190008	D/S 32 SPO180021 8 VCP	320 321				0 0				0 0 0.00			
3 6_No_Defect 2164 PPT 3 6_No_Defect 2165 PPT	6 5	HAZARD HAZARD				D/S 315 SPO190023 10 VCP D/S 320 SPO190024 10 VCP	340 343 340 345		++++		0 0	0.00	+++++++++	+++++++	0 0 0.00		+++	
3 6_No_Defect 2166 PPT	5 2	HAZARD	4/11/2007	6822 68	8823 MHO190005 MHO190006	D/S 84 SPO190002 8 VCP	320 322				0 0	0.00			0 0 0.00 2			
3 6_No_Defect 2167 PPT	5 3	HAZARD	4/11/2007	6823 68	8824 MHO190006 MHO190007	D/S 85 SPO190003 8 VCP	320 323		+++		0 0	0.00	 	+++++	0 0 0.00 1	++++++	+H	U/S MHO190014 corrected to
3 6_No_Defect 2168 PPT	4 6	PLEASANT	4/4/2007	6829 68	8828 MHO190012 MHO190013	U/S 90 SPO190008 8 VCP	295 300				0 0	0.00			0 0 0.00			MHO190012. D/S MHO190009 corrected to MHO190013.
3 6_No_Defect 2169 PPT		SAIL ST.			6778 MHO190013 COO190001		94 92				0.0	0.00			0 0 0.00			MHO190013 corrected to MHO190014
3 6_No_Defect 2170 PPT	4 9	TAFT	4/4/2007	6832 68	8831 MHO190016 MHO190015	U/S 218 SPO190012 8 VCP	158 158				0 0	0.00			0 0 0.00			
3 6_No_Defect 2171 PPT 3 6_No_Defect 2172 PPT		CATALINA CATALINA				D/S 219 SPO190013 8 VCP D/S 94 SPO190014 8 VCP	172 179 362 359		++		0 0				0 0 0.00		\Box	
3 6_No_Defect 2173 PPT	4 2	SAIL ST.				D/S 95 SPO190015 8 VCP	256 258				0 0		<u> </u>	<u> </u>	0 0 0.00			
3 6_No_Defect 2174 PPT 3 6_No_Defect 2175 PPT	5 5	AMBER CIR SAIL ST.				D/S 96 SPO190016 8 VCP D/S 24 SPO190020 8 VCP	256 258 256 257		+		0 0				0 0 0.00			
3 6_No_Defect 2175 PPT 3 6_No_Defect 2176 PPT						D/S 24 SPO190020 8 VCP D/S 98 SPO190018 8 VCP					0 0		 	+++++++	0 0 0.00		+++	
		·																

				General				Structural Defect Co	odina	1 - 1 1 51	1	Operational and Maintenance			Construction Features	w vi	
		9			Pipe				dd Pipe	t Rating	x	.,		Rating Score		neous Featur	реиори
	o B	D No.			ver ID wer ID	(f) t (f)			sforme ollapse amage ning Fa	ags Struc Struc	elect II			Maint Defects Index	Intrud	Surve Isa	d Aba
actor	No. No. rsal Ta	Sal Ins Pocation Tocation	E	xisting MH ID Previous MH ID	fron of ton of ton of (in)	Comme Comme / Leng	Crack Fracture	Broken Hole B H	Joint A O O A S	Mr Struct Struct	Deposits D AE AE Other	Roots (R) Fine (F) Tap (T) Medium (M)	Infiltration Obstacle Ball (B) I OB Other	Vermin 100 88 89 1 Tap (L	ateral) Line M	ous for M SI Outside No.	d en tiffs
Phas Priori Rank	Tape DVD Inspe	Street Name	CCTV Date S	tart End Start End	Existi Previ Size	GIS (GIS CCT)	L C M S H L C M S	H SV VV SV VV S M	LSMLAVHP S LF	RP S S T T T T OT S I	AGS B % L % Z % E	B L J C B L J C B L J C B	L J C G D R W C Z %	OK E F F O IDIL	BI BD D L U R LD RD SRH SI	RB SRL Z SA CU MC F	□ Comments Recommendations
3 6_No_Defect 2177 PPT 3 6_No_Defect 2178 PPT		SAIL ST. WARD			03 D/S 100 SPO200001 8 VCP 09 D/S 387 SPO200015 8 VCP	152 153 265 266				0 0 0	0.00			0 0 0.00			
3 6_No_Defect 2179 PPT 3 6_No_Defect 2180 PPT	4 14	KETCH KETCH			07 D/S 103 SPO200004 8 VCP 08 D/S 104 SPO200005 8 VCP	295 297 320 323				0 0 0	0.00			0 0 0.00	1 1		
3 6_No_Defect 2181 PPT	5 1	KETCH	4/10/2007 7	298 6885 MHO200009 MHO2000	08 U/S 176 SPO200021 8 VCP	320 319				0 0 0	0.00			0 0 0.00			
3 6_No_Defect 2182 PPT 3 6_No_Defect 2183 PPT		WARD SCHOONER			13 D/S 388 SPO200016 8 VCP 12 D/S 106 SPO200007 8 VCP	270 274 320 322				0 0 0	1.00			0 0 0.00			
3 6_No_Defect 2184 PPT 3 6_No_Defect 2185 PPT		SCHOONER WARD			13 D/S 177 SPO200022 8 VCP 21 D/S 389 SPO200017 8 VCP	320 320 265 269				0 0 0	0.00			0 0 0.00			
3 6_No_Defect 2186 PPT 3 6 No_Defect 2187 PPT	4 5	STARBOARD	4/3/2007 6	349 6851 MHO200016 MHO2000	18 D/S 109 SPO200010 8 VCP	259 271				0 0 0	0.00			0 0 0.00			
3 6_No_Defect 2187 PPT 3 6_No_Defect 2188 PPT		STARBOARD STERN		851 6850 MHO200018 MHO2000 851 6852 MHO200018 MHO2000	17 U/S 110 SPO200011 8 VCP 19 D/S 111 SPO200012 8 VCP	290 292 397 399				0 0 0	1.00			0 0 0.00			
3 6_No_Defect 2189 PPT 3 6_No_Defect 2190 PPT		STERN WARD			21 D/S 178 SPO200023 8 VCP 23 D/S 390 SPO200018 8 VCP	396 395 186 206				0 0 0	0.00			0 0 0.00 2	2		
3 6_No_Defect 2191 PPT 3 6_No_Defect 2192 GGSD	52 35	ALLEYWAY STARBOARD	12/28/2007 6	887 6780 MHO200022 COO2000	01 U/S 113 SPO200014 8 VCP 01 U/S 114 SPO210001 8 VCP	114 102 361 392				0 0 0	1.00			0 0 0.00			
3 6_No_Defect 2193 GGSD	7 137	STARBOARD	1/5/2004 6	356 6855 MHO210003 MHO2100	02 U/S 115 SPO210002 8 VCP	361 392 329 362				0 0 0	1.00			0 0 0.00			
3 6_No_Defect 2194 GGSD 3 6_No_Defect 2195 GGSD		SAIL			06 D/S 119 SPO210005 8 VCP 07 D/S 120 SPO210006 8 VCP	272 305 222 210				0 0 0	0.00			0 0 0.00			
3 6_No_Defect 2196 GGSD		HENDERSON			H U/S 665 SPO210014 8 VCP	142 98				0 0 0	1.00			0 0 0.00			Inspection in from MHCC40040 to
3 6_No_Defect 2197 GGSD	8 141	HENDERSON	1/7/2004 6	864 6862 MHO210010 MHO2100	08 U/S 122 SPO210008 8 VCP	350 346				0 0 0	1.00			0 0 0.00			Inspection is from MHO210010 to MHO210002. Manhole found at 345.8' (MHO210008).
3 6_No_Defect 2198 GGSD 3 6_No_Defect 2199 GGSD	8 140	HENDERSON YAWL	1/6/2004 6	364 6863 MHO210010 MHO2100	09 U/S 123 SPO210009 8 VCP 11 U/S 125 SPO210011 8 VCP	154 151 388 354				0 0 0	0.00			0 0 0.00			
3 6_No_Defect 2200 GGSD	9 173	REEVE	1/28/2004 6	367 6868 MHO210013 MHO2100	14 D/S 3 SPO210013 8 VCP	302 321				0 0 0	0.00			0 0 0.00			
3 6_No_Defect 2201 PPT 3 6_No_Defect 2202 GGSD		BOLSA BARBETTE			19 D/S 392 SPO210015 8 VCP D/S 181 SPO220029 8 VCP	30 12 319 307				0 0 0	0.00			0 0 0.00	1 1	1	MSA = Bends
3 6_No_Defect 2203 GGSD		BARBETTE		807 7308 MHO220004 MHO2200		258 335				0 0 0	1.00			0 0 0.00			MHO220016 corrected to MHO220005
3 6_No_Defect 2204 GGSD 3 6_No_Defect 2205 GGSD		KEELSON KEELSON			09 D/S 4 SPO220004 8 VCP 10 D/S 182 SPO220030 8 VCP	185 135 223 349	+++++	++++	 	0 0 0	1.00	 	++++++	0 0 0.00	++++++	+++++	
3 6_No_Defect 2206 GGSD 3 6_No_Defect 2207 GGSD	7 131	DAVIT DAVIT	12/17/2003 6	372 6873 MHO220013 MHO2200	14 D/S 5 SPO220007 8 VCP 15 D/S 183 SPO220031 8 VCP	186 136 223 350				0 0 0	0.00			0 0 0.00			
3 6_No_Defect 2208 GGSD	7 133	SPAR	12/19/2003 7	311 7310 MHO220015 MHO2200	10 U/S 399 SPO220022 8 VCP	260 257				0 0 0	1.00			0 0 0.00			
3 6_No_Defect 2209 GGSD 3 6_No_Defect 2210 GGSD		DAVIT TAMPION			16 D/S 400 SPO220023 8 VCP 24 U/S 6 SPO220013 8 VCP	172 156 62 136				0 0 0	0.00			0 0 0.00			
3 6_No_Defect 2211 GGSD	3 89	BALLAST		223 7222 MHO230006 MHO2300		222 245				0 0 0	0.00			0 0 0.00			MHO230005 corrected to MHO230006
3 6_No_Defect 2212 GGSD					06 U/S 13 SPO230006 8 VCP	387 290				0 0 0	0.00			0 0 0.00			MHO230004 corrected to
3 6_No_Defect 2213 GGSD 3 6_No_Defect 2214 GGSD	3 90	BALLAST WARD		319 7224 MHO230008 MHO2300 320 6792 MHO230009 MHO2300	07 U/S 186 SPO230031 8 VCP 31 U/S 57 SPO230003 8 VCP	416 348 92 99				0 0 0	0.00			0 0 0.00			MHO230005
3 6_No_Defect 2215 GGSD 3 6_No_Defect 2216 GGSD		WARD Y WARD			09 D/S 162 SPO230021 8 VCP 11 D/S 163 SPO230022 8 VCP	80 111 384 349				0 0 0	0.00			0 0 0.00			
3 6_No_Defect 2217 GGSD	19 398	Y WARD	5/13/2004 6	378 6879 MHO230011 MHO2300	12 D/S 164 SPO230023 8 VCP	330 350				0 0 0	0.00			0 0 0.00			
3 6_No_Defect 2218 GGSD 3 6_No_Defect 2219 GGSD		STARBOARD SENNIT	12/4/2003 7	225 7226 MHO230014 MHO2300	05 D/S 56 SPO230002 8 VCP 15 D/S 14 SPO230007 8 VCP	260 255 221 266				0 0 0	1.00			0 0 0.00			
3 6_No_Defect 2220 GGSD 3 6_No_Defect 2221 GGSD		SENNIT STARBOARD			16 U/S 187 SPO230032 8 VCP 14 D/S 55 SPO230001 8 VCP	415 487 270 268				0 0 0				0 0 0.00			Additional MH found
3 6_No_Defect 2222 GGSD	5 111	BEACON	12/5/2003 7	228 7229 MHO230018 MHO2300	19 D/S 16 SPO230009 8 VCP	204 183				0 0 0	0.00			0 0 0.00			MHO230021 to MHO230020 GIS
																	Length is 413.8'. Not Clear. MHO230020 is buried MH on
3 6_No_Defect 2223 GGSD	5 110	BEACON		382 7230 MHO230021 MHO2300		414 348				0 0 0	0.00			0 0 0.00			Inspection Report. It is not MHO230020
3 6_No_Defect 2224 GGSD 3 6_No_Defect 2225 GGSD		KEDGE KEDGE			26 D/S 20 SPO230014 8 VCP 27 D/S 21 SPO230015 8 VCP	290 408 226 149				0 0 0	0.00			0 0 0.00			Additional MH found
3 6_No_Defect 2226 GGSD		REEVE		236 7237 MHO230028 MHO2300		250 271				0 0 0	1.00			0 0 0.00			MHO230016 corrected to MHO230029
3 6_No_Defect 2227 GGSD 3 6_No_Defect 2228 PPT		SPAR STANRICH			21 U/S 168 SPO230027 8 VCP 39 U/S 4798 SPP130036 8 VCP	260 235 160 146				0 0 0	0.00			0 0 0.00			
3 6_No_Defect 2229 PPT		STANRICH	5/21/2007 11	795 11794 MHP130041 MHP1300	40 U/S 4799 SPP130037 8 VCP	105 106				0 0 0	0.00			0 0 0.00			Pipe SPP1130037 corrected to SPP130037
3 6_No_Defect 2230 PPT 3 6_No_Defect 2231 PPT		STANRICH DOROTHY		797 11796 MHP130043 MHP1300 798 11795 MHP130044 MHP1300		175 186 370 374				0 0 0	0.00			0 0 0.00			
3 6_No_Defect 2232 PPT	12 4	DOROTHY	5/21/2007 11	798 11797 MHP130044 MHP1300	43 U/S 4895 SPP130040 8 VCP	320 320				0 0 0	0.00			0 0 0.00			
3 6_No_Defect 2233 PPT 3 6_No_Defect 2234 PPT	12 3		5/21/2007 11	798 11799 MHP130044 MHP1300 799 11800 MHP130045 MHP1400	30 D/S 4897 SPP140023 8 VCP	100 97 120 97				0 0 0							
3 6_No_Defect 2235 PPT 3 6_No_Defect 2236 PPT	11 47	EUCLID LYNNE	5/21/2007 11	802 11801 MHP140032 MHP1400 806 11807 MHP140033 MHP1400	34 D/S 4904 SPP140027 6 VCP	310 315 205 211				0 0 0	1.00		++++++++++++++++++++++++++++++++++++	0 0 0.00 1		+++++	
3 6_No_Defect 2237 PPT 3 6_No_Defect 2238 PPT	11 48	LYNNE LYNNE	5/21/2007 11	807 11808 MHP140034 MHP1400 809 11812 MHP140036 MHP1400	35 D/S 4905 SPP140028 8 VCP	265 271 285 301				0 0 0	1.00			0 0 0.00			
3 6_No_Defect 2239 PPT	12 8	MITCHELL	5/21/2007 11	810 11811 MHP140037 MHP1400	38 D/S 4908 SPP140031 6 VCP	180 192				0 0 0				0 0 0.00			
3 6_No_Defect 2240 PPT 3 6_No_Defect 2241 PPT	12 13	MITCHELL DOROTHY	5/21/2007 11	811 11812 MHP140038 MHP1400 818 11800 MHP140043 MHP1400	30 U/S 4898 SPP140024 8 VCP	300 302 150 164				0 0 0	0.00			0 0 0.00			
3 6_No_Defect 2242 PPT 3 6_No_Defect 2243 PPT		DOROTHY DOROTHY		818 11819 MHP140043 MHP1400 820 12294 MHP140045 MHO1400		160 154 360 363				0 0 0	0.00			0 0 0.00		1	
3 6_No_Defect 2244 PPT	13 22	JOLA	5/31/2007 11	924 11925 MHP150012 MHP1500	13 D/S 4828 SPP150012 8 VCP 13 U/S 4829 SPP150013 8 VCP	335 322				0 0 0				0 0 0.00			
3 6_No_Defect 2245 PPT 3 6_No_Defect 2246 PPT	12 42	LIBBY	5/25/2007 11	927 11926 MHP150015 MHP1500	14 U/S 4830 SPP150014 8 VCP	275 268 250 264				0 0 0	1.00			0 0 0.00			
3 6_No_Defect 2247 PPT 3 6_No_Defect 2248 PPT	12 39	WOODBURY WOODBURY			22 U/S 5424 SPP150030 8 VCP 02 U/S 5301 SPP150015 8 VCP	290 286 130 120		++++		0 0 0	0.00	+++++++	++++++	0 0 0.00	++++++	+++++	
3 6_No_Defect 2249 PPT 3 6_No_Defect 2250 PPT	12 40	BARNETT WOODBURY	5/25/2007 11		16 U/S 5302 SPP150016 8 VCP	350 351 220 218				0 0 0				0 0 0.00			
3 6_No_Defect 2251 PPT	10 42	WOODBURY	5/14/2007 11	000 10953 MHP150018 MHO1500	50 U/S 4013 SPP150047 8 VCP	267 253				0 0 0	0.00			0 0 0.00			
3 6_No_Defect 2252 PPT 3 6_No_Defect 2253 PPT	13 24	WOODBURY HAVENWOOD	5/31/2007 11	934 11932 MHP150022 MHP1500	32 D/S 5304 SPP150018 8 VCP 20 U/S 5306 SPP150020 8 VCP	285 281 195 203		 		0 0 0	0.00	 		0 0 0.00 1		<u> </u>	
3 6_No_Defect 2254 PPT	13 23	WENTWORTH HAVENWOOD	5/31/2007 11	934 11933 MHP150022 MHP1500	21 U/S 5307 SPP150021 8 VCP 23 U/S 5456 SPP150023 10 VCP	175 180 320 338				0 0 0	0.00			0 0 0.00 2			
3 6_No_Defect 2255 PPT 3 6_No_Defect 2256 PPT 3 6_No_Defect 2257 PPT		WENTWORTH	6/5/2007 11	938 11937 MHP150026 MHP1500	25 U/S 5309 SPP150025 8 VCP	215 201				0 0 0	0.00			0 0 0.00 1			
3 6_No_Defect 2257 PPT 3 6_No_Defect 2258 PPT		WOODBURY WOODBURY EASEMENT		970 11430 MHP150030 COP1500 970 11969 MHP150030 MHP1500		90 89	+++++	++++		0 0 0	100	++++++++	++++++	0 0 0.00	++++++	 	
3 6_No_Defect 2259 PPT 3 6_No_Defect 2259 PPT		HAVENWOOD EASEMENT		941 11942 MHP150032 MHP1600	 	150 147	+++++	 		0 0 0	1.00	++++++++	++++++	0 0 0.00 1	1		
3 6_No_Defect 2260 PPT	12 26	TRASK	5/22/2007 11	804 11803 MHP150034 MHP1500	33 U/S 4901 SPP150031 8 VCP	260 287				0 0 0	0.00			0 0 0.00	1		
3 6_No_Defect 2261 PPT 3 6_No_Defect 2262 PPT		TRASK TRASK			37 U/S 4903 SPP150033 8 VCP 07 D/S 4334 SPO150017 8 VCP	130 134 320 321		 		0 0 0	0.00			0 0 0.00		2	
3 6_No_Defect 2263 PPT		ELIZABETH		815 11814 MHP150036 MHP1400		220 220				0 0 0	1.00			0 0 0.00			Pipe SPP150031 corrected to SPP140034
3 6_No_Defect 2264 PPT	12 23	TRASK	5/22/2007 11	815 11813 MHP150036 MHP1500	35 U/S 5286 SPP150034 8 VCP	330 322				0 0 0	.00			0 0 0.00			

					General				Structural Defect C	Codina	1 _ 1 1 5	T T	Operational and Maintenance			Construction Features	- 8	Tall	
		o o				Pipe	e			d Pipe	Rating Fects	×epa			Rating		reous Feature	y Abandoned	
	o Bd.	D No. pec. N				Camera wer ID	£ £			eformes ollapse armage	int Reg ags Struct ral Def	afect In			Maint Defects Defect (Intruding Seal	scellar	Surve)	
y ng actor	No. Vo.	Sal DV Aatche Location		Existing	g MH ID Previous MH ID	ion of ing Sev	-ength	Crack Fracture	Broken Hole B H	Joint a o o o a a	Structu Structu	Deposits D	Roots (R) Fine (F) Tap (T) Medium (M) E	Infiltration Obstacles V	ermin 5 W W 5 Tap (Lateral)	Line Material L IS	Constr M	ons for dentifie	
Phase Priorit Ranki	Tape DVD I Inspe	Street Name	CCTV Date	Start	End Start End	Direct Existi Previk Size (Joint I GIS C GIS C CCTV	C M S H L C M S	H SV VV SV VV S M	I L S M L A V H P S LF	S S AN Total	AGS B % L % Z %	B L J C B L J C B L J C B	L J C G D R W C Z %	B T Total O & M B D D D D D D D D D D D D D D D D D D	D L U R LD RD SRH SRB SRL Z S.	A CU MC F	Reas GIS k	Comments Recommendations
3 6_No_Defect 2265 PPT		ALLEY W/O				U/S 4902 SPP150032 8 VCP					0 0	0.00			0 0 0.00 1			+	
3 6_No_Defect 2266 PPT 3 6_No_Defect 2267 PPT	11 28 10 45	EUCLID WOODBURY			10942 MHP150040 MHP150039 10943 MHP150043 MHP150040	U/S 4002 SPP150036 8 VCP U/S 4003 SPP150037 8 VCP	320 337 150 150				0 0	0.00			0 0 0.00 1			++-	
3 6_No_Defect 2268 PPT 3 6_No_Defect 2269 PPT		FERNWOOD FERNWOOD				U/S 4007 SPP150041 8 VCP D/S 4009 SPP150043 8 VCP	180 172 275 276				0 0	0.00			0 0 0.00				
3 6_No_Defect 2270 PPT	10 44	WOODBURY	5/14/2007	10950	10946 MHP150047 MHP150043	U/S 4006 SPP150040 8 VCP	240 240				0 0	0.00			0 0 0.00 1				
3 6_No_Defect 2271 PPT 3 6_No_Defect 2272 PPT	10 41 10 47	WOODBURY LOMBARDY			10953 MHP150047 MHP150050 10951 MHP150049 MHP150048		265 269 140 130				0 0	0.00			0 0 0.00 1			++-	
3 6_No_Defect 2273 PPT 3 6_No_Defect 2274 PPT		LOMBARDY MILLS			10952 MHP150050 MHP150049 10954 MHP150052 MHP150051		330 333 40 36				0 0	0.00			0 0 0.00 1				
3 6_No_Defect 2275 PPT	10 52	GAINES	5/14/2007	10956	10998 MHP150053 MHO150016	U/S 4016 SPP150050 8 VCP	220 221				0 0	0.00			0 0 0.00 1 1				
3 6_No_Defect 2276 PPT 3 6_No_Defect 2277 PPT		ANITA ROSITA			11942 MHP160002 MHP160001 11429 MHP160003 COP160001		15 22 60 50				0 0	0.00			0 0 0.00 1			++-	
3 6_No_Defect 2278 PPT 3 6_No_Defect 2279 PPT		ROSITA ROSITA			11946 MHP160003 MHP160004 11947 MHP160004 MHP160005		40 50 335 339				0 0	0.00			0 0 0.00 1				
3 6_No_Defect 2280 PPT	14 12	LA BONITA	6/1/2007	11949	11950 MHP160006 MHP160007	D/S 5318 SPP160008 8 VCP	285 288				0 0	0.00			0 0 0.00 1 1				
3 6_No_Defect 2281 PPT 3 6_No_Defect 2282 PPT		LA BONITA ANABEL			11951 MHP160007 MHP170003 11953 MHP160008 MHP160009	D/S 5319 SPP160009 8 VCP D/S 5321 SPP160010 8 VCP	270 287 220 222				0 0	0.00			0 0 0.00			++-	
3 6_No_Defect 2283 PPT 3 6_No_Defect 2284 PPT		ANABEL LA BONITA				D/S 5322 SPP160011 8 VCP D/S 5323 SPP160012 8 VCP	220 224 330 334				0 0	0.00			0 0 0.00				
3 6_No_Defect 2285 PPT	14 10	CYNTHIA	6/1/2007	11955	11956 MHP160011 MHP160012	D/S 5324 SPP160013 8 VCP	215 263				0 0	0.00			0 0 0.00 3				
3 6_No_Defect 2286 PPT 3 6_No_Defect 2287 PPT		LA BONITA SAN JUAN			11957 MHP160012 MHP160013 11963 MHP160013 MHP160021		170 171 325 339				0 0	0.00			0 0 0.00 1			++-	
3 6_No_Defect 2288 PPT 3 6_No_Defect 2289 PPT	14 16	CYNTHIA CIR CYNTHIA CIR	6/1/2007	11972	11971 MHP160016 MHP160015 11959 MHP160016 MHP160017	U/S 3853 SPP160041 8 VCP	345 346 275 278				0 0	0.00			0 0 0.00				
3 6_No_Defect 2290 PPT	14 15	CYNTHIA CIR	6/1/2007	11959	11960 MHP160017 MHP160018	D/S 5327 SPP160017 8 VCP	185 201				0 0	0.00			0 0 0.00 1				
3 6_No_Defect 2291 PPT 3 6_No_Defect 2292 PPT		ANITA ANITA			11961 MHP160021 MHP160018 11965 MHP160021 MHP160023		110 261 215 222		+++		0 0	0.00			0 0 0.00 2		+ $+$ $+$ $-$	$++$ \top	
3 6_No_Defect 2293 PPT	10 40	MILLS	5/14/2007	11002	11001 MHP160023 MHO160022 11964 MHP160023 MHP160022	U/S 6000 SPO160001 8 VCP	163 165				0 0	0.00			0 0 0.00			\Box	
3 6_No_Defect 2294 PPT 3 6_No_Defect 2295 PPT	14 36	ANITA	6/5/2007	11965	11966 MHP160023 MHP170004	D/S 5466 SPP160023 12 VCP	50 47 405 408				0 0	0.00			0 0 0.00 2				
3 6_No_Defect 2296 PPT 3 6_No_Defect 2297 PPT					10957 MHP160025 MHP160024 10981 MHP160026 MHO160021		215 218 350 352				0 0	0.00			0 0 0.00			+	
3 6_No_Defect 2298 PPT 3 6 No_Defect 2299 PPT		BLAKE	5/11/2007	10960	10959 MHP160027 MHP160026	U/S 5955 SPP160027 8 VCP	350 352				0 0	0.00			0 0 0.00				
3 6_No_Defect 2300 PPT	10 20	MANSOR FERNWOOD	5/11/2007	10962	10961 MHP160029 MHP160028 10970 MHP160029 MHP160037	D/S 5989 SPP160030 8 VCP	227 227 149 149				0 0	0.00			0 0 0.00			++-	
3 6_No_Defect 2301 PPT 3 6_No_Defect 2302 PPT		FERNWOOD RANNEY				U/S 5990 SPP160031 8 VCP U/S 5991 SPP160032 8 VCP	145 141 227 226				0 0	0.00			0 0 0.00			++-	
3 6_No_Defect 2303 PPT		ALLEY W/O EUCLID			10967 MHP160035 MHP160034		325 326				0 0	0.00			0 0 0.00 1				
3 6_No_Defect 2304 PPT 3 6_No_Defect 2305 PPT		FERNWOOD FERNWOOD			10965 MHP160036 MHP160032 10969 MHP160037 MHP160036	U/S 5992 SPP160033 8 VCP U/S 5996 SPP160037 8 VCP	243 246 94 94				0 0	0.00			0 0 0.00				
3 6_No_Defect 2306 PPT	10 36	LINNELL AVE	5/14/2007	10970	10972 MHP160037 MHP160039	D/S 5997 SPP160038 8 VCP	275 268				0 0	0.00			0 0 0.00				
3 6_No_Defect 2307 PPT 3 6_No_Defect 2308 PPT		LOMBARDY WESTMINSTER			10971 MHP160039 MHP160038 11948 MHP170001 MHP170002	U/S 5998 SPP160039 8 VCP D/S 5312 SPP170003 10 VCP	163 166 275 267				0 0	0.00			0 0 0.00			++-	
3 6_No_Defect 2309 PPT 3 6_No_Defect 2310 PPT		WESTMINSTER WESTMINSTER			11003 MHP170004 MHP170005 11967 MHP170005 MHP170006		10 9 9 15				0 0	0.00			0 0 0.00				
3 6_No_Defect 2311 PPT		WESTMINSTER			11973 MHP170006 MHP170007		600 646				0 0	0.00			0 0 0.00			Repea	at inspection, DVD 15 -
3 6_No_Defect 2312 PPT	17 6	WESTMINSTER	6/15/2007	11973	11974 MHP170007 MHP170008	D/S 5470 SPP170008 12 VCP	20 9				0 0	0.00			0 0 0.00			Section	123
3 6_No_Defect 2313 PPT 3 6_No_Defect 2314 PPT		FORBES CORPORATE			10973 MHP170010 MHP170009 10935 MHP180001 MHP180002		200 201 330 334				0 0	0.00			0 0 0.00			++-	
3 6_No_Defect 2315 PPT 3 6_No_Defect 2316 PPT		CORPORATE COMMERCE			10940 MHP180002 MHP180007 10975 MHP180003 MHP170011		325 326 330 331				0 0	0.00			0 0 0.00				
3 6_No_Defect 2317 PPT	7 32	COMMERCE	4/25/2007	10937	10936 MHP180004 MHP180003	U/S 3997 SPP180003 8 VCP	330 333				0 0	0.00			0 0 0.00				
3 6_No_Defect 2318 PPT 3 6_No_Defect 2319 PPT	8 12	COMMERCE			10937 MHP180005 MHP180004 10938 MHP180006 MHP180005		325 327 301 302				0 0	0.00			0 0 0.00			++-	
3 6_No_Defect 2320 PPT 3 6_No_Defect 2321 PPT		CAPITAL WOODBURY				D/S 4000 SPP180006 8 VCP U/S 4304 SPQ150006 8 VCP	280 304 275 273				0 0	0.00			0 0 0.00				
3 6_No_Defect 2322 PPT	13 10	JOLA	5/29/2007	11486	11485 MHQ150013 MHQ150012	U/S 4306 SPQ150008 8 VCP	265 263				0 0	0.00			0 0 0.00				
3 6_No_Defect 2323 PPT 3 6_No_Defect 2324 PPT	13 11	JOLA MALIBU				U/S 4307 SPQ150009 8 VCP D/S 4308 SPQ150010 8 VCP	265 265 290 285				0 0	0.00			0 0 0.00 2			++-	
3 6_No_Defect 2325 PPT 3 6_No_Defect 2326 PPT	13 4	SALINAZ SALINAZ				U/S 4309 SPQ150011 8 VCP U/S 4310 SPQ150012 8 VCP	270 269 265 263				0 0	0.00			0 0 0.00				
3 6_No_Defect 2327 PPT 3 6_No_Defect 2328 PPT	13 7	LANNING	5/29/2007	11493	11492 MHQ150020 MHQ150019	U/S 4313 SPQ150015 8 VCP	170 173				0 0	0.00			0 0 0.00				
3 6_No_Defect 2329 PPT	13 6	SALINAZ LANNING	5/29/2007	11494	11495 MHQ150021 MHQ150022	U/S 4311 SPQ150013 8 VCP D/S 4315 SPQ150017 8 VCP	260 265				0 0	0.00			0 0 0.00				
3 6_No_Defect 2330 PPT	14 1	SALINAZ SALINAZ				D/S 35 SPQ150026 8 VCP D/S 34 SPQ150002 8 VCP	305 341 352 360		+		0 0	0.00			0 0 0.00			+	
3 6_No_Defect 2331 PPT 3 6_No_Defect 2332 PPT 3 6_No_Defect 2333 PPT	14 3	SALINAZ	6/1/2007	6770	6771 MHQ150025 MHQ150026	D/S 38 SPQ150022 8 VCP	345 345				0 0	0.00			0 0 0.00				
3 6_No_Defect 2333 PPT 3 6_No_Defect 2334 PPT		NEWHOPE TRASK EASEMENT				U/S 36 SPQ150018 8 VCP U/S 4849 SPQ150030 8 VCP	211 248 150 139				0 0	0.00	 		0 0 0.00	++++++++++	+++	+++	
3 6_No_Defect 2335 PPT	20 4	CARDINAL	6/25/2007	10920	13643 MHQ150033 MHQ150034	D/S 4852 SPQ150033 8 VCP	233 286				0 0	0.00			0 0 0.00			世上	
3 6_No_Defect 2337 PPT 3 6_No_Defect 2338 PPT	13 30 13 27	ANABEL	5/31/2007	10925	10926 MHQ160006 MHQ160007	U/S 4858 SPQ160021 8 VCP D/S 4859 SPQ160022 8 VCP	405 383			+++++++++++++++++++++++++++++++++++++++	0 0	0.00	 		0 0 0.00 1	++++++++++	++-	++-	
3 6_No_Defect 2339 PPT 3 6_No_Defect 2340 PPT	13 28					D/S 3710 SPQ160001 8 VCP D/S 3851 SPQ160015 8 VCP					0 0				0 0 0.00				
3 6_No_Defect 2341 PPT	14 19	NEWHOPE ST				U/S 4806 SPQ160010 8 VCP	115 112				0 0	0.00			0 0 0.00 1				SPQ160013 corrected to
3 6_No_Defect 2342 PPT 3 6_No_Defect 2343 PPT		NEWHOPE				D/S 4809 SPQ160013 8 VCP U/S 4810 SPQ160014 8 VCP	310 315 110 145				0 0				0 0 0.00			Pipe S SPQ1	
3 6_No_Defect 2344 PPT	52 22	NEWHOPE	12/28/2007	10871	11496 MHQ160012 MHQ170009	D/S 4811 SPQ170010 8 VCP	25 9				0 0				0 0 0.00			$\pm \pm \pm$	
3 6_No_Defect 2345 PPT 3 6_No_Defect 2346 PPT	14 7	ANABEL PHYLLIS				U/S 4327 SPQ160007 8 VCP U/S 4328 SPQ160008 8 VCP	80 83 115 110		++		0 0	0.00			0 0 0.00		$+\Pi$	+	
3 6_No_Defect 2347 PPT	14 4	ANABEL	6/1/2007	11505	11506 MHQ160015 MHQ160016	D/S 4329 SPQ160009 8 VCP	200 198				0 0	0.00			0 0 0.00			口厂	
3 6_No_Defect 2348 PPT 3 6_No_Defect 2349 PPT	15 4	WESTMINSTER WESTMINSTER	6/9/2007	11497		D/S 4322 SPQ170003 10 VCP	25 24				0 0							$\pm \pm \pm$	
3 6_No_Defect 2350 PPT 3 6_No_Defect 2351 PPT 3 6_No_Defect 2352 PPT	15 5 15 6	WESTMINSTER WESTMINSTER			11499 MHQ170011 MHQ170012 11500 MHQ170012 MHQ170013	D/S 4323 SPQ170004 10 VCP D/S 4324 SPQ170005 10 VCP	75 52 70 86		+		0 0	0.00			0 0 0.00			+ + + -	
3 6_No_Defect 2352 PPT	15 7	WESTMINSTER	6/9/2007	11500	11501 MHQ170013 MHQ170014	D/S 4325 SPQ170006 10 VCP	95 77				0 0	0.00			0 0 0.00			井上	
3 6_No_Defect 2353 PPT 3 6_No_Defect 2354 PPT	17 4		6/15/2007	11512		D/S 4706 SPQ170009 8 VCP	75 71				0 0								
3 6_No_Defect 2355 PPT 3 6_No_Defect 2356 PPT	25 24	PARSONS LEDA			11511 MHQ170017 MHQ170016 7022 MHR140012 COR140001	U/S 4330 SPQ170008 8 VCP U/S 611 SPR140015 8 VCP	496 500 107 115				0 0	0.00			0 0 0.00			+	
3 6_No_Defect 2357 PPT	25 33	PALM	7/16/2007	6767	6766 MHR140012 MHR140011	U/S 610 SPR140014 8 VCP	296 298				0 0	0.00			0 0 0.00 1				
3 6_No_Defect 2358 PPT	25 32	LEDA	7/16/2007	6767	6757 MHR140012 MHS140053	D/S 612 SPR140023 8 VCP	153 155			<u> </u>	0 0	0.00			0 0 0.00			تطللا	

			General				Structural Defect C	Coding	1 - 1 181	T	Operational and Maintenance			Construction Features	8 H	
	á		Contra		ripe		Ondording Bolog C	adid an in	Rating ects	×ep	Operational and maintenance		Rating	Since State of the	-eature	рвиор
	D No.			er ID	(£) to (£)			formex llapsee rface mage ing Fa	gs Struct ral Def	lect In			Maint efects efect (Intruding Seal	Surve	1 Aban
ctor	tion No	-	Existing MH ID P	vious MH ID 50 80 80 80 80 80 80 80 80 80 80 80 80 80	ommer (ff)	Crack Fracture	Broken Hole B H	Joint B X D X	Mr Sa Po	Deposits D		Infiltration Obstacles \ all (B) I OB	ermin S W W D T Tap (Lateral	Line Material E	Constru	ntifie
Phase Priority Rankir	A Street Nam	e CCTV Date	Start End Sta	Direction Drevio	Joint L.	C M S H I C M S	H SV VV SV VV S M	L S M L A V H P S IF	S ACP Cotal S	AGS B % L % Z % B		Other	Total C Total C S&M [B B B B B B B B B B B B B B B B B B	D D I UR ID RD SRH SRB SRI Z SA CI	Total C	Ω Comments Recommendations
3 6_No_Defect 2359 PPT				13 MHR140017 D/S 423 SPR140024 10 VCF					0 0				0 0 0.00 3			
3 6_No_Defect 2360 PPT 3 6_No_Defect 2361 PPT	53 24 24 18 TRASK	1/11/2008	7435 7436 MHR14	17 MHR140018 D/S 419 SPR140019 10 VCF 20 MHR150001 D/S 422 SPR140022 10 VCF	359 425				0 0	0.00			0 0 0.00			
3 6_No_Defect 2362 PPT 3 6_No_Defect 2363 PPT	51 5 TRASK AVE 52 25 WOODBURY			01 MHR150002 D/S 425 SPR150022 10 VCF 12 MHR150018 D/S 570 SPR150011 8 VCF					0 0	0.00			0 0 0.00 2			MSA = HWL
3 6_No_Defect 2364 PPT	51 2 HARBOR BLVI	12/22/2007	0 0 MHR15	13 MHR150003 U/S 591 SPR150006 12 VCF	361 372				0 0	0.00			0 0 0.00 1			
3 6_No_Defect 2365 PPT 3 6_No_Defect 2366 PPT			7542 7541 MHR15 7544 7543 MHR15	14 MHR150013 U/S 592 SPR150012 12 VCF 16 MHR150015 U/S 847 SPR150014 12 VCF					0 0	0.00			0 0 0.00 2			
3 6_No_Defect 2367 PPT 3 6_No_Defect 2368 PPT	27 15 HARBOR			17 MHR150016 U/S 848 SPR150015 12 VCF	370 373				0 0	0.00			0 0 0.00			
3 6_No_Defect 2369 PPT 3 6_No_Defect 2369 PPT	27 13 HARBOR			18 MHR150017 U/S 849 SPR150016 12 VCF 19 MHR150018 U/S 850 SPR150017 12 VCF					0 0	0.00			0 0 0.00			
3 6_No_Defect 2370 PPT		12/28/2007	7557 7445 MHR15	20 COR150001 U/S 575 SPR150018 8 VCF	269 309				0 0	0.00			0 0 0.00			
3 6_No_Defect 2371 PPT		12/28/2007	7557 7547 MHR15		100 10				0 0	0.00			0 0 0.00			
3 6_No_Defect 2372 PPT 3 6_No_Defect 2373 PPT				01 MHR160026 U/S 565 SPR160018 8 VCF 04 MHR160005 U/S 488 SPR160004 8 VCF					0 0	0.00			0 0 0.00			
3 6_No_Defect 2374 PPT 3 6_No_Defect 2375 PPT			7519 7520 MHR16 7520 7521 MHR16						0 0	0.00			0 0 0.00			
3 6_No_Defect 2376 PPT	15 16 NAUTILUS	6/9/2007	7523 7522 MHR16	09 MHR160008 U/S 492 SPR160007 8 VCF					0 0	0.00			0 0 0.00			
3 6_No_Defect 2377 PPT 3 6_No_Defect 2378 PPT			7523 7524 MHR16 7524 7525 MHR16						0 0	0.00			0 0 0.00			
3 6_No_Defect 2379 PPT	14 23 JACKSON	6/4/2007	7530 7529 MHR16	13 MHR160012 U/S 496 SPR160011 8 VCF	400 403				0 0	0.00			0 0 0.00 3			
3 6_No_Defect 2380 PPT 3 6_No_Defect 2381 PPT			7530 7532 MHR16 7532 7531 MHR16	13 MHR160015 D/S 497 SPR160012 8 VCF 15 MHR160014 U/S 498 SPR160013 8 VCF		+++++	 		0 0	0.00	++++++++++	+++++++	0 0 0.00	+++++++++++++++++++++++++++++++++++++++	+++	+ + + + + + + + + + + + + + + + + + + +
3 6_No_Defect 2382 PPT 3 6_No_Defect 2383 PPT	14 21 QUATRO	6/4/2007		15 MHR160017 D/S 499 SPR160014 8 VCF 17 MHR160016 U/S 500 SPR160015 8 VCF					0 0	0.00			0 0 0.00			
3 6_No_Defect 2384 PPT	14 22 QUATRO	6/4/2007	7534 7536 MHR16	17 MHR160019 D/S 563 SPR160016 8 VCF	290 294				0 0	0.00			0 0 0.00			
3 6_No_Defect 2385 PPT 3 6_No_Defect 2386 PPT				18 MHR160019 D/S 564 SPR160017 8 VCF 23 MHR160025 D/S 574 SPR160025 8 VCF		+++++	 	++++++	0 0	0.00	++++++++++	++++++++	0 0 0.00 1	+++++++++++++++++++++++++++++++++++++++	+++	
3 6_No_Defect 2387 PPT 3 6_No_Defect 2388 PPT	27 11 HARBOR	7/20/2007		24 MHR160025 D/S 852 SPR160026 12 VCF	365 374				0 0	0.00			0 0 0.00			
3 6_No_Defect 2389 PPT	15 44 WESTMINSTE	R 6/11/2007	7515 7516 MHR17	01 MHR170002 D/S 585 SPR170001 12 VCF	37 16				0 0	0.00			0 0 0.00			
3 6_No_Defect 2390 PPT				02 MHR170003 D/S 586 SPR170002 12 VCF					0 0	0.00			0 0 0.00 1			Repeat inspection, DVD 16 -
3 6_No_Defect 2391 PPT 3 6_No_Defect 2392 PPT	25 27 WESTMINSTE 25 28 WESTMINSTE		7521 7526 MHR17 7526 7527 MHR17	03 MHR170004 D/S 587 SPR170004 12 VCF 04 MHR170005 D/S 588 SPR170005 12 VCF					0 0	0.00			0 0 0.00			Section 7
3 6_No_Defect 2393 PPT 3 6_No_Defect 2394 PPT	25 29 WESTMINSTE	7/16/2007	7527 7528 MHR17		250 239				0 0	0.00			0 0 0.00			
3 6_No_Defect 2395 PPT	17 37 PARTRIDGE	6/18/2007	6700 14623 MHS13	24 MHS130021 U/S 8392 SPS130007 8 VCF					0 0	0.00			0 0 0.00 2			
3 6_No_Defect 2396 PPT 3 6_No_Defect 2397 PPT			6701 6702 MHS14 6701 6684 MHS14	03 MHS140004 D/S 682 SPS140003 8 VCF 03 MHT140029 U/S 554 SPS140030 8 VCF					0 0	0.00			0 0 0.00			
3 6_No_Defect 2398 PPT 3 6_No_Defect 2399 PPT	18 14 LILLY	6/19/2007	6702 6703 MHS14 6704 6705 MHS14	04 MHS140005 D/S 683 SPS140004 8 VCF	515 515				0 0	0.00			0 0 0.00 1			
3 6_No_Defect 2400 PPT	23 15 TRASK	7/6/2007	6706 6705 MHS14	08 MHS140007 U/S 406 SPS140007 10 VCF					0 0	0.00			0 0 0.00			
3 6_No_Defect 2401 PPT 3 6_No_Defect 2402 PPT	23 12 TRASK 17 32 ROXEY		6706 6718 MHS14 6709 6707 MHS14						0 0	0.00			0 0 0.00 4			
3 6_No_Defect 2403 PPT 3 6_No_Defect 2404 PPT	17 33 GLORIA	6/18/2007	6709 6708 MHS14	11 MHS140010 U/S 686 SPS140010 8 VCF	288 290				0 0	0.00			0 0 0.00			
3 6_No_Defect 2405 PPT	18 3 BUENA	6/18/2007	6711 6710 MHS14	13 MHS140012 U/S 532 SPS140012 8 VCF					0 0	0.00			0 0 0.00			
3 6_No_Defect 2406 PPT 3 6_No_Defect 2407 PPT			6711 6712 MHS14 6712 6714 MHS14	13 MHS140014 D/S 533 SPS140013 8 VCF 14 MHS140016 D/S 534 SPS140014 8 VCF					0 0	0.00			0 0 0.00			
3 6_No_Defect 2408 PPT 3 6_No_Defect 2409 PPT		6/18/2007	6713 6714 MHS14 6714 6717 MHS14	15 MHS140016 D/S 535 SPS140015 8 VCF	291 289				0 0	0.00			0 0 0.00			
3 6_No_Defect 2410 PPT	18 6 BUENA	6/19/2007	6716 6715 MHS14	18 MHS140017 U/S 537 SPS140017 8 VCF	316 307				0 0	0.00			0 0 0.00			
3 6_No_Defect 2411 PPT 3 6_No_Defect 2412 PPT				18 MHS140019 D/S 538 SPS140018 8 VCF 19 MHS140020 D/S 539 SPS140019 8 VCF					0 0	0.00			0 0 0.00			
3 6_No_Defect 2413 PPT 3 6_No_Defect 2414 PPT	23 13 TRASK	7/6/2007	6718 6719 MHS14		141 142				0 0	0.00			0 0 0.00 1			
3 6_No_Defect 2415 PPT	24 8 TRASK	7/10/2007	6720 6748 MHS14	22 MHS140044 D/S 424 SPS140054 10 VCF	311 339				0 0	0.00			0 0 0.00			
3 6_No_Defect 2416 PPT 3 6_No_Defect 2417 PPT				24 MHS140023 U/S 540 SPS140022 8 VCF 27 COS140001 U/S 542 SPS140024 8 VCF					0 0	0.00			0 0 0.00			
3 6_No_Defect 2418 PPT 3 6 No_Defect 2419 PPT	17 21 CLINTON	6/16/2007	6760 6759 MHS14	28 MHS140026 U/S 604 SPS140049 8 VCF 28 MHS140027 U/S 614 SPS140056 8 VCF	303 306				0 0	0.00			0 0 0.00			
3 6_No_Defect 2420 PPT	17 22 CLINTON	6/16/2007	6760 6761 MHS14	28 MHS140029 D/S 605 SPS140050 8 VCF	275 277				0 0	0.00			0 0 0.00			
3 6_No_Defect 2421 PPT 3 6_No_Defect 2422 PPT	17 18			28 MHS140042 U/S 598 SPS140037 8 VCF 29 MHS140036 D/S 606 SPS140051 8 VCF			 		0 0	0.00	+++++++++	+++++++	0 0 0.00		+++	
3 6_No_Defect 2423 PPT 3 6_No_Defect 2424 PPT	17 28 PARTRIDGE	6/18/2007	6726 6725 MHS14	31 MHS140030 U/S 543 SPS140025 8 VCF 32 MHS140035 D/S 545 SPS140027 8 VCF	295 289				0 0	0.00			0 0 0.00			
3 6_No_Defect 2424 PPT 3 6_No_Defect 2425 PPT 3 6_No_Defect 2426 PPT	17 25 RANCHERO 18 1 REDBIRD	6/18/2007	6728 6729 MHS14	33 MHS140034 D/S 546 SPS140028 8 VCF	254 241				0 0	0.00			0 0 0.00 1			
3 6_No_Defect 2426 PPT 3 6_No_Defect 2427 PPT	17 26 RANCHERO 17 24 CLINTON			35 MHS140036 D/S 615 SPS140057 8 VCF 36 MHS140044 D/S 607 SPS140052 8 VCF					0 0	0.00	++++++++	+++++++	0 0 0.00 1		+++	
3 6_No_Defect 2428 PPT 3 6_No_Defect 2429 PPT	17 40 BLACKBIRD	6/18/2007	6742 6741 MHS14	38 MHS140037 U/S 562 SPS140032 8 VCF 39 MHS140038 U/S 594 SPS140033 8 VCF	126 128				0 0				0 0 0.00			
3 6_No_Defect 2430 PPT	17 41 PEARCE	6/18/2007	6743 6744 MHS14	39 MHS140040 D/S 595 SPS140034 8 VCF	227 231				0 0	0.00			0 0 0.00 5			
3 6_No_Defect 2431 PPT 3 6_No_Defect 2432 PPT	17 42 PEARCE			40 MHS140041 D/S 596 SPS140035 8 VCF 43 MHS140029 D/S 599 SPS140038 8 VCF					0 0	0.00	+++++++	+++++++	0 0 0.00 3		++1	
3 6_No_Defect 2433 PPT 3 6_No_Defect 2434 PPT	24 9 TRASK	7/10/2007	6748 6749 MHS14	44 MHS140045 D/S 411 SPS140039 10 VCF 45 MHS140049 D/S 412 SPS140040 10 VCF	251 252				0 0	0.00			0 0 0.00 1			
3 6_No_Defect 2435 PPT 3 6_No_Defect 2436 PPT 3 6_No_Defect 2436 PPT	18 37 RANCHERO	6/20/2007	6750 6751 MHS14	46 MHS140047 D/S 600 SPS140041 8 VCF	240 232				0 0	0.00			0 0 0.00			
3 6_No_Defect 2436 PPT 3 6_No_Defect 2437 PPT	18 38 RANCHERO 24 11 TRASK			47 MHS140048 D/S 601 SPS140042 8 VCF 49 MHS140050 D/S 413 SPS140044 10 VCF					0 0	0.00			0 0 0.00			
3 6_No_Defect 2438 PPT 3 6_No_Defect 2439 PPT	24 45 TRASK	7/13/2007	6756 6758 MHS14	52 MHS140054 D/S 416 SPS140047 10 VCF 54 MHR140013 D/S 417 SPR140001 10 VCF	179 179				0 0				0 0 0.00			
3 6_No_Defect 2440 PPT	17 1 JAMES	6/15/2007	7455 7454 MHS15	02 MHS150001 U/S 435 SPS150003 8 VCF	267 265				0 0	0.00	 		0 0 0.00			
3 6_No_Defect 2441 PPT 3 6_No_Defect 2442 PPT	17 2 JAMES	6/15/2007		02 MHS150003 D/S 436 SPS150004 8 VCF					0 0	0.00			0 0 0.00			
3 6_No_Defect 2443 PPT	16 36 CARDINAL	6/14/2007	7458 7457 MHS15	05 MHS150004 U/S 438 SPS150006 8 VCF	267 265				0 0	0.00			0 0 0.00			
3 6_No_Defect 2444 PPT 3 6_No_Defect 2445 PPT 3 6_No_Defect 2446 PPT	16 37 CARDINAL 15 33 ROXEY			05 MHS150006 D/S 439 SPS150007 8 VCF 06 MHS150003 U/S 437 SPS150005 8 VCF			 		0 0	0.00	+++++++++++	+++++++	0 0 0.00			+ +
3 6_No_Defect 2446 PPT 3 6_No_Defect 2447 PPT	15 30 SALINAZ 15 29 SALINAZ	6/11/2007	7460 7453 MHS15	07 MHT150007 U/S 472 SPS150019 8 VCF 08 MHS150007 U/S 441 SPS150009 8 VCF	353 355				0 0	0.00			0 0 0.00			
3 6 No Defect 2448 PPT	15 32 ROXEY	6/11/2007	7462 7459 MHS15	09 MHS150006 U/S 440 SPS150008 8 VCF	292 294				0 0				0 0 0.00			
3 6_No_Defect 2449 PPT 3 6_No_Defect 2450 PPT				09 MHS150008 U/S 442 SPS150010 8 VCF 09 MHS150012 D/S 443 SPS150011 8 VCF			 		0 0	0.00	++++++++++	++++++++	0 0 0.00			+
3 6_No_Defect 2450 PPT 3 6_No_Defect 2451 PPT 3 6_No_Defect 2452 PPT	16 34 WOODBURY	6/14/2007	7463 7464 MHS15	10 MHS150011 D/S 444 SPS150012 8 VCF 11 MHS150012 D/S 445 SPS150013 8 VCF	267 266				0 0				0 0 0.00			
5 5_140_Delect 2452 PP1	WOODBORY	0/14/2007	54 /405 MITISTS		204 204				0 0	0.00			0 0.00		шШ	

				General				Structural Defe	ect Cadina	1 _ 1 1 5	1 1	Operational and Maintenance			Construction Features	8 5	
	g.			Condition	Pipe			Olidotalai Boli	D D	pair t Rating fects fect So	xepu	Operational and Wallionalide		Rating Score	STORE	y Aband	
	Vo. VD No.	(Y)	50	stina MH ID Previous MH ID	Camer ID wer ID swer ID	ent (f)	Out Survey	Postero Historia	eforme	oint Re ags A Struc ural De	Nefect II	D (D)	Institution Character 1	k Maint Defects Defect 1 Index	Intruding Seal S	ruction r Surve	
ity ting ractor	No. No. ection 1 ersal Te	Month of the Location Location	EXIS	sting MH ID Previous MH ID	ting Se ling Se lous Sc lous S	Comm.	Crack Fracture	Broken Hole	J D X	Struct Struct	Deposits D AE AE Other	Fine (F) Tap (T) Medium (M)	Ball (B) I OB	emin	Line Material ∑ L IS M	Const cons fo	
Phase Prior Cont	Tape Inspi	Street Name	CCTV Date Star	rt End Start End	Exis:	GIS GIS	C M S H L C M S	H SV VV SV VV S	M L S M L A V H P S L	F RP S A L	AGS B % L % Z %	B L J C B L J C B L J C E	LJCGDRWCZ%	C R R T Total D & C R R D F B B D D	L U R LD RD SRH SRB SRL Z SA CU M	Reak Total	Comments Recommendations
3 6_No_Defect 2453 PPT 3 6_No_Defect 2454 PPT					D/S 446 SPS150018 8 VCP U/S 548 SPS150014 8 VCP	267 269 133 131				0 0	0.00			0 0 0.00			
3 6_No_Defect 2455 PPT 3 6_No_Defect 2456 PPT					U/S 549 SPS150015 8 VCP D/S 550 SPS150016 8 VCP	439 414 264 265				0 0	0.00			0 0 0.00			
3 6_No_Defect 2457 PPT	17 11	REDBIRD	6/15/2007 743	9 7440 MHS150016 MHS150017	D/S 551 SPS150017 8 VCP	436 415				0 0	0.00			0 0 0.00			
3 6_No_Defect 2458 PPT 3 6_No_Defect 2459 PPT					U/S 608 SPS150020 8 VCP D/S 609 SPS150021 8 VCP	215 220 164 154				0 0	0.00			0 0 0.00			
3 6_No_Defect 2460 PPT 3 6_No_Defect 2461 PPT					D/S 7841 SPS150001 8 VCP D/S 447 SPS160001 8 VCP	367 288 258 258				0 0	0.00			0 0 0.00 2			
3 6_No_Defect 2462 PPT	16 33	BUENA	6/14/2007 746	8 7467 MHS160003 MHS160002	U/S 448 SPS160002 8 VCP	128 108				0 0	0.00			0 0 0.00			
3 6_No_Defect 2463 PPT 3 6_No_Defect 2464 PPT					D/S 450 SPS160004 8 VCP U/S 451 SPS160005 8 VCP	256 257 81 100				0 0	0.00			0 0 0.00			
3 6_No_Defect 2465 PPT 3 6_No_Defect 2466 PPT	16 30				U/S 452 SPS160006 8 VCP D/S 453 SPS160007 8 VCP	300 301 256 257				0 0	0.00			0 0 0.00			
3 6_No_Defect 2467 PPT	18 34	LINNELL	6/20/2007 747	2 7443 MHS160007 COS160002	U/S 454 SPS160008 8 VCP	81 95				0 0	0.00			0 0 0.00			
3 6_No_Defect 2468 PPT 3 6_No_Defect 2469 PPT					D/S 455 SPS160009 8 VCP D/S 456 SPS160010 8 VCP	300 301 126 69				0 0	0.00			0 0 0.00	1 1	MSA	A = MCU
3 6_No_Defect 2470 PPT 3 6_No_Defect 2471 PPT	18 35				U/S 459 SPS160013 8 VCP D/S 460 SPS160014 8 VCP	115 113 350 354				0 0	0.00			0 0 0.00			
3 6_No_Defect 2472 PPT	18 30	ROXEY	6/20/2007 747	8 7482 MHS160013 MHS170003	D/S 462 SPS160016 8 VCP	328 336				0 0	0.00			0 0 0.00 1 3			
3 6_No_Defect 2473 PPT 3 6_No_Defect 2474 PPT				3 7502 MHS160014 MHS150021 4 7503 MHS160015 MHS160014	U/S 476 SPS150022 8 VCP U/S 477 SPS160023 8 VCP	330 333 328 333				0 0	0.00			0 0 0.00 1			
3 6_No_Defect 2475 PPT 3 6_No_Defect 2476 PPT	16 11				U/S 478 SPS160024 8 VCP D/S 479 SPS160025 8 VCP	162 166 166 160				0 0	0.00			0 0 0.00 3			
3 6_No_Defect 2477 PPT	16 14	TOURS	6/13/2007 750	5 7538 MHS160016 MHS160022	U/S 566 SPS160028 8 VCP	268 271				0 0				0 0 0.00			
3 6_No_Defect 2478 PPT 3 6_No_Defect 2479 PPT		BORDEAUX	6/13/2007 753	7 7538 MHS160021 MHS160022	D/S 481 SPS160027 8 VCP D/S 465 SPS160019 8 VCP	333 335 395 397				0 0	0.00	 	 	0 0 0.00 4	2		
3 6_No_Defect 2480 PPT 3 6_No_Defect 2481 PPT	16 15				U/S 464 SPS160018 8 VCP D/S 474 SPS160021 8 VCP	262 264 396 397				0 0	0.00			0 0 0.00			
3 6_No_Defect 2482 PPT	16 13	HARPER	6/14/2007 749	8 7501 MHS160025 MHS170009	D/S 475 SPS160022 8 VCP	374 398				0 0	0.00			0 0 0.00			
3 6_No_Defect 2483 PPT 3 6_No_Defect 2484 PPT	16 3	WESTMINSTER	6/12/2007 748	0 7481 MHS170002 MHS170003	D/S 578 SPS170008 10 VCP D/S 579 SPS170009 10 VCP	293 275 83 75				0 0	0.00	 	 	0 0 0.00 1			
3 6_No_Defect 2485 PPT 3 6_No_Defect 2486 PPT	16 4			1 7482 MHS170003 MHS170004 5 7500 MHS170007 MHS170008	D/S 580 SPS170010 10 VCP D/S 583 SPS170018 12 VCP	360 391 221 214				0 0	0.00			0 0 0.00			
3 6_No_Defect 2487 PPT	15 42	WESTMINSTER	6/11/2007 750	0 7501 MHS170008 MHS170009	D/S 584 SPS170019 12 VCP	201 204				0 0				0 0 0.00 2			
3 6_No_Defect 2488 PPT 3 6_No_Defect 2489 PPT				1 7515 MHS170009 MHR170001 0 6631 MHT120005 MHT120006	D/S 590 SPS170023 12 VCP D/S 373 SPT120001 8 VCP	329 333 285 286				0 0	0.00			0 0 0.00 3			
3 6_No_Defect 2490 PPT		GARDEN GROVE			D/S 289 SPT120008 8 VCP	253 253				0 0	0.00			0 0 0.00			
3 6_No_Defect 2491 PPT		BLVD GARDEN GROVE		2 6633 MHT120007 MHT120008		350 358				0 0	0.00			0 0 0.00	1 1		
3 6_No_Defect 2492 PPT 3 6_No_Defect 2493 PPT		BLVD FAIRVIEW	7/3/2007 0 12/31/2007 0		D/S 617 SPT120028 8 VCP D/S 293 SPT120013 8 VCP	380 383 30 47				0 0	0.00			0 0 0.00	 		
3 6_No_Defect 2494 PPT 3 6_No_Defect 2495 PPT		FAIRVIEW FAIRVIEW			U/S 302 SPT130014 8 VCP U/S 303 SPT130015 8 VCP	195 186 146 146				0 0	0.00			0 0 0.00 1			
3 6_No_Defect 2496 PPT		FAIRVIEW		8 6657 MHT130008 MHT130007	U/S 304 SPT130016 8 VCP	293 309				0 0				0 0 0.00			
					PVC Polyvin												
3 6_No_Defect 2497 PPT	22 11	LAIRD	7/3/2007 663	6 7018 MHT130011 COT130002	D/S 284 SPT130003 8 e	145 148				0 0	0.00			0 0 0.00		3	
					PVC Polyvin												
2 6 No Defeat 2409 DDT	22 10	GARDEN GROVE BLVD		6 7017 MHT130011 COT130003	U/S 283 SPT130002 8 e	200 222					0.00						
3 6_No_Defect 2498 PPT 3 6_No_Defect 2499 PPT	19 30	HILTON	6/22/2007 664	0 6639 MHT130015 MHT130014	U/S 286 SPT130005 8 VCP	264 265				0 0	0.00			0 0 0.00			
3 6_No_Defect 2500 PPT 3 6_No_Defect 2501 PPT					U/S 287 SPT130006 8 VCP U/S 292 SPT130008 8 VCP	270 272 122 123				0 0	0.00			0 0 0.00			
3 6_No_Defect 2502 PPT 3 6_No_Defect 2503 PPT					U/S 288 SPT130007 8 VCP U/S 290 SPT140003 8 VCP	270 272 144 137				0 0				0 0 0.00			
3 6_No_Defect 2504 PPT 3 6_No_Defect 2505 PPT	19 24	LEWIS	0/00/0007 664	2 6644 MUT440002 MUT440002	D/C 272 CDT440002 8 VCD	249 251				0 0				0 0 0.00			
3 6_No_Defect 2506 PPT	18 21	MARTY PEARCE	6/22/2007 664 6/19/2007 665	4 6638 MHT140003 MHT140004 9 6733 MHT140005 MHS140002	D/S 291 SPT140002 8 VCP U/S 553 SPT140030 8 VCP	200 203 195 175				0 0	0.00			0 0 0.00	 		
3 6_No_Defect 2507 PPT 3 6_No_Defect 2508 PPT					D/S 307 SPT140008 8 VCP D/S 308 SPT140009 8 VCP	273 256 195 197				0 0				0 0 0.00			
3 6_No_Defect 2509 PPT	18 19	PEARCE	6/19/2007 666	3 6660 MHT140009 MHT140006	U/S 306 SPT140007 8 VCP	237 199				0 0	0.00			0 0 0.00			
3 6_No_Defect 2510 PPT 3 6_No_Defect 2511 PPT	18 18 18 22	STEPHENS	6/19/2007 666	4 6666 MHT140010 MHT140011	U/S 309 SPT140010 8 VCP D/S 310 SPT140011 8 VCP	148 200 255 257				0 0				0 0 0.00			
3 6_No_Defect 2512 PPT 3 6_No_Defect 2513 PPT	18 31				U/S 311 SPT140012 8 VCP U/S 501 SPT140014 8 VCP	252 253 290 289				0 0			++++++++++++++++++++++++++++++++++++	0 0 0.00 1			
3 6_No_Defect 2514 PPT	18 11	BOLIVAR	6/19/2007 667	0 6669 MHT140015 MHT140014	U/S 502 SPT140015 8 VCP D/S 503 SPT140016 8 VCP	270 282				0 0	0.00			0 0 0.00			
3 6_No_Defect 2515 PPT 3 6_No_Defect 2516 PPT	18 10	FAIRVIEW	6/19/2007 667	0 6685 MHT140015 MHT140030	U/S 511 SPT140029 8 VCP	167 159 225 235				0 0	0.00			0 0 0.00			
3 6_No_Defect 2517 PPT 3 6_No_Defect 2518 PPT		FAIRVIEW TRASK			D/S 504 SPT140017 8 VCP U/S 618 SPT140018 10 VCP	396 398 289 273				0 0				0 0 0.00 2 3			
3 6_No_Defect 2519 PPT	23 10	TRASK ROBYN	7/6/2007 667	6 6673 MHT140021 MHT140018	U/S 402 SPT140019 10 VCP	250 258				0 0	0.00			0 0 0.00 2			
3 6_No_Defect 2520 PPT 3 6_No_Defect 2521 PPT	18 23	ROBERTA	6/19/2007 667	8 6680 MHT140023 MHT140025	U/S 516 SPT150005 8 VCP D/S 507 SPT140024 8 VCP	354 354 259 256				0 0				0 0 0.00			
3 6_No_Defect 2522 PPT 3 6_No_Defect 2523 PPT					U/S 508 SPT140025 8 VCP D/S 509 SPT140026 8 VCP	119 114 295 308				0 0				0 0 0.00			
3 6_No_Defect 2524 PPT	24 46	TRASK	7/13/2007 668:	2 6704 MHT140027 MHS140006	D/S 410 SPT140031 10 VCP	337 339 40 42				0 0	0.00			0 0 0.00 2			
3 6_No_Defect 2525 PPT 3 6_No_Defect 2526 PPT				7 6688 MHT150001 MHT150002	U/S 404 SPT140027 10 VCP D/S 512 SPT150001 8 DIP	330 334				0 0				0 0 0.00			
3 6_No_Defect 2527 PPT	23 9	ROBYN	7/6/2007 669	1 6690 MHT150005 MHT150004	U/S 515 SPT150004 8 VCP	58 58				0 0	0.00			0 0 0.00			
3 6_No_Defect 2528 PPT 3 6_No_Defect 2529 PPT	19 14				U/S 346 SPU130001 8 VCP U/S 347 SPU130002 8 VCP	333 331 324 332				0 0				0 0 0.00			
3 6_No_Defect 2529 PPT 3 6_No_Defect 2530 PPT 3 6_No_Defect 2531 PPT	19 12 19 15	SIEMON	6/21/2007 702	7 7026 MHU130004 MHU130003	U/S 348 SPU130003 8 VCP D/S 349 SPU130004 8 VCP	338 330 250 252				0 0	0.00			0 0 0.00			
2 6 No Defect 2522 DDT	40 4	GARDEN GROVE			U/S 358 SPU130006 8 VCP	260 263	 		+++++++++++++++++++++++++++++++++++++++	0 0	0.00	- 	 	0 0 0.00 1	1		
3 6_No_Defect 2533 PPT 3 6_No_Defect 2534 PPT	19 3	LEWIS	6/21/2007 703	8 7040 MHU130007 MHU130009	D/S 360 SPU130008 8 VCP	290 295				0 0				0 0 0.00			
3 6_No_Defect 2535 PPT	19 4	LEWIS	6/21/2007 704	0 7042 MHU130009 MHU130011	D/S 361 SPU130009 8 VCP D/S 362 SPU130010 8 VCP	291 293				0 0				0 0 0.00			
3 6_No_Defect 2536 PPT 3 6_No_Defect 2537 PPT					U/S 363 SPU130011 8 VCP D/S 366 SPU130014 8 VCP	134 139 250 251				0 0		++++++		0 0 0.00		$+++\mp$	
3 6_No_Defect 2538 PPT 3 6_No_Defect 2539 PPT		McEVOY	6/21/2007 662	6 7045 MHU130015 MHU130014	U/S 367 SPU130015 8 VCP	142 143				0 0	0.00			0 0 0.00			
3 6_No_Defect 2539 PPT 3 6_No_Defect 2540 PPT	19 /				D/S 368 SPU130016 8 VCP D/S 370 SPU130018 8 VCP	3/8 382 224 224				0 0				0 0 0.00			

ON 19		Structural Defect Coding Structural Defect Coding Vid.	Operational and Maintenance	Construction Features Construction Features Const	ed Abandomed
See To Se		Crack Fracture Broken Hole Joint 26 3 3 3 5 6 6	25	Infiltration Obstacles Vermin 5 2 3 4 7 2 4 2 4 2 4 2 4 4 4	#E F F F F F F F F F F F F F F F F F F F
3 6_No_Defect 2542 PPT 19 17 SIEMON 6/21/2007 7029 7032	B MHU140001 MHU140002 DIS 350 SPU140001 8 VCP 243 260 2 MHU140002 MHU140005 DIS 351 SPU140001 8 VCP 263 263 3 MHU140003 MHU140003 8 VCP 263 263 4 MHU140003 8 VCP 148 289		0 0 0.00	0 0 0.00	
3 6_No_Defect 2544 PPT 19 18 MARTY 6/21/2007 7032 7033 6_No_Defect 2545 PPT 19 19 MARTY 6/22/2007 7033 7034	3 MHU140005 MHU140006 D/S 354 SPU140005 8 VCP 308 309 4 MHU140006 MHU140007 D/S 355 SPU140006 8 VCP 305 306 308		0 0 0.00	0 0 0.00	
June Man 2	MHU140007 MHT140003 D/S 356 SPU140007 8 VCP 302 307 D MHK060011 MHK060012 D/S 1892 SPK060032 8 VCP 280 283.3 1 5		0 0 0.00 423B 24 63 2.63	0 0 0.00	
Map 1 RICHMOND	WHICHOUGH WHICHOUGH 2 15 1692 SPRUBBUOS 6 VUP 250 263.3 1 5 1 1 1 1 1 1 1 1	16 2	4235 24 63 2.63 4100 1 4 4.00	0000 0 0 0.00	
MAP MAP	11 MHT140021 MHT140026 D/S 7779 SPT140022 10 VCP 280 6		0000 0 0 0.00	0000 0 0 0.00	3' MSA (SIPHON) Both Side. Inspection couldn't complete.
5 8_Reeval_msa 1117 PPT 3-B3-5 21 PALM ST 8/29/2012 14065 1406	6 U/S 7713 new 8 VCP 50 3		0000 0 0 0.00	0000 0 0 0.00	3' MSA (SWEEP AT MH IS TOO SHARP). No Reversal Video
5 8_Reeval_msa 1118 PPT			0000 0 0 0.00	0000 0 0 0.00	3.2' MSA (Object In Joint). No Reversal Video
5 8_Reeval_msa 1119 PPT 3-85 13 STREET 9/13/2012 11127 1138 MAP WOODBURY 10/1/2012 10979 1099 5 8_Reeval_msa 1120 PPT 4-81-6 17 ROAD 10/1/2012 10979 1099			0000 0 0 0.00	0000 0 0 0.00	3.3' MSA (LL). No Reversal Video 9.9' MSA (Drop To OCSD MH). No
5 8.Reeval_msa 1120 PPT 4-81-6 17 ROAD 101/2012 10979 1098 5 8.Reeval_msa 1121 PPT 3-84-1 11 STREET 9/4/2012 14609 14602			0000 0 0 0.00	0000 0 0 0.00 1	Reversal Video 17' MSA (Pump Station). No Reversal Video
MAP NUTWOOD	3 MHM100040 MHM100030 U/S 3278 SPM100042 8 VCP 235 70.5		0000 0 0 0.00	0000 0 0 0.00	Multiple reaches were evaluated with one inspection. 70.5' MSA (At Offset) No Connection 11243 to 11141. Pipe ID is not correct. Ask City.
5 8_Reeval_msa 1123 PPT 3-83-3 21 NUTWOOD STREET 8/22/2012 11141 1124	3 MHM100041 MHM100040 U/S 3279 SPM100043 8 VCP 175 70.5		0000 0 0 0.00	0000 0 0 0.00	Multiple reaches were evaluated with one inspection. 70.5' MSA (At Offset) No Connection 11243 to 11141. Pipe ID is not correct. Ask City.
MAP	5 MHM200005 MHM200004 U/S 48 SPM200001 8 VCP 140 107.6		0000 0 0 0.00	0000 0 0 0.00	107.6' MSA (High Water Level). No Reversal Video 257.7' MSA (High Water Level). No
5 8_Reeval_msa 1125 PPT 2-2-1 24 FERN STREET 7/3/2012 7715 7715 5 8_Reeval_msa 1126 PPT 2-1-5 13 BROOKHURST 1-24/2012 14626 1462 6 1-1 <td>j MHJ120020 MHJ130004 DIS 748 SPJ120020 8 PVC 297 257.7 7 UIS 8396 new 6 VCP 247 259.8</td> <td></td> <td>0000 0 0 0.00</td> <td>0000 0 0 0.00 1</td> <td>Reversal Video 259.8' MSA (MSC). No Reversal Video</td>	j MHJ120020 MHJ130004 DIS 748 SPJ120020 8 PVC 297 257.7 7 UIS 8396 new 6 VCP 247 259.8		0000 0 0 0.00	0000 0 0 0.00 1	Reversal Video 259.8' MSA (MSC). No Reversal Video
5 8.Reeval_msa 1127 PPT May 1 47 BAILEY STREET 5/22/2012 7780 7779	9 MHE090019 MHE090018 U/S 1392 SPE090029 8 VCP 141 115.5		0000 0 0 0.00 22	2000 22 44 2.00	115.5' MSA (DAZ). No Reversal Video
5 8_Reeval_msa 1128 PPT	2 MHE090033 MHE090034 D/S 1959 SPE090053 8 VCP 169 123.1		0000 0 0 0.00 21	1 312C 22 45 2.00 1	123.1' MSA (DAZ). No Reversal Video
5 8 Reeval_msa 1129 PPT B1 35 GILBERT ST 6/11/2012 8954 8955	5 MHL030001 MHL040001 D/S 3666 SPL040001 10 VCP 273 89.4	4	3400 4 12 3.00 3	2300 3 6 2.00 1 1 1	89.4' MSA (Due to CIP). No Reversal Video
5 8_Reeval_msa 1130 PPT 81 61 STRATFORD.WAY 6/13/2012 9841 9838	3 MHN050041 MHN050038 U/S 3764 SPN050039 8 V/CP 93 177.5		0000 0 0 0.00	0000 0 0 0.00	177.5' MSA (No MH 9838) 1' MSA (DAZ)Camera Direction
5 8_Reeval_msa 1131 PPT May 29 PICKETT AVENUE 5/21/2012 8788 8789	9 MHF100015 MHF100016 DIS 1240 SPF100018 8 VCP 350 57.3		0000 0 0 0.00 12	5131 12 24 2.00 2	was U/S. We watched & changed it. Inspection couldn't complete 117.4' MSA (DAZ) & 215.7' MSA
June June Man 2 Man 2) MHE120005 MHE120006 D/S 1362 SPE120004 8 VCP 350 333.1	2	3200 2 6 3.00 10	1 312A 11 23 2.09 2	(JOM) from D/S MH. Inspection couldn't complete 6' MSA From both side (Siphon).
5 8_Reeval_msa 1133 PPT B1 52 B1 53 DALLAS DRIVE 6/12/2012 9896 9897	7 MHN060023 MHN060024 DIS 6140 SPN060023 8 VCP 90 12		1100 1 1 1.00	0000 0 0 0.00	Inspection couldn't complete 196.4' Small BVV. Major Defect. FIXED 2/19 & 24/2014 By G
8_Reeval_Majo	5 MHM180003 MHM180004 D/S 199 SPM180002 8 VCP 180 218.8 2	5 1	5134 8 22 2.75	2 1200 2 2 1.00	GROVE (Broken Pipe 194.5' , 2 cracks & replace new Wye) - (Phase 3, Project #92) Patch Repair
8_Reeval_Majo 5 r 99 PPT 4-81-5 25 Y DONEGAL DRIVE 9/19/2012 10572 1039	7 MHM170023 MHM170024 DIS 2220 SPM170019 8 VCP 340 340.1 1 ₃ 2	16 3 2 19 2	4C38 57 187 3.28 14 15	2000 29 58 2.00	Major. FIXED 9/10, 11/2013 By G GROVE (3 Fractures 48', 50.6' & 144') - (Phase 3, Project #97) Should Reline
June June S. Reeval Majo Wap 2 S T DALLAS DRIVE 6/12/2012 9695 9837	7 MH-N050018 MH-N050019 D/S 5006 SPN050054 8 VCP 381 383.6 1 ₁₁ 1 ₁₁	13 11 6 13 8	4C3B 4	6 4216 10 16 1.60 1	Too many Crades & Finctures. Major Defect. FIXED 10/15/2013, 12/10/2013 By G GROVE (3 Fractures at 49, 97, 94 F % Replace Broken Wye at 49.57 - (Phase 3, Friget #1003) Should Reline
8. Reeval Mino	5 MHN050043 MHN050044 DIS 4888 SPN050048 8 VCP 330 335 1	13 11 6 13 6	1 2 2.00	1 4 4.00	FIXED 8/19/2014 By G GROVE (Crack L at 321.4') - (Phase 3, Project #445)
8 Reeval Mino 2	0 MHR120024 MHS120004 DIS 4585 SPR120012 8 VCP 310 310.1				SMALL SAG. FIXED 8/28/2014 By G GROVE (Root Intrusion lateral at 68') - (Phase 3, El Rey Repair)
June 8 Regyal Minn Man 2		6 1	4136 17 36 2.12 16 6 1	3 3128 26 44 3.00	FIXED 2/7/2013 By G GROVE (HVV had been patched at 24.10') - (Phase 3, Project #77)
8, Reeval, Mino 10604 Garden	8 MHO130039 MHO130040 DS 2584 SPO130043 6 VCP 3 270 285	1	3 300	1 17 071	FIXED 1/8 & 9/2013 By G GROVE (3 Fractures at 189.6°, 191.6° & 196.2°, Sag 185 to 220 & 3 new Wye) - (Phase 3, Cypress Repair) Spot Repair, Cut roots
8 Reeval Mino Mao 2		26	3D13 29 81 2.79	4200	FIXED 7/10/2013 By G GROVE (Crack at 246') - (Phase 3, Project #94)
8_Reeval_Mino 5 r 402 PPT 4-B1-3 7 STERN AVE 9/11/2012 6852 6853	3 MHO200019 MHO200020 D/S 112 SPO200013 8 VCP 396 400.7 1	24	3C11 25 73 2.92	0000 0 0 0.00	FIXED 4/2 & 3/2013 By G GROVE (Fractures at 300.11' & 125.5') - (Phase 3, Project #86)
8_Reeval_Mino 5 r 410 PPT 3-2 4 FULMER DR 7/23/2012 9628 9625	9 MHO060023 MHO060024 DIS 3752 SPO060028 8 VCP 310 312.3 1 5	18	3821 24 61 2.54	0000 0 0 0.00	FIXED 11/27 & 28 /2012 By G GROVE (2 Fracture at 117.11' & 251.10') - (Phase 3, Project #75)
8_Reeval_Mino 5 r 433 PPT MAP 11 FAYE AVE 7/17/2012 9871 9872	2 MH-N070006 MH-N070012 D/S 6078 SPN070007 8 VCP 250 249.6 1	11	3A21 12 35 2.92	0000 0 0 0.00	FIXED 1/29/2014 8. 2/5/2014 By G GROVE (Fractures at 199. 1; 204.5 and Crack Circumferental @ 173.2, Replace 2 Wye) - (Phase 3, Project #80)
R Recyal Minn MAP	1 MHO200002 MHO200003 D/S 101 SPO200002 8 VCP 384 386.8		3800 8 24 3.00 8	2800 8 16 2.00	D/S MH was 6842. We checked GIS & changed it. FIXED 7/17, 18 & 23/2013 By G GROVE (Cracks 180.1' & 60.7') - (Phase 3, Project #91)
8_Reeval_Mino MAP		6 1	1 3623 24 39 1.63	0000 0 0 0.00	FIXED 5/8/2013 By G GROVE (35.5' Replace new Wye) - (Phase 3, Stanford Repair)
8, Reeval, Mino 5 7 830 PPT MAP 4-82-2 21 McMAINS STREET 9/13/2012 10610 10600	3 MHL160011 MHL160001 U/S 2602 SPL160002 8 VCP 300 300.1 1	3	3321 4 11 2.75	2100 1 2 2.00	FIXED 10/9/2012 By G GROVE (BVV at 162.5') - (Phase 3, Project #66)

				Ge	eneral									Structural De	efect Coding	g					Operat	tional and Ma	intenance						Construction	Features		res	d d	
	o o	ο ο ο ο ο ο ο ο ο ο ο ο ο ο ο ο ο ο ο				D D	ē.	Pipe		-						med psed Plpc ce age	Repair	ruct Ratir Defects	ct Index							aint Ratin	act Score					ellaneous ion Featu	irvey Aba	
y ng actor	No. No. Stion No.	Sal DVD I seal Insperior Check	-	Existing MH ID	Previous MH ID	ion of Car	us Sewe	(i) je	ength (ft)	(f)	Crac	Frac	ture I	Broken Hole B H		D X	Point	Quick St Structural	ural Defe	Deposits D	Fine (F)	Roots Tap (T)	(R) Medium (M)	Infil Ball (B)	ration Obstacles Ve	emin 5 V	D&M Defa	Tap (Lateral)	Line L	Intrud Ma	ding Seal laterial	M Miso	ons for Su lentified A	
Phase Priority Rankir	Tape h DVD N Inspec	2 Street Name	CCTV Date	Start End	Start End	Directi	Previo	Size (ii Materi	Joint L GIS C	Length	L C M	S H L C I	иѕнѕ	sv vv sv vv s	S M L S	S M L A V H P S LF	RP S	PACP Total 9	Structi	AGS B % L % Z % B	L J C	BLJC	B L J C B	LJCGE	R W C Z %	D ACP	Total C O&M [FD FL BI BD	D L U R L	D RD SRH SR	RB SRL Z SA C	ON WC E	Reaso GIS Id	Comments Recommendations FIXED 3/26/2013 By G GROVE
8_Reeval_Mino 5 r 592 PPT	MAP 4-B2-3 8	WOODBURY ROAD	9/28/2012	10437 10436 M	HO160001 MHO1500	044 U/S 2158	SPO160025	8 VCP		335 339	.3 1							3100 1 3	3.00		2					1200	2 2 1.00						(1)	(BSV at 286.4', Fracture at 100') - (Phase 3, Project #84) FIXED 11/7/2012 By G GROVE (
5 8_Reeval_Mino r 595 PPT	MAP 4-B1-5 15	11th STREET	9/19/2012	6897 6898 M	HN180006 MHN1800	007 D/S 194	SPN180034	8 VCP		380 69	8 1							3100 1 3	3 3.00							0000	0 0 0.00						E (1	BVV & Fixed 2 Wye at 176.5') - (Phase 3, Project #67) FIXED 10/9/2013 By G GROVE
8_Reeval_Mino 2 r 813	R058 3	Y RAMONA DR	11/11/2005	12322 12323 M	HP140022 MHP1400	023 D/S 4296	SPP140021	8 VCP		240 229	.7 1							1 3	3		1 8		1				10 12						(I	(New Wye at 188) - (Phase 3, Ramona Lateral Repair) FIXED 3/18/2014 By G GROVE
3 8_Reeval_Mod 3 erate 38 PPT	45 25	KNOTT EASEMENT	10/5/2007	8141 8140 M	HH120008 MHH1200	007 U/S 917	SPH120007	8 VCP		288 29	1				2			2 6	3.00								0 0 0.00						(1	(Repair 2 JOM at 279.1' & 282.8') - (Phase 3, Project #150) FIXED 3/19/2014 By G GROVE
3 8_Reeval_Mod erate 42 PPT	39 42	FIELDGATE	9/10/2007	7157 7158 N	MHI090012 MHI0900	13 D/S 1010	SPI090001	8 VCP		235 23	6	1						1 2	2.00								0 0 0.00						(1	(Fracture Circumferential at 228.5') - (Phase 3, Project #154) FIXED 9/27 & 28/2011 By G
8_Reeval_Mod 1 erate 54	13 15	x 10712 Frances Av.	3/2/2004	11099 11100 M	IHO140028 MHO1400	129 DS 2319	SPO140015	6 VCP	2	303 30	7 1 1						1	10 30	0 3.00							3	57 0.78	1 1					G F	GROVE (126.7' repair TBI & 162.9' Fractured Wye) - (Phase 1, Project #214) Replace pipe
8_Reeval_Mod 2 erate 61	G008 6	DALE ST			IHK070044 MHK0700			8 VCP		366 369	.9 1 1 1	2 1			1		1	15 22 47	7	2 3 5.00	1 2		2				10 22							Sag. FIXED 4/15/2014 By G GROVE (Lateral at 351') - (Phase 3, Dale Lateral Repair)
8_Reeval_Mod																																	F	FIXED 4/8/2014 & 5/20/2014 By G GROVE (Crack at 148.1' & Fracture at 13.1') - (Phase 3,
3 erate 61 PPT	1 4	HEWITT LN.	3/20/2007	0 0 M	HK160009 MHK1600	010 D/S 272	SPK160010	8 VCP		152 17	4 2	1						3 4	1.33								0 0 0.00					+	F I	Project # 173) FIXED 3/27/2014 & 4/1/2014 By G GROVE (Fracture at65.1' &
8_Reeval_Mod 3 erate 62 PPT	1 9	LARIAT	3/20/2007	0 0 M	HK160011 MHK1600	028 D/S 645	SPK160034	8 VCP		165 16	4	1						1 2	2.00								0 0 0.00						F	Cracks at 15.5' -18') - (Phase 3, Project #174) FIXED 4/23/2014 By G GROVE
8_Reeval_Mod 3 erate 63 PPT	1 11	RIATA	3/20/2007	0 0 M	HK160012 MHK1600	034 U/S 648	SPK160036	8 VCP		120 12	3	1						1 2	2.00								0 0 0.00					+	F	(Fracture at 119.5') - (Phase 3, Project #175) FIXED 10/12/2011 By G GROVE
8_Reeval_Mod 1 erate 67	42 8	x 8851 Anthony Ave.	4/19/2004	8397 8398 _M	IHK120014 MHK1200	015 DS 3371	SPK120015	8 VCP	3	317 31	5 2 3 4	1	ı					25	5 3.13	5		10 1	1			8	22 0.61	1				+H	F	(221.5' Crack in Wye) - (Phase 1, Project #227) Replace pipe
8_Reeval_Mod 3 erate 69 PPT	20 26	CORVETTE	6/26/2007	9040 9041 M	IHL100009 MHL1000	110 D/S 3507	SPL100021	8 VCP		236 23	6							1 4	4.00								0 0 0.00	1					(I n	(Multiple Fracture at 4.5'& replace new Wye at 30') - (Phase 3, Project #181)
8_Reeval_Mod 3 erate 70 PPT	34 11	HARVEY	8/14/2007	9043 9042 M	IHL100012 MHL1000	011 U/S 3509	SPL100023	8 VCP		197 20	1	1						1 2	2 2.00		1	1					2 3 1.50	2					(1	FIXED 6/17/2014 By G GROVE (Fracture & New Wye at 52') - (Phase 3, Project #182)
8_Reeval_Mod 3 erate 71 PPT	34 10	LAVINA	8/14/2007	9045 9046 N	IHL100014 MHL1000	015 D/S 3512	SPL100026	8 VCP		230 23	0	1						2 6	3.00								0 0 0.00						-	FIXED 6/5 & 11/2014 By G GROVE (Fracture at 10.5' & 225.8') - (Phase 3, Project #183)
8_Reeval_Mod 3 erate 74 PPT	20 29	HEALEY	6/26/2007	9066 9069 N	IHL100042 MHL1000	043 D/S 3527	SPL100042	8 VCP		359 36	4							1 4	4.00								0 0 0.00						(1	FIXED 9/30/2014 By G GROVE (Fractures at 156.6' & 159') - (Phase 3, Project #186)
8_Reeval_Mod 3 erate 75 PPT	1 24	YOAK	3/22/2007	11043 11065 N	IHL150018 MHL1500	121 D/S 2298	SPL150037	8 VCP		274 27	6	1						1 2	2 2.00								0 0 0.00						(1	FIXED 10/7/2014 By G GROVE (Fracture Circumferential at 49.1') - (Phase 3, Project #187)
8_Reeval_Mod 1 erate 76	10 20	x 12521 Leroy Ave.	0/0/0004	0296 9479	IHL110035 MHL1100	2120	SDI 110022	8 VCP		350 35									4 000								0.040							FIXED 11/16/2011, 12/1/2011 By G GROVE (Fracture Wye at 119.1' & 217.4',) - (Phase 1, Project #236) Replace pipe
8_Reeval_Mod 3 erate 76 PPT	1 1	McMAINS			IHL110035 MHL1100			8 VCP	3	300 30	4	111			1			1 4	1 2.63	10	2	3 3					0 0 000	2					l d	FIXED 10/21/2014 By G GROVE (Fracture Multiple at 185.2') - (Phase 3, Project #188)
8_Reeval_Mod 3 erate 77 PPT	1 12	YOAK			IHL150028 MHL1600			8 VCP		305 30								1 1	4.00								0 0 0.00						(1	(Flase 3, Friget # 100) FIXED 10/8/2014 By G GROVE (Fracture at 240.2' - 243') - (Phase 3, Project #189)
8_Reeval_Mod	1 12	TOAK	3/22/2007	10005 W	WHE1000	D/S 2007	SF E100000	o ver		303 30									4.00								0 0 0.00						1	GROVE (Fracture at 23.4' & Crack Multiple at 221.1') - (Phase
3 erate 78 PPT	1 16	INGRAM	3/22/2007	11031 11033 N	IHL160014 MHL1600	116 D/S 2612	SPL160011	8 VCP		256 26	0 1	1						2 5	2.50								0 0 0.00					+H	3	3, Project #190) FIXED 12/9/2014 By G GROVE
8_Reeval_Mod 3 erate 79 PPT	32 14	GAMBLE	8/9/2007	10248 10250 M	HM050007 MHM0500	011 D/S 4535	SPM050021	8 VCP		357 34	9	3						4 10	0 2.50								0 0 0.00	1 2					(I	(Replaced Fracture Wye at 198', Fracture at 182.2'- 184.6' & 128.9'- 130.7') - (Phase 3, Project #191)
8_Reeval_Mod 3 erate 80 PPT	34 8	GAMBLE			HM050010 MHM0500					170 17	3							1 4	4.00								0 0 0.00						(1	FIXED 10/23/2014 By G GROVE (Fracture at 66.1') - (Phase 3, Project #192)
8_Reeval_Mod																																	(1	FIXED 1/29/2015 By G GROVE (Fracture Circumferential at 155.8' & Replace TBI at 136.1'- 139.5') -
3 erate 82 PPT	36 33	GARDENAIRE	8/27/2007	10257 10028 M	HM050018 MHM0600	031 D/S 4545	SPM060008	8 VCP		170 17	4	1						1 2	2 2.00								0 0 0.00	1					1	(Phase 3, Project #194) FIXED 1/20/2015 By G GROVE (Fracture at 50.8' & 38.2' Replace
8_Reeval_Mod 3 erate 84 PPT	35 37	BARCLAY	8/22/2007	10181 10182 M	HM050021 MHM0500	022 D/S 3701	SPM050032	8 VCP		210 21	2	:	2					2 8	4.00								0 0 0.00					+	#	new Wye) - (Phase 3, Project #196) FIXED 3/4/2015 By G GROVE
8_Reeval_Mod 3 erate 85 PPT	35 30	KATELLA AVE	8/20/2007	9723 9724 M	HM050023 MHM0500	024 D/S 5050	SPM050009	8 VCP		335 33	7 1	:	2					3 11	1 3.67								0 0 0.00							FIXED 3/4/2015 By G GROVE (Fracture Circumferential at 235.1') - (Phase 3, Project #197)
8_Reeval_Mod 3 erate 98 PPT	36 35	JOYZELLE	8/28/2007	10100 10101 M	HM060035 MHM0600	036 D/S 4696	SPM060037	8 VCP		360 25	4 1	1						2 5	2.50								0 0 0.00						(1	FIXED 12/13/2014 By G GROVE (Hole at 148.9') - (Phase 3, Joyzelle Lateral Repair)
9 Page Mark																																	E	FIXED 7/27,28 /2011 & 9/9/2011 By G GROVE (Crack multiple at 85 61 152 31 & Experture at 200 61)
8_Reeval_Mod 1 erate 103	8 23	x 12621 Fletcher Dr.	2/18/2004	10691 10692 M	IHN110028 MHN1100	DS 2626	SPN110035	8 VCP	4	335 31	7 1		2		2	1	+	14	4 2.33	3		+++		++++		+	6 0.29	+ + +			+ + +	+ + +	(1	83.6'; 152.1' & Fracture at 209.6') - [Phase 1, Project #263) Replace pipe FIXED 10/25,26/2011 & 11/1/2011 By G GROVE (Fracture
8_Reeval_Mod 1 erate 105	34 14	x 12860 Louise St.	4/5/2004	8431 8432 M	IHK120033 MHK1200	034 DS 3409	SPK120035	8 VCP :	3.5	321 32	0 1	2			4			14	4 2.00	7	1	Ш					6 2.00						a F	11/1/2011 By G GK0VE (Fracture at 296; 107.5 at 11.3) - (Phase 1, Project #265) Replace pipe FIXED 4/5,10,17 & 19/2012 By G
8_Reeval_Mod																																		ROVE (Fracture at 179.1'-182.1', Cracks 148.4' & 210.6'-219.8' , new Wye at 9.5') - (Phase 1, Project
1 erate 106	3 25	x 10361 Law Dr.	2/6/2004	11269 11270 N	INW14046 MNW140	047 DS 2553	SPN100030	8 VCP	3	280 27	5 3 1	2	1					14	4 2.33								0 0.00	3					#	#266) Reline, Repair lateral FIXED 4/24/2012, 5/1,2,3/2012
8_Reeval_Mod 1 erate 114	34 8	x 8670 Acacia Ave.	4/2/2004	8414 8425 M	IHK120023 MHK1200	027 DS 3392	SPK120025	8 VCP	3	330 33	0		3					13	3 2.60								44 1.61						3	#1/EU #1/24/2012, 91,2,3/2012 By G GROVE (Fractured Pipe at 322.3', 162.4', 54.1' & Crack at124.8') - (Phase 1, Project #274) Spot Repair
																																	1 1 2	FIXED 5/31/2012, 6/ 5, 6 & 12/2012 By G GROVE (3 crack & 2 Fractured Pipe & new Wye at
8_Reeval_Mod 1 erate 117	37 21	x 12791 Fem St.	4/9/2004	7699 7700 N	MHJ120011 MHJ1200	012 DS 733	SPJ120013	8 VCP	3	370 35	8 3 2						+	13	3 2.17	2		2				+	5 0.44	1			+ + +	+	1 #	149.9' to 153.1') - (Phase 1, Project #277) Reline, Cut roots, Fix Lat FIXED 8/16,17 &23/2011 By G
8_Reeval_Mod 1 erate 121	36 10	8432 Lenore Dr.	4/7/2004	7089 7702 N	MHJ110003 MHJ1100	004 DS 823	SPJ110014	8 VCP		381 38	1 2	1					\bot	12	2 2.40	1		+++					0 0.00				+ + +	+	2	GROVE (Cracks at 42.7',98' & 252.5') - (Phase 1, Project #281) Spot Repair, Cut roots 12' Small BVV. Moderate Defect.
8_Reeval_Mod 5 erate 121 PPT	MAP 4-B1-4 15	BROOKHURST Y STREET	9/13/2012	10401 10531 M	HN170037 MHN1700	038 D/S 2133	SPN170004	8 VCP		390 396	.8 3 3 16			1			\perp	5141 25 68	8 2.72	16	1				∐∐ ,	6 2B17	23 39 1.70	$\perp \mid \mid \mid \mid \mid$					F F (I	FIXED 11/1 /2012 By G GROVE (Replace Patched BVV at 12.4') - (Phase 3, Project #73) Patch Repair
8_Reeval_Mod																			П														2	FIXED 3/6, 7, 13, 15/2012 By G GROVE (Crack at 60', 216'-218.2', 259.2' & 308.5') - (Phase 1, Project
1 erate 125	35 24	8312 Central Ave.	4/12/2004	/684 7724 M	IHK140036 MHJ1400	001 DS 828	SPJ140030	8 VCP		331 33	2 4					+++++++++++++++++++++++++++++++++++++++		12	2 2.40	3 2		111	++++				9 1.76			+++		\perp	#	#285) Spot Repair, Clear D&R

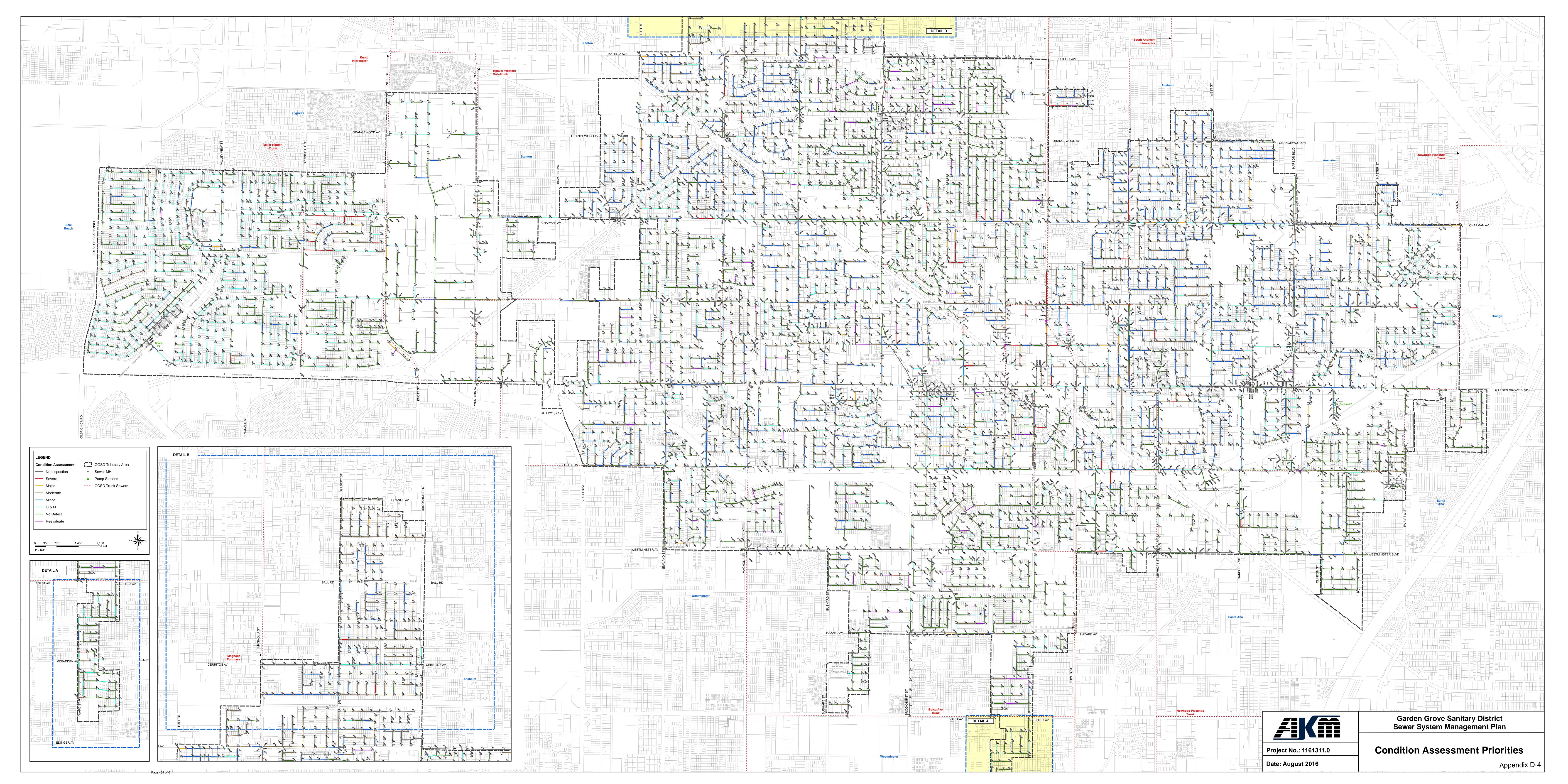
		o c			General		ē		Pipe						Struc	ural Defect Coo	ding	adid be	ailure	st Rating efects	Index		Operation	nal and Mainter	inance			rt Rating		Construct	tion Features		meous Features	sy Aband. andoned	
lority iority anking outractor	upe No. VD No. spection No. eversal Tape No.	vD Watched? ()		Existing MH	H ID Previous M	1H ID	rection of Came	evious Sewer II	aterial	S Comment	ngth (ft)	C	ack C	Fracture F	Broken H	О О	Joint J S	X Collaps Surface Damage	Point R	ACP Quick Structural Districtural Districtur	nal Structural Daructural Daructural Daructural Defect	AE AE Other		Roots (R) Tap (T) M	fledium (M) Ba		ation Obstacles Vermi OB V Other	ACP Quick Mair AcP Quick Mair atal O&M Defect atal O&M Defect SM Defect Index	Tap (Latera	al) Lin	ne In	ntruding Seal Material	Miscella Miscella and a Miscella and	sasons for Survi	
8_Reeval_Mod 3 erate 125 PPT	31 1	Street Name	8/3/2007	9714 97	713 MHN050028 M	End	□ ŵ	SPN050029 8	5 ≥ -	5 0	370 37	L C	M S H L	C M S I	H SV VV SV	VV S M L	SMLA	/ H P S	LF RP	1 2	2 200	AGS B % L % Z % B	L J C	BLJCB	BLJCBI	LJCGD	RWCZ%C	0 0 0.0	FD FL BI E	BD D L U F	R LD RD SRH	SRB SRL Z SA	CU MC F	æ o	Comments Recommendations FIXED 5/21/2014 By G GROVE (Fracture at 184') - (Phase 3, Project #228)
8_Reeval_Mod 5 erate 126 PPT	MAP	Y 15th ST			974 MHN170024 M				3 VCP		390 26	4			1					5100 1 5	5 500						1	1100 1 1 10							235.8' Small BSV. Moderate Defect. FIXED 3/12/2013 By G GROVE (HVV at 235.7') - (Phase 3, Project #76) Patch Repair
8_Reeval_Mod 3 erate 127 PPT	30 37	ALDGATE			0349 MHN050033 M				3 VCP		294 29	6		1						1 4	4 4.00							0 0 0.0							FIXED 6/18/2014 By G GROVE (Fracture at 50.1') - (Phase 3, Project #240)
8_Reeval_Mod	MAP																																		Fractures & Cracks. Moderate Defect. FIXED 8/28/2012 & 9/5/2012 By G GROVE (Fracture & Replace W ye) - (Phase 3, Project
5 erate 127 PPT 8_Reeval_Mod 3 erate 128 PPT		Y PEARCE ST DEWEY			943 MHN050041 M				3 VCP		338 33		7 2	1 20	1					4C39 37 12	25 3.38	0	2				4	0 0 0.0	0						#50) Should Reline FIXED 6/3/2014 By G GROVE (Fracture at 26.7') - (Phase 3, Project #241)
8_Reeval_Mod 1 erate 129	46 8	12552 Edieth Dr.	5/6/2004	9483 94	484 MHM110007 M	IHM110008 [DS 3571	SPM110011 8	3 VCP		300 30	3 1	1	1 1							11 275							7 11	6						FIXED 5/15,16 & 23/2012 By G GROVE (Fracture at 94.9', Crack & Fractured Wye at181.3' & 43') - (Phase 1, Project #289) Spot Repair
8_Reeval_Mod	25 2				373 MHL110050 M				3 VCP		300 30	2 1	2	1							11 275	3	1					2 00							FIXED 1/10,11 & 17/2012 By G GROVE (Cracks at 254.3' &98.9', Fracture at 9.3') - (Phase 1, Project #290) Spot Repair, Cut roots
8_Reeval_Mod 1 erate 131	17 17	9332 Marietta Dr.			465 MHL120010 M				3 VCP		308 30		2	1							11 2 20							156 1 9	3						FIXED 1/24,31 & 2/1/2012 By G GROVE (Cracks at 147.8' & 237.1', Fracture at 72.5') - (Phase 1, Project #291) Spot Repair, Cut roots
8_Reeval_Mod 3 erate 132 PPT	39 7	GARDEN			0230 MHN060015 M				3 VCP		190 19	2		1 1						2 6	6 3.00							0 0 0.0							FIXED 8/12 /2014 By G GROVE (Fractures at 9.4° & 12.2') - (Phase 3, Project #245)
8_Reeval_Mod 5 erate 133 PPT	MAP 4-B2-1 14	TAFT ST	9/7/2012	10982 109	0983 MHO160024 M	IHO160025 E	D/S 6006	SPO160002 8	ycp vcp		250 248	1.9	1 1	5 11						4A32 18 6	50 3.33							0000 0 0 0.0	0						FIXED 10/17/2012 By G GROVE (Replace Wye) - (Phase 3, Project #65) FIXED 2/22,23 & 28/2012 By G
8_Reeval_Mod 1 erate 134	23 13	12901 Lucille Ave.	3/16/2004	8492 84	491 MHL120027 M	1HL120026 U	US 3151	SPL120025 8	3 VCP		303 30	5 1	3							1	11 2.75							0 0.0	0						GROVE (Cracks at 102.5' , 165.1' & 204.3'-207.2') - (Phase 1, Project #294) Spot Repair
8_Reeval_Mod 3 erate 135 PPT	32 18	McDANIEL	8/9/2007	9901 99	900 MHN060030 M	IHN060029 L	U/S 4868	SPN060027 8	3 VCP		310 31	3		1						1 4	4 4.00							0 0 0.0	0						FIXED 8/6/2014 By G GROVE (Fracture Multiple at 137') - (Phase 3, Project #248)
8_Reeval_Mod 1 erate 136	46 23	x 9852 Beverly Ln.	5/10/2004	9497 94	498 MHM100016 M	IHM100017	DS 3423	SPM100019 8	3 VCP :	3	280 27	7 1		2						11	10 2.50	9	1					11 0.2	3						FIXED 6/21 & 22/2011 By G GROVE (Fractured Pipe at 196.3' & 50') - (Phase 1, Project #296) FIXED 6/24 & 25/2014 By G
3 8_Reeval_Mod 136 PPT	32 17	McDANIEL	8/9/2007	9903 99	901 MHN060031 M	IHN060030 L	U/S 4869	SPN060028 8	3 VCP		319 32	1		1 1						2 6	6 3.00							0 0 0.0	0						GROVE (Fractures at 204.5' & 233.1') - (Phase 3, Project #249) FIXED 7/12 &14/2011 By G
8_Reeval_Mod 1 erate 138	8 15	x 10332 Park Ave.	2/17/2004	11246 112	1247 MHN120012 M	1HN120013	DS 2534	SPN120013 8	3 VCP	5	350 35	7 2 2		1						11	10 3.33	6		2 2	2 4			2 0.4	3 1						GROVE (2 Cracked Wye at 28.2 ' - 33.3 & 270.1') - (Phase 1, Project #298) Reline, Cut R, Fix Lat FIXED 6/29 &30/2011 By G
8_Reeval_Mod 1 erate 139	27 21	13332 Earle Dr.	3/23/2004	11539 115	1540 MHL140030 M	MHL140031	DS 2707	SPL140015 8	3 VCP		370 36	3	2	1						11	10 1.67	1						3 0.6	0						GROVE (2 Cracked Pipe at 62.6' - 67' & 311.6) · (Phase 1, Project #299) Spot Repair, Cut roots FIXED 2/8, 9 & 14/2012 By G
8_Reeval_Mod 1 erate 141	16 18	12622 Edieth Dr.	3/4/2004	10747 107	0748 MHM110032 M	IHM110033	DS 2665	SPM110021 8	3 VCP		310 31	1 1	2	1						11	10 2.50	1						0 0.0	0						GROVE (2 Cracked Pipe at 16' & 57.3' & Fracture at 293.4') - (Phase 1, Project #301) Spot Repair, Cut roots
8_Reeval_Mod 1 erate 142	37 9	8422 Acacia Ave.	4/8/2004	7087 76	694 MHJ120003 M	MHJ120006	DS 723	SPJ120003 ε	3 VCP		256 25	7 1	2	1						1	10 2.50							81 0.8	3						FIXED 6/2 & 14/2011 By G GROVE (2 Cracked Pipe at 40.3' & 204.1) - (Phase 1, Project #302) Spot Repair
8_Reeval_Mod 5 erate 143 PPT	MAP 3-4 12	Y 9th STREET	7/04/0040	12006 120	2997 MHP070026 M	IUDnennoo P	0/9 6210	SPROZOOS	3 VCP		320 32	4 5 12								463D 50 12								2713 10 17 1.7							Cracks & Fractures. Moderate Defect. FIXED 10/3/2013 By G GROVE (Replace Broken Sewer Lateral at 55) - (Phase 3, 9th St. Lateral Repair) Should Reline
			7/31/2012									. 3 12	20							30 12	20 2.32							3.00 10 17 1.7							Inspection Report shows 282.2' BVV. This is RPP & ve changed it. FIXED 1/16/2013 By G GROVE
5 erate 152 PPT		Y MAST AVE	9/11/2012	6841 68	842 MHO200003 M	IHO200004	D/S 102	SPO200003 8	3 VCP		400 401	.5 7 6	14	4					1	453A 32 8	30 2.50							0000 0 0 0.0	0						(BVV at 283.4') - (Phase 3, Project #78) FIXED 7/11, 12, 17 & 18/2012 By
5 8_Reeval_Mod 5 erate 154 PPT	MAP 4-B2-1 15	LINNELL AVE	9/7/2012	11002 109	0983 MHO160023 M	IHO160025	D/S 4620	SPO160024 8	yCP VCP		255 249	1.2 4	1	1 5 1						4532 12 3	36 3.00							0000 0 0 0.0	0						G GROVE (2 Cracks, 3 Fractures & 1 Wye) - (Phase 3, Project #14) FIXED 9/17/2013 By G GROVE
8_Reeval_Mod 5 erate 155 PPT	MAP 4-B2-3 7	BOWEN STREET	9/28/2012	10499 105	0500 MHN150035 M	IHN150036 E	D/S 2244	SPN150025 8	3 VCP		291 290	.6 3	1	1 5						4531 10 3	31 3.10							0000 0 0 0.0	0						FIXED 9/17/2013 By G GROVE (Fractures & wye 187.2' to 189.4') - (Phase 3, Project #102) FIXED 6/13/2012 By G GROVE (
5 8_Reeval_Mod erate 166 PPT	MAP 4-B2-3 16	ERIN STREET	9/21/2012	10540 105	0546 MHM150014 M	IHM150021	D/S 2031	SPM150009 8	3 VCP		280 281	.3 3 1	5	4						4435 13 3	38 2.92							0000 0 0 0.0	0				2		1 JOL & 2 JOM fixed at 41.4' to 49.9') - (Phase 3, Project #7)
8_Reeval_Mod 5 erate 179 PPT	June Map 2 B1 60	BROOKSIDE Y DRIVE	6/13/2012	9949 99	950 MHN060047 M	IHM060043 E	D/S 4892	SPN060038 8	3 VCP		262 263	i.7 1 4	6	1	1					6 4136 19 4	42 2.21	6					6	2616 12 18 3.0	0						Laterals @ 208.5' & 217.4' have over 50% Deposit. FIXED 10/12/2012 By G GROVE (188.6' BVV) - (Phase 3, Project #54) Clean laterals
8_Reeval_Mod 5 erate 181 PPT	MAP 4-B2-3 6	LAKE STREET	9/28/2012	6816 68	817 MHO180029 M	IHO180030 E	D/S 79	SPO180013 8	3 VCP		350 347	.3 2	2	1 3						4332 8 2	24 3.00							0000 0 0 0.0	0						FIXED 3/13/2013 By G GROVE (CM & new Wye at 105.5) - (Phase 3, Project #98) FIXED 10/23 & 31/2012 By G
5 8_Reeval_Mod 6 erate 189 PPT	MAP 4-B1-4 11	Y KERN AVE	9/13/2012	7257 72	258 MHO180013 M	IHO180014 E	D/S 133	SPO180029 8	3 VCP		306 309	.1 7 5	17 1 2	1	1					423B 34 9	91 2.68		8		2		1	3219 11 15 1.3	6						FIXEU 10/23 & 37/2012 By G GROVE (2 Fractured Pipe at 144.11' & 109.11') - (Phase 3, Project #72) FIXED 87/2012 By G GROVE
8_Reeval_Mod 5 erate 201 PPT	June Map 2 B1 55	Y STRATFORD WAY	6/12/2012	9905 148	1804 MHN060033 M	IHN060034 E	D/S 5013	SPN060032 8	3 VCP		312 320	.7 9	10	2						423A 21 4	47 2.24	20					3	2C13 23 43 2.0	0						FIXED 8/7/2012 By G GROVE (Replace Patched BVV at 236') - ((Phase 3, Project #26) FIXED 10/16/2012 By G GROVE
5 B_Reeval_Mod erate 208 PPT	MAP 1-2 5	Y SANTA ROSALIA	7/19/2012	7214 72	215 MHI090022 N	MHI090024 E	D/S 868	SPI090021 8	Clay Tile		243 241	.2 6 1	3	2						20 4233 32 7	70 2.19	4	2				12	241A 18 22 1.2	2	+++					(JOM & Small HVV at 216.8') - (Phase 3, Project #57) Moderate. Pipe ID was 2523, we
8_Reeval_Mod 5 erate 216 PPT	MAP 2-2-2 25	CORVETTE STREET	7/16/2012	9064 90	062 MHL090027 M	1HL090025 L	U/S 3523	SPL090028 8	Clay Tile		184 183	.5 7 1	2	2						4232 12 2	29 2.42		1					1100 1 1 1.0							checked GIS & changed it. FIXED 6/28/2012 By G GROVE (Fractures & Cracks at 173.6' to 178.8') - (Phase 3, Project #19)
8_Reeval_Mod 1 erate 224	37 23	13192 Jefferson St.	4/9/2004	7683 76	684 MHK130044 M	1HK140036	DS 717	SPK130046 8	3 VCP		330 32	3	2							6	6 3.00	5		3				12 0.6	3						FIXED 3/25/2014 By G GROVE
8_Reeval_Mod 5 erate 226 PPT	MAP 2-1-1 13	Y ALAMITOS WAY	7/9/2012	8467 84	469 MHL120011 M	1HL120012 E	D/S 3127	SPL120012 8	3 VCP		390 39	2 2 14	40	1						413G 57 14	42 2.49	22 8					1	2D11 32 65 2.0	3 1	+++					G GROVE (2 Crack in Wye) - (Phase 1, Project #130) Inspection Report shows 204' BSV,
5 8_Reeval_Mod erate 234 PPT	MAP 3-4 14	Y MEDINA DRIVE	7/23/2012	9930 999	924 MHO080025 M	IHO090016 E	D/S 4215	SPO080025 8	Clay Tile		339 326	i.1 21 1	14 2	1						413B 39 9:	95 2.44	21	2		2			322C 25 50 2.0							This is FM & we changed it. FIXED 9/12/2012 By G GROVE (Fracture at 205.8') - (Phase 3, Project #55)
5 8_Reeval_Mod erate 237 PPT	MAP 2-1-4 10	FAYE AVE			871 MHN070005 M				3 VCP		257 261	.4 2	10 1	1						413A 14 3	38 2.71							0000 0 0 0.0	0						MODERATE. FIXED 1/15, 28, /2014 By G GROVE (Cracks at 96.11 to 99.2; Fracture at 256.6') - (Phase 3, Project #105)
										-	-																				-				

			General				ı		Structural Defec	ct Coding		D		Operational and	d Maintenance			Construction Features	So	р _Б	
io io io	3			D era	Pipe						ned sed Pipe ge Failure	uct Ratin Defects Defect St	t Index				int Rating cts		llaneous on Featur	vey Abar bandoned	
0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0	Location	Exis	isting MH ID Previous MH ID	n of Carr Sewer	ngth (ft)	(f)	Crack	Fracture	Broken Hole	Joint .l	X Collap Surfax Dama Lining	Sags Suick Str ructural	Deposits	Ro Fine (F) Tan (oots (R)	Infiltration Ob	stacles Vermin OB V OB V Tap	(Lateral) Line Material	M Misce	s for Sur	
Phase Ranking Contrac Contrac DVD NC Inspecti	Street Name C	CCTV Date Sta	art End Start End	Direction Existing Previou Size (in)	Material Joint Le	Length	L C M S F	LCMS		O S A	/ H P S LF RP	PACP C Total St	AGS B % L % Z %		J C B L J C B		hther S & S & W	EL BI BD D L U R LD RD SRH SRB SF	RL Z SA CU MC	Reason GIS Ide	Comments Recommendations
8_Reeval_Mod	MORNINGSIDE Y DRIVE	9/18/2012 678	B1 7239 MHO170047 MHO17004	D D/S 26 SPO170011 8	VCP	158 160.3	7 3 6	1		1		4137 18 42	2.33				0000 0 0 0.00			FI (B)	FIXED 9/25/2012 By G GROVE BVV at 8') - (Phase 3, Project #58)
8_Reeval_Mod	SKYLARK BULEVARD	8/25/2012 1013	31 13905 MHL080010 MHL080001	D/S 3741 SPL080019 8	VCP	340 320.1	9 11 6	1				4136 27 51	1.89				2K00 60 120 2.00		1	(Bi	FIXED 10/3/2012 By G GROVE Broken Tap at 236.3') - (Phase 3, Project #60)
		0/20/2012					3 11 0					21 31	1.05				2.100 00 120 2.00			FI G	FIXED 5/29/2013 & 6/11/2103 By G GROVE (New Wye at 11.9' &
8_Reeval_Mod 1 erate 253 7A 6		2/16/2004 1175	753 11754 MHP110004 MHP110008	5 DS 4629 SPP110031 6	VCP	330 330	1 1					5	1.25	1			2 0.56			Pir	epair Wye at 87.7') - (Phase 3, Pine Sinkhole Repair) Spot Repair, Cut roots FIXED 2/12/2013 By G GROVE
		9/11/2012 684	48 6847 MHO200015 MHO200014	4 U/S 107 SPO200008 8	VCP	175 177.3		1 1				4131 2 7	3.50 12				2A00 12 24 2.00			(PI	BVV had been patched at 99.8') - Phase 3, Project #79) FIXED 6/19/2012 By G GROVE (
8_Reeval_Mod 5 erate 284 PPT 4-B2-3 11	Y AVENUE	9/25/2012 1054	45 10546 MHM150019 MHM15002	1 D/S 2037 SPM150015 8	VCP	331 323.9	1 1	1 1		1		4131 5 12	2.40 24				2C00 24 48 2.00		4	28	JOL & 1 JOM fixed at 19.7' - 28.7') - (Phase 3, Project #8) FIXED 9/18. 25/2013 & 10/1 . 2
8_Reeval_Mod MAP																				/20 Mu	2013 By G GROVE (Fractures & Multiple Cracks at joint 9.11',85.6', 102.6' & 297.8') - (Phase 3,
5 erate 314 PPT 4-B1-4 10	McCLURE AVE	9/13/2012 725	51 7252 MHO180007 MHO180000	3 D/S 129 SPO180025 8	VCP	300 302.8	6 16	1				3B21 23 56	2.43				0000 0 0 0.00			Pri	Project #101) FIXED 8/13/2013 By G GROVE
8_Reeval_Mod 5 erate 319 PPT 4-B1-4 2	BOONY LANE	9/18/2012 696	66 6967 MHO170044 MHO170048	5 D/S 252 SPO170043 8	VCP	275 277.5	5 12	1				3A21 18 43	2.39	1			4211 3 9 3.00			26 Pri	Fracture at joint 37.8'& 64.8'.Replace lateral) - (Phase 3, roject #100)
June																				Th FD	nspection Report shows JOL @ 8'. This is JOM & we changed it. IXED 8/8/2012 By G GROVE (
8_Reeval_Mod Map 2 B1 54 S S S S S S S S S	Y AVE 6	6/12/2012 988	87 9888 MHN060008 MHN060009	9 D/S 6130 SPN060013 8	VCP	190 195.7		1		1		3 3124 5 11	2.20				1 0000			3,	Replace 2 JOM at 6' - 9') - (Phase 1, Project #43)
8_Reeval_Mod 5 erate 339 PPT 3-2 5	WOODWARD Y LANE	7/23/2012 1064	49 10650 MHO080017 MHO080018	B D/S 4114 SPO080017 8	VCP	420 324.3	1			1		3121 2 5	2.50 8 13	4			15 412C 41 65 1.59			Re	FIXED 8/1/2012 By G GROVE (Replace 2 JOL at 123.6' -0 125.10' - (Phase 3, Project #34)
8_Reeval_Mod MAP																				FI (R	FIXED 10/11/2011 By G GROVE Replace 1 Wye at 223.8' to
5 erate 357 PPT 3-B3-2 5	FRANCES STREET 8	8/20/2012 1110	01 11100 MHO140030 MHO140029	9 U/S 2320 SPO140016 6	VCP	303 287.1		1		1		3200 2 6	3.00				3200 2 6 3.00	2		22 FI	24.5') - (Phase 1, Project #147) FIXED 10/2/2012 By G GROVE (3SV at 212.7) - (Phase 3, Project
5 8_Reeval_No 1033 PPT 4-B2-2 11	Y EASEMENT 9	9/19/2012 1051	18 10459 MHN160004 MHO16001	7 U/S 2263 SPO160048 8	VCP	300 299.6						0000 0 0	0.00				0000 0 0 0.00			#6 FI	FIXED 6/9/2014 & 7/24/2014 By
8_Reeval_O& 34 1110	Y WINTON	4/6/2005 787	77 7876 MHE090038 MHE080056	0 U/S 1532 SPE090048 8	VCP	307 305						0 0	0.00 3 12			1	16 32 2.00	1		(PI Re	G GROVE (New Wye at 129') - Phase 3, Eastgate Park Lateral tepair)
8_Reeval_O& 1 M 734 10 24	10151 Larson 2	2/23/2004 1128	87 11070 MHN130022 CON13000	3 US 2887 SPN130019 6	VCP	410 418						0	0.00				2 0.56			(No	FIXED 2/26/2013 By G GROVE New Wye at 214.7') - (Phase 3, arson Lateral Repair) Cut roots
June																				FD By	283.3" BSV. Severe Defect. FIXED 6/25, 26/2013 & 7/9/2013 By G GROVE (BSV 281.2" & 2
	Y KATELLA AVE	6/11/2012 972	24 9725 MHM050024 MHM050029	5 D/S 5051 SPM050010 8	VCP	285 287.6	1 4 7	2	1			5141 15 40	2.67 4				2400 4 8 1.00			Pn 23	Project #87) (Phase 3, Replace Pipe 283.3' to 286' 23.5' BVV. U/S MH is CO. FIXED
8_Reeval_Sev	Y ACORN STREET 1	10/1/2012 1064	10643 MHO080012 MHO08001	1 U/S 4108 SPO080011 8	VCP	160 102.4			1			5100 1 5	5.00 24				3 2C13 27 48 1.78) -	W6/2013 By G GROVE (BVV 24.5' - (Phase 3, Project #89) Cracks & Fractures. Severe
8_Reeval_Sev MAP																				De GF	Oracka & Fractions. Severe Defect. FIXED 3/19/2013 By G SROVE (Replace Lateral & Cast ron Pipe at 50') - (Phase 3,
5 ere 71 PPT 3-2 13	Y WAKEFIELD AVE 7	7/24/2012 1315	57 13156 MHP060003 MHP060004	4 D/S 6606 SPP060005 8	VCP	327 330.8	8 15 43 1	1 3 17	1			4B3G 89 248	2.79 33				1 2C11 34 67 1.97			W:	Vakefield Lateral Repair) Reline Pipe Too many Cracks & Fractures.
																				& / GF	Severe Defect. FIXED 2/26/2014 1/ 3/4, 5, 11 & 12/2014 By G SROVE (BVV at 289.1' & 6
8_Reeval_Sev	Y READING AVE	9/13/2012 1053	33 10534 MHN170040 MHN17004	1 D/S 2024 SPN170039 8	VCP	303 306.1	15 6 35 3	3 2 11	2			4A3G 77 227	2.95 9 0		1		3129 10 21 2.10			14 Pri	ractures at 73', 289.1', 217.6', 46.2', 98.4', 74.7') - (Phase 3, roject #95) Reline Pipe
June																				Se By	Foo many Cracks & Fractures. Severe Defect. FIXED 12/11/2013 By G GROVE (Fracture
	13000 Garden		02 9903 MHN050002 MHN06003				15 8 10 1 3	8 1 6	2			4A3B 54 149	2.76 56				3 2J13 59 115 1.95				Circumferential at 192.6') - Phase3, Project #104) Should Reline
3 9_Aband 3 PPT 45 4			129 11294 MHN130011 MHN13002 111 10212 MHM070053 MHM07005			175 172 129 129		1	1	1		5 1 5	5.00				2 0.67 0 0 0.00		2 12	L X	Abandoned Abandoned
		8/1/2005 1359	94 13591 MHJ080008 MHJ080015	5 D/S 7107 SPJ080009 10					1			0 0	2.29 46 19 5.00 1 5.00 1 45.00			1	10 10 0.90 67 135		1		Abandoned i7.4' MSA=DAZ Abandoned 2' MSA=DAZ (HEAVY
2 9_Aband 5 G015 4 G016 2	Y NEARING DR	8/1/2005 1358	88 13589 MHJ080016 MHJ080022	2 D/S 7094 SPJ080017 10	VCP Aband.	. 130 129.2	1					1 2	32 1 15.00 9 40.00				42 93		1	χ DE	DEPOSITS ATT. OTHER 40%) 86.2' MSA=DAZ (HEAVY DEPOSITS ATTACHED OTHER
2 9_Aband 6 G015 3 G016 1 1 2 2 9_Aband 7 M021 4			92 13587 MHJ080015 MHJ080016 81 14380 MHR110031 MHR110019		VCP Aband.							0 0	46 6 5.00 1 30.00 2 35.00				55 112		1 9	X 35	Abandoned 44.7' BROKEN PIPE (VV), 54.7' D/SL) JOL Abandoned
2 9_Aband 10 G016 6	Y CHAPMAN AV	8/2/2005 1355	53 8520 MHK090044 MHK090043	3 U/S 7004 SPK090028 8	VCP Aband.	. 55 4.0			1	1		1 5	3 1 5.00				1 2	1	1	X MS	I' MINOR BROKEN PIPE (VV), 4" ASA = SIPHON Abandoned
			344 13541 MHJ090004 MHJ090005 338 13537 MHJ090006 MHJ090007			. 255 261.8 . 276 276.9				1		76 77 155 57 58 116					7 14 41 90		4		8.5' (D/SL) JOM, 3 SAGS Abandoned USAGS, HIGH FLOW Abandoned
2 9_Aband 15 G018 3	CHAPMAN AV	8/4/2005 1353	173 14472 MHL150006 MHL150007 136 13534 MHJ090007 MHJ090008	B D/S 6971 SPJ090009 10	VCP Aband.		1			1		3 49 50 100	3.00 3 1 30.00 1 3 4 25.00				5 0.78 7 18		2 17	M X 2 5	Abandoned SAGS Abandoned
1 9_Aband 17 13 20	Y CHAPMAN AV x 12555 Euclid St.	8/2/2005 1355 3/2/2004 1176	50 13549 MHJ090001 MHJ090002 69 12790 MHO110002 MHO11000	2 D/S 6999 SPJ090001 8 3 DS 4789 SPO110002 8	VCP Aband.	135 135	42 1	1 1				41 47 92 9 59	15 8 1 50.00	4			24 48 1 1 4 0.80	1		х	HIGH FLOW, 3 SAGS Abandoned Abandoned
2 9_Aband 17 G016 5 1 1 9_Aband 18 42 19	Grove St.(Home		52 13551 MHK090044 MHJ090001 193 13502 MHO120014-RMHO130001		VCP Aband.	. 275 291.2	1 2	1 1		+++++		36 41 86	72 4 5.00				77 154 1	++++++++		X HI	HIGH FLOW, 3 SAGS Abandoned Abandoned
	Y CHAPMAN AV	8/2/2005 1354	13547 MHJ090002 MHJ090003 40 13597 MHJ080006 MHJ080007	B D/S 6995 SPJ090002 8		. 175 161.5		1				42 42 84 37 38 76		1	1		19 38				HIGH FLOW, SAG Abandoned SAGS Abandoned
2 9_Aband 21 G017 1 2 9_Aband 25 G009 15	CHAPMAN AV AUGUSTA DR 7	8/3/2005 1354 7/22/2005 1360	40 13539 MHJ090005 MHJ090006 04 13603 MHJ080001 MHJ080002	B D/S 6979 SPJ090005 10 2 D/S 7127 SPJ080026 8	VCP Aband. VCP Aband.	. 280 277.3 . 239 238.5						33 34 69 25 26 51	5 2 35.00				7 16 3 6			χ SA χ 2.5	SAG Abandoned P SAGS Abandoned
			33 13532 MHJ090008 MHJ090009									24 24 48					107 222				HIGH FLOW, SAG Abandoned
	Y LAMPSON AVE 8	8/31/2012 1265	52 12643 MHT100032 MHT100003	3 D/S 3912 SPT100028 8	VCP Aband.	280 278.8	14 4 16 9	3 2 6	6	1		4A3D 61 207	3.39 80	1	+++++		3 2014 84 164 1.95		2	χ Cri	Cracks & Fractures. Major Defect Abandoned
5 9_Aband 110 PPT 3-B3-7 1 1 2 9_Aband 58 G010 7			550 12651 MHT100030 MHT10003 98 8540 MHJ080004 MHJ080006				11 2 7 2	9 10	3			4A3B 44 138 18 24 48		1	+++++		2l11 54 107 1.98 4 8		++++	х Ма х 2.5	
3 9_Aband 65 PPT 51 32	LOMAY ALLEY 1: GARDEN GROVE	2/26/2007 699	93 14541 MHK160038 MHK160015	5 D/S 8303 SPK160019 8	VCP	360 352		1				1 4					0 0 0.00			X	Abandoned
2 9_Aband 121 R043 3 2 9_Aband 185 R043 7	PALM ST 1	0/25/2005 1376 0/25/2005 1376	142 13741 MHS120048 MHS120049 162 13763 MHS120002 MHS120003	9 D/S 7266 SPS120053 10 3 D/S 7305 SPS120030 10	VCP Aband. VCP Aband.		3					11 14 31 10 10 20		4			0 0			X	Abandoned Abandoned
2 9_Aband 231 R043 6 '	Y PALM ST 1 CARDINAL EASEMENT 1		61 13822 MHS120002 MHS12000 49 13652 MHR150010 MHR15000		VCP Aband. VCP Aband.					2		2 6	21 4 5.00	1			26 51				226.9' (D/SH) & 235.9' (D/SL) JOM Abandoned ### Abandoned Abandoned
							1 1					8 9 19					0 0 0.00		1 1	26 BL	265.6' MSA=JOM, CAMERA BLOCKED BY OFFSET JOINT,
2 9_Aband 249 G008 1	Y AUGUSTA DR	7/21/2005 1360	02 13601 MHJ080002 MHJ080003	3 D/S 7123 SPJ080003 8	VCP Aband.	. 265 265.6				1		1 3	3 1 5.00	1			5 10		1 1	X 26	(63.9' (D/SH) JOM Abandoned

	General	I Str	ructural Defect Coding	Qperational and Maintenance	Const	ruction Features
0	Pipe		allure d Pipe	9 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	Rating Score	Feature / Aban idoned
0 0 N N O O O O O O O O O O O O O O O O	Samers (ft) (ft) (ft)	(t)) c	former llapseemage mage mage lim Reg	ral Ded	Maint Befects Index	Intruding Seal Survey
ctor ctor all last lns; Vo. o. o	Existing MH ID Previous MH ID 5 8 8 8 8 9 9 9 9 10 10 10 10 10 10 10 10 10 10 10 10 10	E Crack Fracture Broken C F B	Hole Joint A S 3 A 5 A 5 A 5 A 5 A 5 A 5 A 5 A 5 A 5 A	B B B Coots (R) P D Fine (F) Tap (T) Medium (M) Ball (B)		Line Material W L Lo S M S L Lo S M Lo S M L Lo
Phase Phase DVD N N Revers Revers Revers	e CCTV Date Start End Start End C End Start En	e C M a H I C M a H av vv	O S D D D D D S S S S S S S S S S S S S	AE AE Other	Other O O O O O O O O O O O O O O O O O O O	J R LD RD SRH SRB SRL Z SA CU MC F C Comments Recommendations
MAD MAD	e CCTV Date Staff End Staff End E E U 2 7	J 0 E C M 3 H E C M 3 H 3 V V V	SV VV O M E O M E A V H P S LF RP S L			J K LD RD SKE SKB SKE Z SK CO MC F Z G Comments Recommendations
5 9_Aband 352 PPT 4-B2-1 24 TRASK AVE	9/7/2012 6755 6756 MHS140051 MHS140052 D/S 415 SPS140046 10 VCP Aband.	33 146.6 1 1 1		3 8 2.67 2	2200 2 4 2.00	X Abandoned
1 9_Aband 280 28 13 x 13302 Galway 1 9_Aband 281 33 13 x 9181 Trask Ave		355 353 305 325	68	134 2.00 1 132 2.00	0 0.00	X Abandoned X Aban
1 9_Aband 287 36 8 9070 Trask Ave	. 4/7/2004 14462 14475 MHL150012 MHL150014 DS 8235 SPL150035 18 VCP Aband.	325 311	47	84 2.00	2 0.66	X Abandoned
1 9_Aband 296 28 12 13240 Galway 1 9_Aband 316 36 7 Trask Ave.	St. 3/24/2004 14518 14515 MHM140005 MHM140041 DS 8295 SPM140026 12 VCP Aband. 4/7/2004 14476 14463 MHL150011 MHL150012 DS 8216 SPL150007 18 VCP Aband.	360 330 135 144	36	71 2.03	4 4.00	X Abandoned X Abandoned
1 9_Aband 317 45 8 46 5 Euclid St.	4/28/2004 11769 11768 MHO110002 MHO110001 US 4788 SPO110001 8 VCP	366 366	17	32 2.00 1	0 0.00 2	2 TBI X Abandoned
2 9_Aband 318 R005 11 Y CHAPMAN AV 3 9_Aband 321 PPT 45 6 BROOKHURS		275 265.0 3 1 1 1 2 332 332 1		8 20 100 74 5.00 1 1 1 1.00	175 351 1 1 0 0 0 0.00	X 225 TO 264 HEAVY GREASE Abandoned X Abandoned
3 9_Aband 338 PPT 30 30 PARLIAMENT	8/2/2007 9922 9657 MHN060026 CON060001 U/S 3757 SPN060007 8 VCP	30 30 1		1 3 3.00	0 0 0.00	1 1 X MSA = HWL Abandoned
1 9_Aband 343 36 6 9100 Trask Ave 3 9_Aband 351 PPT 12 34 WALNUT	. 4/7/2004 14464 14477 MHL150010 MHL150011 DS 8220 SPL150006 18 VCP Aband. 5/25/2007 12279 12278 MHO130012 MHO130011 U/S 3837 SPO130011 8 VCP	95 80 365 365	8	1 4 4.00	0 0.00	X Abandoned 1 X MSA = End of pipe Abandoned
2 9_Aband 369 R040 7 HASTER ST	10/3/2005 12682 12673 MHT090043 MHT090008 D/S 6365 SPT090040 8 VCP Aband.	58 59.2		9 16 1 500		18' MMC TO PVC, 24.7' MMC 2 X TO VCP, SAG Abandoned
2 9_Aband 450 R043 8 PALM ST	10/25/2005 13764 13765 MHS120003 MHS120004 D/S 7309 SPS120031 10 VCP Aband.	95 85.8	6	6 12 3 3	3 3	X Abandoned
2 9_Aband 592 M021 5 BUARO ST 2 9_Aband 643 M020 13 Y BUARO ST	9/15/2005 14382 14383 MHR110031 MHR110020 D/S 8114 SPR110007 10 VCP Aband. 9/14/2005 14377 14379 MHR110018 MHR110019 D/S 8106 SPR110005 10 VCP Aband.	270 275.5 2 3 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1		5 7 23 33 5.00 2 2 6 65 5.00 1 10.00 3	56 112 69 135	X Abandoned 2 X MMC= MLC (LINING CHANGE) Abandoned
2 9_Aband 686 G057 5 Y LAMPSON AV		315 319.4 1 1		2 5 105 1 5.00 8 1	1 116 222	X Abandoned
2 9_Aband 717 G055 10 Y LAMPSON AV 2 9_Aband 816 R044 2 Y HASTER ST	ST 12/7/2005 12694 12695 MHS100002 MHS100003 D/S 6378 SPS100001 8 VCP Aband. 10/26/2005 12405 12406 MHT120001 MHT120002 D/S 3985 SPT120009 8 VCP Aband.	288 286.8 1 1 1 120 120.6 1		2 4 71 7 1	13 92 166	X Abandoned X Abandoned
2 9_Aband 844 G012 6 Y AUGUSTA DR	7/27/2005 13586 13605 MHK080046 MHJ080001 D/S 2002 SPK080051 8 VCP Aband.	95 98.6 1		1 2 2 14	16 32	X Abandoned X Abandoned
2 9_Aband 900 M021 8 BUARO ST 1 9 Aband 656 33 14 Trask Ave.	9/15/2005 14388 14389 MHR120004 MHR120005 D/S 8126 SPR120004 10 VCP Aband. 4/1/2004 14466 14465 MHL150009 MHL150010 DS 8224 SPL150005 18 VCP Aband.	90 92.5 1 170 170		1 1 0 0 0 0 0	0 0	X Abandoned
	MILETOWN MILETOWN MILETOWN DO 0224 OFF.130000 18 VCF A0880.	···			4 0.01	DAGS at 85.20 ft, 160.30 ft, 191.20
3 9.Aband 778 PPT 30 29 Y PARLIAMENT	8/1/2007 9899 9904 MHN060028 MHN060032 D/S 4867 SPN060026 8 VCP	202 202				ft, 199.10 ft (15-20% blocked). High water level. Capacity X deficiency per SECAP. Abandoned
3 9_Aband 778 PPT 30 29 Y PARLIAMENT 3 9_Aband 780 PPT 51 49 PARLIAMENT		282 282 278 278		0 0 0.00 4	1 2 2.00	X deficiency per SECAP. Abandoned X Abandoned
MAP						
5 9_Aband 785 PPT 3-B2-6 1 HASTER STRE		235 250.1	0000	0 0 0.00	1 10 2100 1 4 4.00	X Abandoned CONTINUOUS DEPOSITS
2 9_Aband 921 S007 8 Y ASPENWOOD	10/21/2003	345 332.9		0 0 100 5.00 1 35.00	101 202	X ATTACHED ENCRUSTATION Abandoned
2 9_Aband 937 M021 6 Y BUARO ST		205 207.3		0 0 41 30 5.00 1 5.00	72 144	2 X MMC=MLC (LINING CHANGE) Abandoned CONTINUOUS DEPOSITS
2 9_Aband 946 S005 3 LAMPSON AV 2 9_Aband 997 R062 11 TRASK AV	10/14/2005 12695 12701 MHS100003 MHS100004 D/S 6379 SPS100002 8 VCP Aband. 11/30/2005 10915 14002 MHQ150005 MHR150007 U/S 7624 SPQ150034 12 VCP	242 229.2 275 197.7		0 0 61 5.00 0 0 22 5.00	61 122	X ATTACHED ENCRUSTATION Abandoned X Abandoned Abandoned
2 9_Aband 1029 R045 9 PALM ST	10/27/2005 13768 13769 MHS120005 MHS120049 D/S 7319 SPS120033 10 VCP Aband.	316 284.0			11 17	124.2" FOUND A NEW X MANHOLE. Abandoned
2 9 Aband 1050 S005 4 LAMPSON AV		45 54.4		0 0 6 500	1 7 12	CONTINUOUS DEPOSITS x ATTACHED ENCRUSTATION Abandoned
2 9_Aband 1068 G016 3 NEARING DR	8/2/2005 13590 13554 MHJ080022 MHJ090005 D/S 7090 SPJ080020 10 VCP Aband.	180 176.8		0 0 3 1 25.00 1	5 10	X ATTACLES ENGINEER Abandoned
2 9_Aband 1106 R043 9 PALM ST 2 9_Aband 1111 G008 2 AUGUSTA DR	10/25/2005 13766 13767 MHS120004 MHS120005 D/S 7313 SPS120032 10 VCP Aband. 7/21/2005 13600 13599 MHJ080000 MHJ080004 D/S 7119 SPJ080004 8 VCP Aband.	50 213.2 295 299.0		0 0 1 6 1 6	7 7 3 6	X Abandoned X Abandoned
2 9_Aband 1134 G011 11 NEARING DR	7/26/2005 13596 13599 MHJ080007 MHJ080008 D/S 7111 SPJ080008 10 VCP Aband.	114 114.0		0 0 2	2 4	X Abandoned
2 9_Aband 1160 R044 10 LAMPSON AV	10/26/2005 12651 12652 MHT100031 MHT100032 D/S 3911 SPT100027 8 VCP Aband.	240 245.5		0 0	3 3	X Abandoned
2 9_Aband 1188 R068 7 EASEMENT	12/9/2005 14603 6697 MHS130020 MHS130021 D/S 521 SPS130006 8 VCP Aband.	193 195.9		0 0	1 2	1 1 2 X 195.9' MSA = ALIGNMENT RIGHT Abandoned
MIXE						
4 9_Aband 258 TY1 6 Y KATELLA	11/7/2007 14503 8959 MHL050045 MHL050050 D/S 8266 SPL050004 12 VCP	165 131.2				No Defect Abandoned
	. 4/1/2004 14471 14470 MHL150007 MHL150008 DS 8232 SPL150003 18 VCP Aband.			0 0.00	0 0.00	X Abandoned
1 9_Aband 936 28 14 13362 Galway	St. 3/24/2004 14512 14511 MHM140042 MHM140043 DS 8275 SPM140028 12 VCP Aband.	325 327		0 0.00	0 0.00	X Abandoned
5 9_Aband 953 PPT 3-B2-4 6 HASTER STRE	ET 8/24/2012 12672 12656 MHT090008 MHT100038 D/S 4027 SPT090026 10 VCP Aband.	160 164.8	0000		0000 0 0 0 0	Y Abandoned
MAP WESTMINSTE					555 0 0 0.00	<u> </u>
5 9_Aband 1076 PPT 4-B1-5 11 BLVD	9/21/2012 10884 10886 MHR170008 MHR170010 D/S 4351 SPR170008 15 VCP Aband.	190 342.5	0000	0 0 0.00	0000 0 0 0.00	X Abandoned
5 9_Aband 1085 PPT 3-B3-7 7 HASTER STRE	EET 8/31/2012 12407 12408 MHT120003 MHT120004 D/S 3987 SPT120011 10 VCP Aband.	356 352.1		0 0 0 0 0		Abandoned
5 9_Auanu 1005 FF1 3-B3-7 7 HASTER STRE	E1 8/31/2012 12407 12408 WH1120003 WH1120004 D/S 3997 SF1120011 10 VCF AUGILO.	396 392.1		0 0 0.00	0000 0 0 0.00	X Abelianie
5 9_Aband 1087 PPT 3-B3-7 6 HASTER STRE	EET 8/31/2012 12408 13228 MHT120004 MHT120027 D/S 3988 SPT120012 10 VCP Aband.	350 353.5	0000	0 0 0.00	0000 0 0 0.00	X Abandoned
MAP						Ending MH was 12406. We
5 9_Aband 1088 PPT 3-B2-6 2 HASTER STRE 2 9_Aband 1221 R041 2 Y SALERNO ST	ET 8/31/2012 12427 12405 MHT110031 MHT120001 D/S 4479 SPT120025 10 VCP Aband. 10/4/2005 12637 12636 MHT090026 MHT090025 U/S 5263 SPT090010 8 VCP Aband.	365 356.2 110 71.5	0000	0 0 0.00	0000 0 0 0.00	X checked GIS & changed it. Abandoned 1 X 71.5' MSA =? Abandoned
2 9_Aband 1249 M021 7 BUARO ST	9/15/2005 14386 14387 MHR110021 MHR120004 D/S 8122 SPR120003 10 VCP Aband.	40 31.7		0 0	0 0	X Abandoned
3 9_Aband 1397 PPT 46 19 GILBERT 3 9_Aband 1398 PPT 46 20 GILBERT	10/16/2007 13903 13902 MHL080003 MHL080004 D/S 7491 SPL080003 10 VCP 10/16/2007 13897 13896 MHL080004 MHL080005 D/S 7500 SPL080004 10 VCP Aband.	116 274 65 45		0 0 0.00	0 0 0.00	X Abandoned X Abandone
3 9_Aband 1399 PPT 46 21 GILBERT	10/16/2007 13900 14281 MHL080005 MHL090035 D/S 7942 SPL080005 10 VCP	311 337		0 0 0.00	0 0 0.00	X Abandoned
3 9_Aband 1477 PPT 34 22 BROOKHURS' 3 9_Aband 1479 PPT 45 2 BROOKHURS'	0.0000	115 115 229 229 229 229 229 29 229 29 29 29 29		0 0 0.00	0 0 0.00 1	X Abandoned X Abandoned
3 9_Aband 1480 PPT 45 3 BROOKHURS	10/1/2007 10245 10211 MHM060006 MHM070053 D/S 4158 SPM060007 10 VCP	333 333		0 0 0.00	0 0 0.00	X Abandoned
3 9_Aband 1541 PPT 45 5 BROOKHURS' 3 9_Aband 1542 PPT 45 7 BROOKHURS'		188 188 208 208		0 0 0.00	0 0 0.00	X Abandoned X Abandoned
3 9 Ahand 1543 PPT 45 34 BROOKHURS	10/8/2007 10215 10225 MHM070057 MHM070059 D/S 5498 SPM070005 10 VCP	206 206		0 0 0.00	0 0 0.00	X Abandoned
3 9_Aband 1546 PPT 45 35 BROOKHURS' 3 9_Aband 1547 PPT 45 36 BROOKHURS'		130 130 332 332		0 0 0.00	0 0 0.00	X Abandoned X Abandoned
3 9_Aband 1557 PPT 45 37 BROOKHURS	10/8/2007 9982 9983 MHM080001 MHM080002 D/S 5111 SPM080001 10 VCP	333 333		0 0 0.00	0 0 0.00	X Abandoned
3 9_Aband 1558 PPT 45 38 BROOKHURS' 3 9_Aband 1559 PPT 45 39 BROOKHURS'		125 125 332 332 332 332 332 332 332 332 332 3		0 0 0.00	0 0 0.00	X Abandoned X Abandone
3 9_Aband 1560 PPT 45 40 BROOKHURS	10/8/2007 9986 9956 MHM080005 MHM090035 D/S 5491 SPM080005 10 VCP	34 34		0 0 0.00	0 0 0.00	1 X MSA = Camera stuck Abandoned
3 9_Aband 1715 PPT 28 5 PARLIAMENT 3 9_Aband 1728 PPT 30 27 PARLIAMENT		135 135 329 329		0 0 0.00	0 0 0.00	X Abandoned X Abandoned
3 9_Aband 1729 PPT 30 28 PARLIAMENT	8/2/2007 9898 9899 MHN060027 MHN060028 D/S 4866 SPN060025 8 VCP	282 282		0 0 0.00	0 0 0.00	X Abandoned X Abandoned
3 9_Aband 1731 PPT 31 20 PARLIAMENT 3 9_Aband 1732 PPT 31 21 PARLIAMENT	8/7/2007 9904 9906 MHN060032 MHN060034 D/S 4872 SPN060031 8 VCP 8/7/2007 9906 10233 MHN060034 MHN060036 D/S 4167 SPN060056 8 VCP	288 288		0 0 0.00	0 0 0.00	X Abandoned X Abandoned
3 9_Aband 1/32 PPI 31 21 PARLIAMENT 3 9_Aband 1/34 PPT 31 22 PARLIAMENT	8/7/2007 10233 10235 MHN060036 MHN060038 D/S 5502 SPN060047 8 VCP	269 269 264 264		0 0 0.00	0 0 0.00	X Abandoned X Abandoned
3 9_Aband 1735 PPT 31 23 PARLIAMENT	8/7/2007 10235 10237 MHN060038 MHN060040 D/S 4149 SPN060049 8 VCP	264 264		0 0 0.00	0 0 0.00	X Abandoned MSA = High water level. Capacity
3 9_Aband 1736 PPT 39 3 53 19 PARLIAMENT	9/4/2007 10237 10239 MHN060040 MHN060042 D/S 4151 SPN060051 8 VCP	76 76		0 0 0.00	0 0 0.00	2 1 X deficiency per SECAP. Abandoned
3 9_Aband 2336 PPT 51 6 CARDINAL EASEMENT	12/22/2007 13651 13650 MHQ150034 MHR150010 D/S 7173 SPR150021 8 VCP Aband.	420 434	<u> </u>	0 0 0.00	0 0 0.00	X Abandoned
20 100						

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Appendix D.F.
Appendix D-5 Equipment Inventory
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Appendix D-5 Equipment Inventory

Vehicles

	14.00
2	Combination trucks
1	Wash Truck
1	CCTV Van
1	Utility Truck with Crane
2	Flatbed Trucks
2	Utility Trucks
1	10 Wheeler Dump Truck
1	Backhoe Trailer
1	Backhoe
1	Heavy Duty Flatbed Truck
1	Heavy Duty Dump Bed Truck
1	Dump Trailer
1	Towable Air Compressor
1	Gas Arrow Board
1	Solar Arrow Board
1	Solar Message Board

Vehicle Equipment

	<u> </u>
300 F	eet of 6-inch Dump Hose for Combination Trucks
1	500 - Foot Jetter Hose
1	20 - Foot Leader Hoses
1	Tiger Tail Hose Guide
2	5 - Foot Aluminum Double Flanged Suction Tubes
1	3 -Foot Aluminum Double Flanged Suction Tube
1	Flex Suction Hose for Combination Trucks
6	Suction Tube Clamps
1	Lateral-Cleaning Hose and Reel
2	Emergency Reflective Triangles
3	Fill Hoses
2	Hydrant Wrenches
2	Wash Down Guns
1	Jumper Cables
2	Come Along Wince
25	30 Minute Flares
5	Grease Guns
1	12 Foot Clams
1	8 Foot Clams

Sewer Maintence Equipment

1	SRECO CCTV Push Camera, Monitor, and Locator
1	RIDGID"See Snake" CCTV Push Camera, Monitor, and Locator
1	Dell Laptop for Future SCADA Use
1	Panasonic Toughbook Laptop
1	Gas-Powered Bypass Pump
2	Suction Hoses for Bypass Pump
1	Honda 2000l Gas Powered Inverter Generator
1	Metal Detector
1	5 Gallon Portable Air Tank
1	Roll of Neoprene Rubber for Storm Drain Mats
1	Manhole Debris Scoops
1	Debris Grabber
1	8-Foot Clams
1	12- Foot Clams
6	6-Foot Aluminum Extension Poles for Scrapers
2	EZ Up Canopies
Asso	rted Rubber Plugs for I/ I P revention
1	Upper Manhole Roller
1	Sewer Hose Swage Tool with Assorted Fittings
6	Sewer Hose Traffic Ramps
Asso	rted Grit Catchers
2	15-Inch Sand Traps
2	J-Hook Manhole Pullers
4	Chain Hook Large Manhole Pullers
8	Sweet Filter Carbon Vent Caps for Order Control

Sewer Cleaning Equipment

5511	ver diedining Edolphiem				
16	Standard Sanitary Nozzles in Various Shapes				
2	Stone Age Industries Warthog Nozzles				
1	Lumberjack Nozzle				
3	3D Cleaning Nozzles				
1	Chain Knocker				
2	Root Cutters				
1	Milling Cutter				
1	Bulldog Nozzle				
3	Teardrop Grease Bullet Nozzle				
2	Dual Radial Nozzles				
2	Buzz Bomb Nozzles				
1	Rotating Screw Blade Spinner Nozzle				
5	SRECO Vortex Nozzles				
1	Sand and Sludge Nozzle				
2	Storm Aluminum Nozzles				
1	Terminator Nozzle				
1	Super Blockbuster Penetratiing Nozzle				
1	Dagger Nozzle				
2	Nozzles with Pulling Eye				
1	4-Inch Sewer Cleaning Ball				
1	6-Inch Porcupine				
1	8-Inch Porcupine				
1	10-Inch Porcupine				
1	18-Inch Proofing Tool				
Asso	Assorted Skids in Various sizes				
Asso	rted Skids, Chains, and Tools for Chain Knocker				
Asso	rted Skids, Blades, and Tools for Root Cutters				

Safety Equipment

	- 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1
4	Traffic Safety Signs
13	Traffic Safety Flags
1	DBI Sala Tripod
2	Fall Prevention Winches
2	Lift Winches
8	Harnesses
2	Triangle Harness Spreaders
6	Hard Hats
2	Fall Arrest Lanyards
2	Pass Through Anchor Slings
2	15-Minute SCBA
1	30-Minute SCBA
3	15- Minute Air Tanks Without Adapters
1	Electric Blower
5	Flexible Blower Duct Hoses
1	Saddle Vent
1	Manhole Barricade
2	Gas Detectors
3	20 Foot Gas Detector Extension Tubes
1	3M Respirator
1	Chainsaw Safety Helmet
1	Rubber Boots
2	500 Watt Safety Lamps
1	Air Star Lighting System
6	Stemar Speed Shore Hydraulic Shoring Jacks
7	Speed Shore Shoring Fluid - 8 oz. Bottles
1	Speed Shore Hydraulic Shoring Pump
1	20 Foot Fiberglass Step Ladder
9	Folding Traffic Barricades
20	Sanitation Traffic Delineators
Asso	rted Traffic Signs

Power Tools

1	Partner K650 12" Cutoff Saw with Diamond Blade
1	Milwaukee Rotary Hammer Drill
1	Makita Cordless 4-Inch Angle Grinder
1	Ridgid 1/2 Inch Drill
1	Ryobi Jigsaw
1	Milwaukee Cordless Sawzall
1	Chicago Tool Company Buffer
1	Hilti Rotary Hammer Drill
1	Makita 4-Inch Angle Grinder
1	Husky 5HP 17-Gallon Compressor with Air Hose
1	Ridgid 16-Gallon Wet/Dry Vacuum
1	Sawtec HS-50 12" Pneumatic Cutoff Saw
1	Ingersoll-Rand Air Hammer
1	Stihl Leaf Blower
1	Husqvarna Chainsaw
1	Chicago Electric Plastic Welder
1	Mini Weld Plastic Welder

Construction Crew Equipment and Tools

1	60 Pound Pneumatic Jackhammer
1	90 Pound Pneumatic Jackhammer
1	Clay Spade Pnuematic Jackhammer/Chipping Gun
1	Backfill Tamper (Powder-Puff)
1	Wacker Soil Compactor
2	Compressor Air Hoses
1	8-Inch Mechanical Pipe Plug
2	10-Inch Mechanical Pipe Plugs
3	6-Inch Inflatable Test Plugs
2	10- Inch Inflatable Test Plugs
1	6 to 10 Inch Inflatable Plug
2	8 to 12 Inch Inflatable Plugs
2	Tire Pumps
2	Inflation Hoses for Plugs
2	5 Foot Extension Poles for Plugs
1	Genie Lift Heavy Duty Moving Dolly
1	48 Inch Level
1	PVC Cutters
1	Ridgid Chain Pipe Cutter
1	Ridgid Offset Pipe Cutter
1	Wheelbarrow
1	Jackhammer Attachment for Backhoe
1	Small Bucket for Backhoe
1	Transit
2	Story Poles
2	Tile Probes
	· · · · · · · · · · · · · · · · · · ·

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3	Hach Sigma Flow Meters
8	Qtrek Flowmeters
6	Telog PT30 Overflow Meters
1	Palm Pilot and Cables for Communication with Telog Meters
1	Intersection/Extraction Tool with Extension Pole
1	6-Inch Flow Meter Mounting Band
4	8-Inch Flow Meter Mounting Bands
2	10-Inch Flow Meter Mounting Bands
2	12-Inch Flow Meter Mounting Bands
2	15-Inch Flow Meter Mounting Bands
2	18-Inch Flow Meter Mounting Bands
2	Adjustable Flow Meter Mounting Bands
Asso	rted Tools, Chargers, and Adapters for Flow Monitoring Equipment

Sewer Pipe (Stick = 5 Foot Section)

27	Sticks - 4" Vitrified Clay Sewer Pipe - Bell and Spigot	
10	Sticks - 6" Vitrified Clay Sewer Pipe - Bell and Spigot	
7	Sticks - 8" Vitrified Clay Sewer Pipe - Bell and Spigot	
2	Sticks - 6" Vitrified Clay Sewer Pipe - Plain End	
19	Sticks - 8" vitrified clay sewer pipe - plain end	
4	Sticks - 10" vitrified clay sewer pipe - plain end	
Assorted lengths of vitrified clay, ABS, PVC, and ductile iron sewer pipe		

Sewer Pipe Fittings

1	6"X 4" Vitrified Clay Wye
1	6" X 6" Vitrified Clay Wye
4	8" X 4" Vitrified Clay Wyes
1	8" X 6" Vitrified Clay Wye
1	8" X 8" Vitrified Clay Wye
1	10" X 4" Vitrified Clay Wye
8	4" Vitrified Clay 1/8 Bends
6	4" Vitrified Clay 90
2	8" Vitrified Clay 1/8 Bends
3	6" Vitrified Clay 1/4 Bends
2	8" Stopper Caps
	6" Stopper Caps
Asso	rted ABS Fittings

Compression Fittings

2	4" Saddle Wye
3	4" Clay to 4" Clay Coupling with Metal Shield
9	4" Clay to 4" clay Coupling - No Shield
3	4" Plastic/Cast Iron to 4" Plastic/Cast Iron Coupling with Metal Shield
11	6" Clay to 6" Clay Coupling - No Shield
24	8" Clay to 8" Clay Coupling with Metal Shield
4	10" Clay to 10" Clay Coupling with Metal Shield
1	6" Bushing
4	6" Plastic/Cast Iron to 6" Clay Coupling
3	8"Plastic/Cast Iron to 8" Clay Coupling
5	10" Plastic/Cast Iron to 10" Clay Coupling
2	4" Cap
1	6" Cap

Manhole Rings and Covers

53	36"X 6" Manhole Ring and Cover			
13	36" X 4" Manhole Ring and Cover			
2	36" X 4" Storm Drain Manhole Ring and Cover			
1	48" X 6" Manhole Ring and Cover			
10	36" Manhole Covers			
3	Cleanout Ring and Covers			
8	Cleanout Covers			
2	4" Concrete Grade Rings			
2	6" Concrete Grade Rings			
2	Preformed Manhole Base, Shafting, and Cone			

Chemicals and Compounds

19	Golden Bell Lift Station Degreaser - 5 Gallon Container
40	Golden Bell Tackle Degreaser - 5 Gallon Container
1	Case of RamNek Joint Sealant Compound

Lift Station Equipment

1	Spare Pump for Tiffany Lift Station
1	Spare Pump for Belgrave Lift Station
	Spare Pump for Partridge Lift Station

Misc. Equipment

- 1 KSB Single Phase Pump from Partridge Lift Station
- 2 | Submersible Trash Pumps from Harbor Lift Station

Pumps, Motors, and Equipment from renovation of Tiffany and Begrave LS

1 iodgid See Snake Analog Monitor

Pearpoint CCTV Equipment from CCTV Truck Retrofit



GARDEN GROVE SANITARY DISTRICT Design Criteria for Sewer Facilities

Prepared for GARDEN GROVE SANITARY DISTRICT Garden Grove, California

Prepared by

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TABLE OF CONTENTS

<u>Sect</u>	<u>ion</u>		<u>Page</u>	
1	Stand	ard Requirements	1	
2	Calcu	lations Required	1	
3	Size		1	
4	Minim	Minimum and Maximum Slope		
5	Desig	n Flow Criteria	2	
6	Stand	ard Location and Alignment	3	
7		nents		
8	Horizo	ontal Curves	4	
9	Statio	ning Procedure	4	
10	Minim	num Depth	4	
11	Sewei	r Pipe Material	4	
12		oles		
	12.1	Manhole Requirements	5	
	12.2	Manhole Type and Size	5	
	12.3	Manhole Covers	5	
	12.4	Manhole Linings and Coatings	6	
	12.5	Manhole Warning Signs	6	
13	Clean	-Outs	6	
14	Separ	ation Between Sewer and Water and Recycled Water Lines	7	
15	House	e Laterals	7	
16	Privat	e Sewer System	7	
17	Sewei	r Pump Station	8	
	17.1	General	8	
	17.2	Standards and Codes	9	
	17.3	Design Flows and Heads	9	
	17.4	Drivers	10	
	17.5	Wet Well	10	
	17.6	Emergency Storage		
	17.7	Dry Well		
	17.8	Standby Equipment		
	17.9	Pumps		
		Valves and Gates		
	17.11	Magnetic Flow Meters		
		Piping and Support System		
		Ancillary Equipment		
	17.14	Electrical Equipment	∠8	

TABLE OF CONTENTS (Continued)

	17.15	Instrumentation and Controls	29
	17.16	Supervisory Control and Data Acquisition (SCADA) System	32
		Pressure Gauges	
	17.18	Pump Station Facility	33
	17.19	Force Mains	34
	17.20	Access Roads	34
		Flood Control	
	17.22	Grading and Area Drainage	34
		Soils Report	
	17.24	Surveying	35
		Security	
		Water Supply System	
		Landscaping and Irrigation System	
	17.28	Construction	36
18	Inspe	ction and Testing of Gravity Sewers	37
	18.01	CCTV Inspection	37
	18.02	Gravity Pipe Leakage Tests	37
	18.03	Manhole Leakage Tests	37
	18.04	Pipe Slope	38
19	Stand	ard Sewer Notes	38
		LIST OF STANDARD PLANS	
	S-1	Manhole Details	
	S-2	Concrete Base and Joint Details	
	S-3	Manhole Shaft Location Details	
	S-4	Traffic Manhole Frame and Cover	
	S-5	PVC Pipe Bedding & Special Details	
	S-6	VCP or PVC Typical Lateral	
	S-7	Cut In Wye Connection	
	S-8	VCP Pipe Bedding Details	
	S-9	Terminal or Main Cleanout Detail	
	S-10	Concrete Encasement Type A, B & C	
	S-11	Concrete Slope Anchors	
	S-12	Steel Casing Pipe	
	S-13	Drop Manhole Details	
	S-14	PVC-Lined Manhole for Sewers	
	S-15	PVC Liner Details	
	S-16	Gas Flap Installation	
		Flat Top Manhole	

1. STANDARD REQUIREMENTS

The design and construction of all sanitary sewer system facilities to be operated and maintained by the Garden Grove Sanitary District (GGSD or District) shall be in accordance with these Design Criteria, and the latest edition of the following:

- The Garden Grove Sanitary District Standard Plans, latest edition (GGSDSP)
- The City of Garden Grove Public Works Department Standard Plans, latest edition (GGPWSP)
- Standard Specifications for Public Works Construction (Greenbook),
- Garden Grove Sanitary District's Sewer System Management Plan,
- Statewide General Waste Discharge Requirements issued by the State Water Resources Control Board (Order No. 2006-0003)
- Requirements of the jurisdictional agencies where the work shall be performed
- Cal-OSHA requirements

2. CALCULATIONS REQUIRED

Substantiating engineering calculations for design flows; pipe size; pump, motor, generator, wet well size and appurtenant equipment selection; structural design, and bedding/backfill designs shall accompany plan submittals to the District. All calculations shall be sealed and signed by a California registered professional engineer.

Where flow from a new development or redevelopment is added to an existing sewer, and where the new development or redevelopment is in an area of questionable sewer capacity, the existing sewer shall be flow monitored by a qualified company acceptable to GGSD at the owner's cost for a minimum period of two weeks to verify the existing minimum, average, and peak dry weather flows. Two copies of the report shall be submitted to GGSD in the District's required format. The District will determine the adequacy of capacity in all the facilities that will convey the subject flow.

3. SIZE

Gravity Sewers

The minimum size gravity sewer shall be 8-inches in diameter. The Garden Grove Sanitary District may accept 6-inch diameter sewer lines if they must be used to provide adequate velocity. Sewer pipes shall not be constructed in a common trench with another utility. Adequate horizontal and vertical clearance shall be maintained in accordance with the State of California Department of Health Services "Criteria for the Separation of Water Mains and Sanitary Sewers", summarized on GGPWSP B-760, B-761, B-762, and B-763.

Force Mains

The size of sewer force mains shall be determined during the design phase of the project based upon a comparative study of the construction cost and pumping costs for several alternative sizes. In no case shall a force main be less than 4 inches in diameter. The capacity of the force main shall be the design peak flow from the pump station. The minimum design velocity for a force main shall be 3.0 fps, and maximum allowed 5.0 fps.

The discharge shall be into a manhole with a smooth flow transition to a gravity sewer. The force main terminal manhole shall be PVC lined.

All force mains shall have a tape attached to the pipe, identifying it as a sewer pipe.

4. MINIMUM AND MAXIMUM SLOPE

All sewers shall be designed and constructed to provide a mean velocity of not less than two (2) feet per second (fps) when flowing at the estimated average dry weather flow as calculated using Manning's formula with an "n" value of 0.013. Subject to the velocity limitations contained in this subsection, the slope shall be the maximum possible. Drop manholes shall not be used to reduce slopes to the minimum allowed.

The maximum allowable slope shall be the slope which generates a maximum flow velocity of 6 fps at the peak dry weather flow rate in vitrified clay pipe (VCP), and 5 fps in polyvinyl chloride pipe (PVC) as calculated using Manning's equation with an "n" value of 0.013.

The minimum slope on 6-inch sewer shall be 1% where the tributary area consists of less than 20 dwelling units (d.u.) or its flow equivalent.

Sewer pipes shall have a constant slope between the upstream and downstream manhole of each reach. Any reach of sewer containing sags of any amount shall be removed and reconstructed at the design slope at no cost to the Garden Grove Sanitary District. The total cost of inspection, administration, and retesting of improperly installed sewers shall be borne by the contractor. The Garden Grove Sanitary District shall not accept any sewer that does not meet these requirements. There shall be no exception to the proper slope requirement.

5. DESIGN FLOW CRITERIA

The average dry weather flow (Q_{adw}) rates for sewers shall be calculated using the unit flow factors contained in Table 1 and the tributary land uses. Where appropriate, and when required by the Garden Grove Sanitary District, the unit flow factors shall be evaluated by the design engineer based upon the specific land uses and densities proposed for new development or redevelopment.

Table 1
Unit Flow Factors

Land Use		Unit	
Designation	Land Uses	Flow Factor	Units
R-1	Low Density Residential	1,450	GPD/AC
R-2	Medium Density Residential	2,750	GPD/AC
R-3	High Density Residential	3,000	GPD/AC
C-1	Neighborhood Commercial	1,500	GPD/AC
C-2	Community Commercial	1,500	GPD/AC
M-1	Light Industrial	2,000	GPD/AC
O-P	Office/Professional	1,500	GPD/AC
O-S	Open Space	10	GPD/AC
PUD	Planned Unit Development	1,000	GPD/AC
BCSP, CCSP, HCSP	Specific Plans	1,000	GPD/AC

The peak dry weather flow (Q_{pdw}) in cubic feet per second (cfs) shall be determined from Q_{adw} in cfs based upon the following equation:

Coefficients a and b shall be based upon a minimum of two weeks of flow monitoring where the tributary flow from a new development or redevelopment is added to an existing sewer. Where such information is not available, the following equation shall be used to determine the peak dry weather flow:

$$Q_{pdw}$$
=2.0 Q_{adw} 0.92

The determination of the peak dry weather flow shall also consider other factors such as pumped flows and large sewer flow generators.

The peak wet weather flow (Q_{pww}) shall be based upon recorded historical information where available and applicable. Otherwise, the peak wet weather flow shall be calculated utilizing the following formula:

The peak dry weather flow rate in pipes 15-inches and smaller will be limited by the calculated depth to pipe diameter ratio of d/D = 0.5; and 18-inches and larger d/D = 0.62.

The pipe shall flow at a calculated depth to pipe diameter ratio of no more than 0.80 with the peak wet weather flow.

6. STANDARD LOCATION AND ALIGNMENT

In local residential and industrial streets, sewer pipes shall be located six (6) feet from the centerline of the street in the center of the driving lane. In major, primary, and secondary highways, the sewer pipes shall be located in the center of the driving lane nearest to the center of the street, but will **not** be located in the median strip or parking lanes. Any deviation from the standard location and alignment shall only be done with prior written approval of GGSD.

All-weather access roads capable of accommodating all required construction and maintenance equipment shall be provided for all sewers not located within a paved street.

In curved streets, gravity sewer mains shall be constructed in straight reaches between manholes. In no case shall the outside of the sewer main be closer than four feet to the closest curb face.

A maximum horizontal separation between sewer and domestic water mains shall be achieved by aligning the sewer on the opposite side of the street centerline from the domestic water main.

7. EASEMENTS

Permanent easements, where absolutely necessary, shall be a minimum of 30 feet in width and shall be shown on the plans. Temporary easements for construction only shall be shown on the plans including date of termination.

Where applicable, permanent public utility easements shall be recorded on the tract map, and granted to the Garden Grove Sanitary District. When applicable, separate easement documents for both permanent and temporary easements shall be prepared (on standard title company forms) and presented to the Garden Grove Sanitary District for acceptance and recording.

The District will accept sewers on private streets upon granting of a public utility easement to the District.

The District will not accept any easement for sewers if said easement cannot be accessed with a flush truck through its entire length.

Sewer easement shall be located entirely on one lot. Building set backs shall be minimum 20 feet from easement edges.

8. HORIZONTAL CURVES

Gravity sewer mains shall **not** be designed with horizontal curves.

9. STATIONING PROCEDURE

Centerline stations for sewers shall be shown on the plans. Sewer centerline stations shall be independent of street stationing. All manholes shall be numbered and the numbers noted on the plans (example: MH #1). Sewer stations shall start at 1+00.00 at the downstream point of connection and increase upstream to the last manhole on a sewer line. Intersecting sewer lines will be independently stationed from their downstream point of connection and increase upstream to the last manhole. Each line shall be independently labeled for identification as "Sewer Line A", "Sewer Line B", etc.

10. MINIMUM DEPTH

Minimum depth of cover from finish street grade to the top of sewer main pipe shall be seven (7) feet unless otherwise approved by the District Engineer.

Unless dictated otherwise by the elevation of an existing mainline sewer, house connections shall be installed so that there is a minimum of six (6) feet of cover from the top of the curb to the top of the pipe at the curb line. At the time of construction, stakes shall be provided for location and grade of each house connection.

11. SEWER PIPE MATERIAL

All gravity sewers shall be either extra strength VCP or SDR-26 PVC. Imperfections **shall not be allowed** in either type of pipe. Sewer service laterals shall be of the same material as the main line sewer-either extra strength VCP or SDR-26 PVC pipe.

All sewer force mains carrying domestic sewage and operating at pressures of less than 40 psi shall be PVC pipe meeting AWWA C-900 Class 200 pipe standards. All other force mains shall be 40 mil ceramic epoxy lined and properly coated ductile iron pipe.

All gravity sewers in industrially zoned areas or major commercial areas shall be extra strength VCP.

12. MANHOLES

12.1 Manhole Requirements

A manhole will be required at:

- A. The upstream end of each line, change in grade or size, change in alignment, or intersection of two (2) or more sewers
- B. At a lateral when it is the same size as the main line sewer
- C. Along the sewer main at maximum distances of 300 feet for 6-inch sewers, 400 feet for 8-inch and larger sewers.

12.2 Manhole Type and Size

Manholes shall be precast reinforced concrete with eccentric cone in accordance with Garden Grove Sanitary District Standard Drawings S-100 through S-104. The summit manholes shall be precast reinforced concrete with concentric cone. Minimum diameter shall be 48 inches and larger sizes shall be required as shown in the following table:

Manhole Sizes

Sewer Main (inches)	Maximum Branch Size (inches)	Manhole Size (inches)	Frame and Cover (inches)
8-15	10	48	30
18-21	12	60	30
24-36	15	72	36

Extra Depth Requirements

Depth of Cover	Manhole Size
(feet)	(inches)
6 or less	60
6.5-12	48
12.5-16	60
16.5 and greater	72

All manholes shall be provided with at least all-weather vehicular access.

12.3 Manhole Covers

Manhole covers shall be cast iron in accordance with Garden Grove Sanitary District Standard Drawing S-103. The size shall be determined from the table in Section 12.2. Manhole covers shall have one (1) vent hole and one (1) pick hole.

Temporary covers may be necessary in new streets. In these cases, the manhole shaft shall be left six (6) inches, minimum, below subgrade. A heavy metal plate acceptable to the District Engineer shall be provided to cover the manhole opening. Cleats shall be provided in at least four (4) points for the underside of the temporary cover to prevent the temporary cover from moving. These cleats shall extend a minimum of 3 inches from the cover plate and shall be welded to the plate.

Plywood shall be cut to the shape and size of the manhole base and placed in the base before the temporary cover is placed on the shaft. At the completion of final paving, each manhole shall be raised to final grade by the installation of grade rings, as necessary, and the installation of the permanent frame and cover assembly. Plywood shall be removed from the manhole when the permanent frame and cover assembly is installed.

12.4 Manhole Linings and Coatings

The following manholes will be lined with PVC:

- A. If the sewer has a slope of 5% or greater, all the manholes on the sewer
- B. Where there is a change in slope, from steep to flat, of 3% or greater, the manhole at the grade change and the next manhole upstream
- C. All force main terminal manholes
- E. As required by the District Engineer

The approved PVC liners are Ameron T-Lock liner and Koroseal Lok-Rib by B. F. Goodrich. Refer to Orange County Sanitation District Standard Drawing S-065 for PVC liner details.

All other manholes shall be lined with Sancon 100 or equal.

Outer surfaces of precast and cast-in-place manholes and structures shall be given two coats of bituminous dampproofing applied at a rate in accordance with manufacturer's instructions. In no case shall the total bituminous coating be less than 16 mil dry film thickness.

12.5 Manhole Warning Signs

The entrance to every new manhole shall be fitted with a plastic warning sign, located 12 inches below the top of the manhole frame, with the inscription "CAUTION – VENTILATE BEFORE ENTERING" in letters no smaller than ½-inch in height. The sign shall be attached to the concrete with four Type 316 stainless steel screws and anchors. Signs shall be manufactured by W.H. Brady Company; Seton Nameplate Corporation, or equal.

13. CLEAN-OUTS

Use of clean-outs as shown in the Garden Grove Sanitary District Drawing S-105 shall be limited to the following instances unless approved otherwise by the District Engineer.

- A. At the upstream end of short sections of sewer, less than 250 feet which will be extended within three months.
- B. All sewer laterals at the property owner's side of the property line.
- C. Special instances such as on a sewer lateral to a single family residential lot where the dwelling unit is set back more than 100 feet from the property line, where there is a large slope up to the building pad from the property line and a grade change in the

lateral is necessary, or where the sewer lateral enters the rear of the lot from a public right-of-way.

D. On a lateral where the overflow level of the lowest wastewater fixture in the building is below the rim elevation of the uphill sewer manhole on the main line. In this situation the rim elevation of the clean-out installed at the property line shall be at least 6-inches below the overflow elevation of the lowest wastewater fixture on the lateral. A backflow prevention device is required on the lateral.

14. SEPARATION BETWEEN SEWER AND WATER AND RECYCLED WATER LINES

Horizontal and vertical separation between sewer mains and water and reclaimed water lines will be provided in accordance with the State of California Department of Heath Services "Criteria for Separation of Water mains and Sanitary Sewers" and GGSD Standard Drawing No. S-118.

15. HOUSE LATERALS

Sewer laterals shall be constructed to the property line from the main line and there shall be a separate lateral for each individually owned building.

Sewer laterals shall have a minimum 4-inch diameter. Apartment and condominium developments shall have at least one (1) 6-inch, or one (1) 8-inch lateral to serve each building in the development which contains more than one dwelling unit.

Laterals shall have a minimum slope of 2%.

Laterals shall be located at the center of each lot and shall be constructed perpendicular or radial to the property line. If the developer must install a sewer lateral at a location other than in the center of a lot due to unavoidable interference, the improvement plans shall indicate the centerline station of the lateral on the sewer and show the distance from a property corner. In no case shall a sewer lateral be located within 12 feet of a property corner. Refer to Section 13 and Standard Plan S-105 for cleanouts on laterals.

Permanent visible monuments shall be set to indicate the locations of all sewer laterals. A 1½-inch high "S" shall be chiseled in face of curb where the lateral crosses under the curb or on the edge of alleys without curbs. The method used shall be indicated on the plans. A licensed Civil Engineer or Land Surveyor shall verify locations of set monuments.

The sewer laterals from the main to the building, and inside the buildings are governed by the Uniform Plumbing Code and enforced by the City of Garden Grove Building Official.

The sewer house laterals between the main sewer line and the property line are owned by the property owner, and **NOT** by the Garden Grove Sanitary District.

16. PRIVATE SEWER SYSTEMS

All plans submitted for review and approval for commercial/industrial developments and residential developments with private sewer systems shall show the plans, profiles, and details of private onsite sewer systems. The private sewer systems shall be planned,

designed, and constructed to the same standards as the Garden Grove Sanitary District's public sewer system.

Sewer pump stations on private property shall be designed, administered, and inspected by the Garden Grove Sanitary District or its designated representative. The private property owner shall be responsible for all costs associated with such design, administration, and inspection.

Each site shall be reviewed on an individual basis at the time plans are submitted. As a condition of service, the Garden Grove Sanitary District shall require the property owner to enter into an agreement with the District acknowledging that the onsite facilities are private and shall be properly maintained according to industry standards and the State Water Resources Control Board's General Waste Discharge Requirements 2006-0003. The property owner shall further agree to hold the District and the City of Garden Grove harmless from any claims on the design, maintenance and operation of the private onsite systems. The property owner shall prepare an Overflow Emergency Response Plan and a Preventative Maintenance Plan as required by Order No. 2006-0003.

All onsite sewer collection systems for commercial/industrial developments shall be private and shall be owned, operated and maintained by the property owner up to the District's sewer line in a public street. A cleanout or manhole shall be installed at the owner's side of the property line in accordance with District Standard Plans S-105 or S-100 through S-104. Each building onsite shall have an individual sewer lateral with a monitoring manhole. Monitoring manholes shall be installed in accordance with District criteria. All laterals from a building shall be connected to the main lateral upstream of the monitoring manhole for that building. No lateral connections are to be made downstream of the monitoring manhole.

17. SEWER PUMP STATIONS

17.1 General

All sewer pump stations conveying wastewater flows to the Garden Grove Sanitary District's collection system, including those from private systems, shall be designed, administered, and inspected by the Garden Grove Sanitary District, or its authorized representative.

The general criteria outlined herein shall apply to all sewer pump stations. The detailed design criteria for each sewer pump station will be established based upon the specific conditions of each installation on a case-by-case basis and documented in a preliminary design report. Sewer pump stations shall be designed according to the following criteria:

Small sewer pump stations, where the peak wet weather flow can be pumped with a maximum of two duty pumps of 1,500 gpm capacity, shall be the stainless steel slide-rail submersible type with a minimum of two recessed impeller or enclosed screw impeller centrifugal pumps, permanent standby generator/automatic transfer switch, and peak flow storage.

Larger sewer pump stations shall be wet well-dry well type with permanent standby generator/automatic transfer switch, and peak flow storage. The District Engineer may allow slide rail submersible pump stations if project conditions warrant it. Pumps shall be either the recessed impeller, or enclosed screw impeller type, as determined by the District Engineer.

17.2 Standards and Codes

Sewer pump station designs shall be based upon current codes and standards, including but not limited to:

- Statewide General Waste Discharge Requirements covered under Order No. 2006-0003 issued by the State Water Resources Control Board on May 2, 2006
- Hydraulic Institute Standards
- California Administrative Code, Title 8, Article 59-Electrical Safety Orders
- National Electrical Code
- NFPA 820 Fire Protection in Wastewater Treatment Plant and Collection System Facilities
- Uniform Building Code
- Uniform Plumbing Code
- Uniform Mechanical Code
- California Fire Code
- National Electrical Manufacturers Association (NEMA)
- American Society of Heating, Refrigerating, and Air Conditioning Engineers (ASHRAE)
- Standard Specifications for Public Works Construction
- Standard Plans for Public Works Construction
- OSHA Construction Safety Orders
- American Water Works Association
- American Society for Testing Materials

17.3 <u>Design Flows and Heads</u>

The pump stations shall be designed with a firm pumping capacity equaling the greater of:

- Tributary peak wet weather flow
- Flow that will provide a minimum velocity of 3 fps in the force main.

The standby pump will have the same capacity as the largest pump in the pump station.

In selecting the number, capacity, and operating characteristics of the pumps, the minimum, average, peak dry weather and peak wet weather flows, as well as wet well size and operating band shall be considered. The selected design shall minimize pump cycling and odors.

The total dynamic head (the sum of static lift, velocity head, and frictional losses in the station piping/ valving and force main) shall be determined for all operating conditions, wet

well and discharge point water surface elevations, and a range of frictional coefficients (Hazen Williams C factor of 80 to 150).

Calculations documenting the determination of flows and head calculations shall be submitted along with pump curves and catalog information for the recommended pumps. Prior to final acceptance, the design engineer shall obtain written verification from the recommended pump manufacturers that the selected pumps shall perform throughout their operating range as designed at the published efficiencies free from cavitation, vibration, and premature failure.

17.4 Drivers

The pumps shall be driven by submersible or vertical dry pit immersible motors. All motors shall be Factory Mutual (FM) or Underwriters Laboratories, Inc. (UL) listed explosion proof type. Motors operated by variable frequency drives shall be inverter duty motors. Nameplate horsepower shall be at least 20 percent greater than the maximum brake horsepower needed within the operating range of the pump.

Variable frequency drives shall be provided with bypass contactors to operate the pumps at full speed.

Small pump stations may be designed with constant speed pumps. Larger pump stations may require the use of variable speed drives. The decision of the District Engineer of the Garden Grove Sanitary District shall be final as to the type of driver to be used.

17.5 <u>Wet Well</u>

The wet well shall be sized to

- Provide adequate submergence
- Provide adequate net positive suction head available (NPSHA)
- Prevent frequent pump cycling
- Provide emergency storage

Submergence provided shall prevent formation of vortices and air being drawn into the pump. It shall also prevent cavitation. The minimum submergence shall be at least one foot greater than that required by the pump manufacturer.

The net positive suction head available shall be calculated as:

$$NPSHA=2.24 (P_a-P_v)-H_1+Z$$

Where

P_a= Atmospheric pressure (psia)

P_v= Vapor Pressure of liquid at the maximum expected temperature (use 0.59 psia)

H_i= Friction and minor losses between the wet well and the pump suction flange in feet of liquid

Z= Difference in elevation between the minimum wet well water level and pump datum, in feet. Use – when the pump datum is higher than the minimum wet well water level.

The minimum NPSHA shall be at least eight feet greater than the net positive suction head required (NPSHR) by the selected pump for the maximum expected flow through the pump.

The wet well shall be sized to provide the storage capacity which will preclude exceeding the following number of pump starts per hour:

Motor Horsepower	Maximum Starts per Hour	Minimum Cycling Time (Minutes)
Up to 20	6	10
25 to 50	4	15
60 to 75	3	20
100 and larger	2	30

Wet well bottom corners shall be sloped at 1:1 and slope to the suction pipe inlet to prevent the accumulation of debris on the wet well floor.

Influent pipe(s) shall not enter the wet well in a position which may cause pre-rotation of the flow into the pump suction, and turbulence in the wet well. The influent velocity into the wet well shall be no greater than three (3) feet per second.

For large pump stations, a partition wall(s) with sluice gates may be required to isolate a portion of the wet well for cleaning.

17.6 Emergency Storage

Emergency storage volume needed shall be evaluated for each pump station based upon the tributary area and expected ultimate wastewater flows. The minimum volume of emergency storage shall be 30 minutes of ultimate peak wet weather flow without surcharging the tributary collection system. The emergency storage volume may be provided in the wet well or in a separate adjacent PVC lined overflow structure.

Where possible, the invert of the overflow structure shall be higher than the low water elevation of the pump station wet well to allow gravity drainage of the stored sewage to the wet well. There shall be a minimum of two connecting pipes between the overflow structure and the wet well. The connecting pipes shall be equipped with flap gates on the wet well side. The floor of the overflow structure shall slope to the connecting pipes.

All overflow structures shall be equipped with an access hatch, and three 30-inch diameter maintenance access holes. A 2-1/2 inch hydrant water connection shall be provided near the overflow structure for use in periodic cleaning. The water supply to the hydrant water connection shall have a reduced pressure backflow preventer.

The higher of the maximum storage level and overflow level shall be set at least one foot (1-ft) lower than the top of the lowest manhole in the system, basement or p-trap of the plumbing fixture connected to the system.

17.7 Dry Well

The dry well shall meet the following criteria:

- A. Pumps shall be placed to provide minimum clear space of 3'-6"
- B. The lowest level of the pump station dry well shall have a sump pit with duplex explosion proof submersible pumps controlled by float switches. The sump pumps shall discharge to the wet well above the maximum water level.
- C. Discharge piping and the force main shall be placed in the dry well along the common wall with the wet well. The flow meter shall be placed inside the dry well sufficiently downstream of the last pump discharge pipe. If there is not sufficient room, the flow meter shall be placed in a below grade vault adjacent to the pump station structure.
- D. Catwalks or mezzanine levels shall be provided to access the flow meters, valves, and other portions of the equipment

17.8 Standby Equipment

All pump stations shall have standby equipment capable of handling the ultimate peak wet weather flow during a commercial power outage and/or with the largest unit out of service. This criterion shall apply to all essential electrical and mechanical equipment including pumps/motors, fans, air compressors and sump pumps.

There shall be a minimum of one **standby main sewage pump** equal in size to the largest duty main sewage pump in the station.

All pump stations shall have a **permanent standby generator** and an **automatic transfer switch** sized to start and operate all the sewage pumps needed for ultimate peak wet weather flow, sump pump, ventilation fans, lighting, instrumentation, controls, and telemetry, with voltage dip not to exceed 16% when starting any motor.

Generators shall be skid mounted, permanently anchored to the foundation, and housed in an acoustically insulated enclosure. Exhaust mufflers shall be super critical grade designed for noise level not to exceed the noise level allowed within each particular area.

Load banks sized for 80% of the generator capacity shall be provided. Load banks shall be mounted in the vicinity of the generator and protected with adequate enclosure suitable for the location as required by NEMA Standards.

Portable trailer mounted generators are acceptable only for locations where installation of a permanent skid-mounted generator is not feasible. When a portable trailer mounted generator is furnished, a power receptacle shall be permanently installed for quick connection.

Standby generators shall be furnished with battery chargers and block heaters.

The standby generator shall be a diesel or natural gas powered generator. The diesel fuel powered generators shall be equipped with a sub-base fuel tank sized for a minimum of 12

hours of continuous full load operation. Standby generators shall be units pre-approved by the South Coast Air Quality Management District.

17.9 **Pumps**

Pumps shall be the enclosed screw-centrifugal or recessed impeller type. Wet well-dry well pumps shall be suitable for operation when the dry well is flooded. Pumping capacity and head shall be considered in the selection of the type of pump for the wet well-dry well pump stations.

RECESSED IMPELLER CENTRIFUGAL PUMPS

Recessed impeller centrifugal pumps are designed to handle stringy materials and up to 25 times the amount of solids of conventional non-clog pumps. Some recessed impellers are labeled by pump manufacturers as torque-flow, bladeless and sphere flow. However, all of these pump models follow the general design of placing the impeller away from the fluid stream in order to pass stringy material without clogging the hydraulic passages.

The recommended minimum design criteria in the selection of recessed impeller centrifugal pumps are as follows:

- a. Pump impeller shall be selected with the best possible efficiency at design point or at the operating range of the pump.
- b. Maximum Speed

1750 rpm or shall not exceed the limitation as recommended by the Hydraulic Institute Standards for Centrifugal Pump application

- c. Materials of Construction
- NiHard (minimum of 550 Brinnell hardness) or stainless steel Type 316 impeller with a removable wear plate of the same material as the impeller
- NiHard (minimum of 550 Brinnell hardness) or cast iron casing, as determined by the District Engineer.
- Stainless steel Type 316 shaft.
- Tandem mechanical shaft seal system for the motor with two totally independent seal assemblies and Tungsten-Carbide seal faces
- d. Upper and Lower Bearings
- Radial and thrust bearings, grease lubricated with minimum B-10 bearing life of 60,000 hours for the operating range of the pump.
- e. Slide Away Coupling

Foot mounted discharge elbow and adaptor, base plate, upper and lower rail supports, lifting yoke, and cable. All metal to metal interfaces where movement may occur shall be non-sparking.

- f. Electric Motor
- For wet well installation, motors shall be FM or UL listed, and be designed for Class I, Group D, Division 1 explosion proof.
- NEMA Design B, heavy duty, high efficiency, non-overloading, with a nameplate horsepower at least 20% greater than the maximum horsepower required over the entire operating range.
- Thermal overload protectors imbedded in the motor windings.
- Dual moisture or leak sensors on the sealing chamber.

- Motors shall be immersible capable of operating continuously in air without the use of sewage pumped for cooling if installed in a dry well.
- Motors in damp locations and dry pits shall have two cycles of solid baked epoxy vacuum impregnation.
- Motors shall be inverter duty if operated by variable frequency drives.

g. Painting and Coating

All non-stainless steel wetted surfaces in contact with wastewater shall be coated with coal tar epoxy enamel. Surface preparation shall be in accordance with SSPC-SP5, white metal blast cleaning. Prime coat to DFT=1.5 mils, Amercoat 71, Engard 422 or equal. Two or more coats, DFT=16 mils, Amercoat 78HB, Engard 464 or equal. Total system DFT=17.5 mils.

All non-stainless steel external surfaces exposed to corrosive environment shall be coated and painted by amine-cured epoxy. Surface preparation shall be in accordance with alkaline cleaned, SSPC-SP1. Prime coat and finish coat shall be three or more, DFT=16 mils. Amercoat 395, Engard 480 or equal.

SCREW-CENTRIFUGAL PUMPS

The recommended minimum design criteria in the selection of the screw-centrifugal pumps are as follows:

- a. Pump impeller shall be selected with the best possible efficiency at design point or at the operating range of the pump.
- b. Maximum Speed
- 1750 rpm for pumps with discharge nozzle diameter up to 12-inch,
- 1175 rpm for pumps with discharge nozzle diameter from 14 to 16-inch,
- Shall not exceed the speed limitation recommended by the Hydraulic Institute Standards for Centrifugal Pumps.
- c. Materials of Construction
- Cast iron with Hi Chrome suction liner or 316 Stainless steel where available
- Stainless steel Type 316 impeller and shaft.
- Tandem mechanical shaft seal system for the motor with two totally independent seal assemblies and Tungsten-Carbide seal faces and silicone carbide lower seal
- Minimum B-10 bearing life of 60,000 hours for the operating range of the pump.
- d. Electric Motor
- For wet well installation, motors shall be FM or UL listed, and be designed for Class I, Group D, Division 1 explosion proof.
- Thermal overload protectors imbedded in the motor windings.
- Dual moisture or leak sensors on the sealing chamber.
- Motors shall be NEMA Design B, heavy-duty, high efficiency with Class B or F insulation. Motors shall be non-overloading over the entire operating range, with a nameplate horsepower rating a minimum of 20

percent greater than the maximum horsepower required over the operating range.

- Motors located in a damp environment and in a dry pit shall have 2 cycles of solid baked epoxy vacuum impregnation.
- Motors shall be inverter duty if operated by variable frequency drives.
- Motors shall be immersible, capable of operating continuously in air without the use of sewage pumped for cooling if installed in a dry well.

e. Painting and Coating

All non-stainless steel wetted surfaces in contact with wastewater shall be coated with coal tar epoxy enamel. Surface preparation shall be in accordance with SSPC-SP5, white metal blast cleaning. Prime coat to DFT=1.5 mils, Amercoat 71, Engard 422 or equal. Two or more coats, DFT=16 rails, Amercoat 78HB, Engard 464 or equal. Total system DFT=17.5 mils.

Non-stainless steel external surface exposed to corrosive environment shall be coated and painted by amine cured epoxy. Surface preparation shall be in accordance with alkaline cleaned, SSPC-SP1. Prime coat and finish coat shall be three or more, DFT=16 mils. Amercoat 395, Engard 480 or equal.

17.10 Valves and Gates

Pump stations are equipped with various types of valves to prevent backflow, to isolate the equipment from the system, to control hydraulic surges and to drain the piping system during scheduled repair and maintenance. Each valve type differs in construction, materials, and operation depending on the service and application. All valves shall be suitable for wastewater service.

All interior surfaces of valves in contact with wastewater shall be epoxy coated. All valves 10-inch diameter and larger shall be provided with motor operators. Manually operated valves located more than six feet above the operating floor shall be equipped with chain wheel operators, with the chain extended 36 inches above finish floor. Motor operated valves shall be provided with a manual hand wheel and manual push button station conveniently located below the valve, 5 feet above finished floor.

SLUICE GATES

Sluice gates shall be furnished with stainless steel frames and slides with embedded bronze seats, Type 316 stainless steel stem, and adjustable bronze bushed stem guides. Sluice gate manual operator shall have AWWA square nut; manual crank operator with floor stand and 2-speed gear reducer designed for opening time of not to exceed six minutes. Motor operator shall be provided when required by the District Engineer. Motor operated gates shall be designed for opening and closing times of one foot per minute.

Sluice gates shall be specified to be furnished with pattern wall thimbles to match the concrete thickness where the gate is to be installed.

Sluice gates shall be Rodney Hunt or approved equal.

ECCENTRIC PLUG VALVES

Non-lubricated eccentric plug valves shall be used as isolation valves. Valves shall have hard rubber (suitable for sewage service) resilient faced plugs and flanged ends. Valve seats and discs shall be stainless steel, Type 316. Bodies shall be semi-steel with raised seats. Valves shall be of the bolted bonnet design. Valve design shall allow repacking without removing the bonnet, and the packing shall be adjustable. All exposed nuts, bolts, springs, and washers shall be stainless steel, Type 316. Valves shall have permanently lubricated stainless steel bearings in the upper and lower plugstem journals.

Manual valves shall have a 2-inch square nut and lever actuator. Levers shall be field cut as required to be operable in their installed locations.

Eccentric plug valves may be used as pump control valve to alleviate hydraulic surges during normal starting and stopping of the pumps and as surge anticipators when required. These valves shall have hydraulic cylinder type operators with adjustable opening and closing times. Where the valve is used as a surge relief valve, emergency (upon failure of power supply) opening and closing times shall be specified.

Where space permits, all eccentric plug valves shall be installed with the shaft in the horizontal position. The orientation of the plug with respect to the fluid flow direction shall be as recommended by the manufacturer. The valve manufacturer's recommended installation instructions to prevent clogging of the valves during extended shutdown periods shall be strictly followed.

Valves shall have unobstructed port area of not less than 80-percent of total pipe area.

Eccentric plug valves shall be as manufactured by DeZurik Corporation, Keystone, Drum-Owens (Homestead), Milliken, or approved equal.

BALL VALVES

When required by the District Engineer, ball valves shall be used as pump control valves or for surge relief where flow characteristics require the valve trim that would match that of the ball valves.

Small diameter ball valves (3/4 inch to 2-1/2 inch diameter) shall be used as isolation shut off valves for potable or pump station water system.

All ball valves shall be in accordance with ANSI/AWWA C 507, with cast iron, ductile iron, cast steel, or stainless steel bodies, support legs or pads, flange ends, suitable for velocities up to 35 fps, temperatures up to 125 degrees F, and design pressures to 150, or 250 psi depending on the pressure range required by the system. The balls shall be cast iron, ductile iron, cast steel or stainless steel, shaft or trunion-mounted, with tight shut-off, single or double seat, and full bore. The valves shall be rubber, with stainless steel or monel shafts, and at least one thrust bearing. Except for stainless steel, ferrous surfaces of valves in contact with wastewater shall be minimum 16 mil epoxy-coated.

Ball valves shall be as manufactured by Jamesbury Corporation, Wm. Powell Company, or approved equal.

CHECK VALVES

Check valves shall be installed at each pump discharge piping to prevent backflow of wastewater which can cause severe damage to the pump impeller and shaft, and recirculation of flows back to the wet well in stations with multiple pumps. Valves shall comply with the requirements of AWWA C508.

Check valves shall be the outside lever and weight type swing check valves. They shall be installed in the horizontal position to prevent accumulation of solids downstream of the valve which can cause clogging of the valves.

Swing check valves shall have a flanged cover piece to provide access to the disc. The valve body, cover, and disk shall be cast iron conforming to ASTM A 126 Grade B. Disc facing shall be rubber conforming to ASTM D2000 2BG715. Seat ring and clapper arm shall be cast bronze conforming to ASTM B584 Alloy C 84400. Clapper arm shall be clamped to the hinge pin with stainless steel screws and jam nuts.

Ferrous surfaces of valves in contact with wastewater shall be minimum 16 mil epoxy coated.

Swing check valves shall be as manufactured by APCO (Valve and Primer Corp.), Kennedy, Crane Company, or approved equal.

SEWAGE SURGE RELIEF VALVES

The necessity for surge control devices shall be determined through a complete surge analysis of the pumping system. Although surge tanks are the most reliable means to alleviate damaging surges in the force mains, sewage surge relief valves may be required by the system. Where surge relief valves are required, the valve shall be installed in the discharge piping manifold and connected to the wet well. The valve shall be designed to open immediately when the system pressure exceeds the load setting of the counterweights and shall close slowly at an adjustable speed upon return of system pressure to normal.

The surge relief valve body shall be constructed of a heavy cast-iron or cast steel disc having rubber seating face; and corrosion resistant shaft and cushion chamber.

Sewage surge relief valves shall be as manufactured by APCO (Valve and Primer Corporation), Empire Specialty Co., Inc, or approved equal.

SEWAGE AIR RELEASE VALVES

Sewage air release valves shall **not** be used unless **absolutely necessary**. The design engineer shall endeavor to provide a system which rises continuously from the pump station to the discharge point. Where absolutely necessary, sewage air release valves shall be provided to vent accumulating air or gas during pumping operation or entrapped during initial operation. Air release valves shall be installed at high points of the piping systems. Entrapped air or gases can reduce pumping capacity of the pumping system or cause corrosion of the piping system with gases containing hydrogen sulfide. The air or gas vent located at the pump station plant shall be discharged to the wet well.

The valves shall have long float stems and bodies to minimize clogging. Each valve shall be furnished with backwashing accessories to remove solids accumulated inside the valve. Water supply and connection shall be provided with appropriate reduced pressure backflow preventer near the valve for backwashing.

Sewage air release valves shall be as manufactured by APCO (Valve and Primer Corporation), Val-Matic (Valve Manufacturing Corporation), or approved equal.

REDUCED PRESSURE BACKFLOW PREVENTERS

Backflow preventers shall be installed where utility water or plant water is connected to the potable water supply to prevent contamination of the potable water system. The valves shall be designed to operate on the reduced pressure principle. The valve assembly shall consist of two spring loaded check valves, automatic differential pressure relief valve, drain valves and shut-off valves. The body materials shall be bronze for working pressure of not less than 150 psi, with bronze and stainless steel trim. Drain lines and air gaps shall be provided. All backflow preventers shall be registered with County Health Department and must be approved for use in the Garden Grove Sanitary District.

Backflow prevention valves shall be as manufactured by Cla-Val Company or Febco.

PUMP CONTROL VALVES

The pump control valves shall be installed in the pump discharge pipe to minimize hydraulic surges during normal starting, stopping and emergency stopping of the pump during power failure or emergency stopping caused by system failures.

The pump control valve shall be operated by hydraulic (oil) or pneumatic operator with a reserve accumulator system as back-up energy source to operate the valve during power failure. The pump control system shall be designed to start the pump against a closed valve. Once the pump has developed pressure, the pump control valve shall start to open until it reaches the maximum open position. Stopping sequence shall cause the pump control valve to close. Complete closure of the valve shall signal the pump to stop. Emergency power failure shall cause the pump control valve to close.

The normal opening, closing, and emergency closing times of the pump control valve shall be independently adjustable. Range of adjustment shall be determined based upon the results of surge analysis. Final settings of closing and opening times shall be verified during pump station start-up. Settings shall be included in the Operation and Maintenance Manual.

17.11 Magnetic Flow Meters

Each pump station shall be equipped with metering equipment to measure outlet flow and provide flow signal for recording, totalizing and control of other equipment. In addition, the flow meter shall be used for pump field performance test to measure capacity and efficiency. The meter shall be magnetic type suitable for wastewater service.

Magnetic flow meters shall be provided at the pump station discharge manifold capable of metering the full range of flow with an accuracy of ±1 percent of flow rate from 10 to 100 percent of scale. At a velocity below 1 foot per second, the accuracy shall be ±0.1 percent

of the full scale. The meter shall be installed in the piping manifold with minimum straight approach of 4 and 2 diameters upstream and downstream respectively.

The size of the flow meter shall be selected to cover the entire velocity range expected.

The magnetic flow meter shall utilize characterized electromagnetic induction to produce a voltage linearly proportional to the average flow rate. The metering system shall consist of a sensor with field coils, transmitter and interconnecting cables to make a complete operating flow metering system. The meter shall be bipolar pulsed dc type with continuous automatic zeroing.

The sensor shall be flange tube with non-conductive liner. The tube shall be constructed of Type 316 stainless steel with carbon steel flanges AWWA Class D if the coils are external to the tube. The sensor rating shall be NEMA 4, and capable of withstanding accidental submergence in water to a depth of 30 feet for 48 hours. The meter shall include a positive zero feature for periods when the metering portion of the process pipe is not full.

Liner material shall be neoprene, except for liquids which may deposit non-conductive coatings, which shall have Teflon linings. The specific conductivity of the liquid shall not preclude meter operation.

Grounding electrodes shall be of the same material as the sensing electrodes and shall be furnished mounted on each end of all flanges.

Transmitters shall be provided for either local or remote indication as required for each particular project. Remote transmitters shall be NEMA-4X enclosures suitable for wall mounting. Transmitters shall produce a 4-20 ma-dc output signal into a minimum load of 800 ohms linear flow, and a scaled pulse for totalization. All electrical equipment furnished with the magnetic flow meter shall carry a UL label.

Magnetic flow meters shall be Tigermag manufactured by Sparling Instrument Co., Inc. or approved equal.

17.12 Piping and Support System

The pump station piping and supports system consists of the gravity sewer, pump suction and discharge piping, station water or utility water piping, potable water piping, air piping, sanitary drainage piping, fire protection, and sprinkler piping systems. Most of these piping systems are adequately specified by the applicable sections of the Uniform Plumbing Code, Fire Codes and the Standard Specifications for Public Works Construction.

This Section includes special requirements and recommended practices involving the design of piping and the support system.

A. Piping

Materials

Ductile iron pipe shall be used in pump station main piping, consisting of suction and discharge piping, discharge manifolds, force mains as specified in Section 11, and water piping 2-1/2 inch and larger. Ductile iron pipe shall

be in accordance with SSPWC, and ANSI A21.5I (AWWA C151). All internal surfaces of ductile iron pipe and fittings for water service shall be cement mortar lined and sealed with bituminous coating in conformance with AWWA C104. Internal surfaces of ductile iron pipe for sewer service shall be lined with polyurethane or glass.

Unless otherwise specified, all joints of ductile iron pipe shall be 125-lb flange in conformance with ANSI B16.1, B16.2 and A21.10 (AWWA C110). Sleeve or mechanical grooved type couplings shall be provided at the suction and discharge piping of the pump, and between the magnetic flow meter and the isolation valves to allow removal of the equipment for maintenance.

All bolts shall be of Type 316 stainless steel with bronze nuts or cap screws of copper—copper silicon alloy, conforming to ASTM B 98, Alloy C 65100, designation H04, or alloy C 65500, designation H04. Where anaerobic conditions are anticipated, Type 304 stainless steel shall be used.

Mechanical-type couplings (grooved) shall be used between the valves, pumps, meters and the piping system for the above ground installation. Groove type couplings shall not be used for underground installation. Mechanical-type couplings shall be cast as manufactured by Victaulic, Gustin Bacon or equal.

Sleeve-type couplings shall be of fabricated steel with steel bolts and with sizes to fit outside diameter of the ductile iron pipe. The middle ring shall not be less than 1/4-inch in thickness and minimum of 5 to 7-inches long. The follower shall be single piece contoured mill section welded and cold-expanded as required for the middle rings. The coupling shall be equipped with a gasket to make the joint water-tight. The coupling shall be factory epoxy coated suitable for sewer service.

Sleeve couplings shall be installed in the piping systems subject to differential settlement as in the force main that connects the piping inside the pump station building to the yard piping. Two sets of sleeve couplings shall be installed with spacing as recommended by the coupling manufacturer.

Where sleeve couplings are installed in the piping system subject to thrust loads, the coupling shall be provided with restraining bolts. The bolts shall be designed in conformance with AWWA Design Manual M-11.

Sleeve-type couplings shall be as manufactured by Rockwell (Smith-Blair), or Dresser.

2. Suction Pipe

The suction pipe shall meet the following requirements:

a. The suction pipe shall be sized to provide a minimum velocity of 3 feet per second, and a maximum velocity of 6 feet per second throughout the operational range of the pump.

- b. The inlet velocity to the eye of the impeller shall meet the pump manufacturer's requirements. The largest suction inlet available shall be selected.
- c. The suction pipe shall be flat, or slope up to the pump to eliminate the formation of air pockets. Reducers shall be the eccentric type, with flat top, matching the crown of the suction pipe.
- d. There shall be a straight length of pipe of minimum 5 diameters before the suction elbow to provide uniform flow to the pump.
- e. The inlet of the suction pipe shall be a long radius elbow with a flared bell. The inlet location shall be in accordance with the hydraulic institute standards. The velocity at the inlet to the suction bell shall be less than 2.5 feet per second.
- f. The suction line isolation valve shall be full port eccentric plug valve located close to the wet well wall, allowing sufficient room for removal of the bolts and servicing of the valve.
- g. A pressure gauge capable of measuring the entire range of pressures expected at the entrance to the pump shall be provided as close to the pump as possible. The gauge shall be installed on a ½ inch NPT pipe tap with a ball isolation valve and chem seal with snubber.

Discharge Pipe

The discharge pipe shall meet the following requirements:

- a. Discharge pipes shall be sized for a minimum velocity of 3 feet per second and a maximum velocity of 6 feet per second.
- b. The discharge nozzle for dry well installed pumps shall be directed towards the wet well and rotated 45 degrees from the suction line.
- c. The discharge pipe shall be connected to the discharge header at an angle of 45 degrees.
- d. A pressure gauge shall be installed on the discharge nozzle or as close to the pump as possible. The gauge shall be installed on a ½ inch NPT diameter pipe tap with a ball isolation valve and chem seal with snubber.
- e. A 1-1/2 inch diameter pipe with a ball isolation valve shall be installed between the top of the pump casing and the wet well.

B. Pipe Support Systems

All piping systems, including connections to equipment, shall be designed with proper support to prevent undue deflection, vibration, and stresses on piping, equipment, and structures resulting from normal operation and seismic events. All

supports and parts thereof shall conform to the requirements of ANSI/ASME B 31.1 except as specified herein.

Ductile iron pipe of any size shall have a minimum of 2 supports per straight length not to exceed 10 feet of unsupported span. One of the supports shall be located at the joint.

Where the piping system is subject to thrust as a result of hydraulic surge or actuation of a surge relief valve, a thrust support or a hydraulic shock suppressor shall be provided.

All pipe supports shall be galvanized after fabrication. Pipe supports shall have a minimum of 1-1/2 inch thick dry pack between the floor and the support base.

17.13 Ancillary Equipment

Each pump station shall be designed to provide the necessary ancillary equipment to support the operation and maintenance of the facility. This equipment is essential to the operation and maintenance of the system. Ancillary equipment or systems that are discussed herein are commonly required equipment or systems in a wet well-dry well pump station.

A. Hoisting Equipment

Most pump stations are located underground to provide adequate submergence for the pumps. Therefore, the substructure and superstructure need to be designed to allow for installation and removal of equipment. The provisions for access hatches, lifting hooks, hoisting systems, roll-up doors and other means to provide ease of maintenance shall be carefully investigated and designed as required.

For wet well-dry well type pump stations equipped with either vertical non-clog dry well pumps or submersible pumps mounted in the dry well, a traveling bridge crane shall be provided. The bridge crane shall be designed to have a travel and span capable of reaching the pumps, meters and valves. Where the valves are located in areas which are inaccessible to the crane, lifting eyes attached to the ceiling shall be provided directly above the valve or equipment. A floor access hatch shall be provided when required.

Bridge cranes shall have a manually or electrically operated hoist, trolley and end trucks, all designed to conform to all applicable codes, and OSHA safety requirements. Where possible, monorail hoists may be used in lieu of the traveling bridge cranes.

Where space permits, a hoisting system shall be designed to allow direct transfer of equipment from the dry well to a flat bed truck. Traffic into the pump station building shall be given special consideration and necessary turning radius shall be provided.

B. HVAC and Odor Control Systems

A typical pump station consists of the wet well, dry well or the pump room, motor room, electrical and control room, and ancillary equipment rooms. Each of these

rooms requires different methods and degrees of heating, air conditioning and ventilation to provide the following conditions:

- 1. A safe and comfortable working environment for personnel;
- 2. To facilitate proper operation of equipment;
- 3. To minimize corrosion of equipment and building materials; and
- 4. To prevent accumulation of explosive and hazardous gases.

The heating, ventilating and air conditioning (HVAC) system and odor control systems shall be designed and controlled as one integrated system. Air distribution, building enclosures, wall penetrations, wind directions, building occupancies, and area classifications shall be carefully investigated. HVAC systems shall be designed in accordance with the American Society of Heating, Refrigerating and Air Conditioning Engineers (ASHRAE), State of California Energy Conservation Standards Title 24 and the NFPA 820 Fire Protection in Wastewater Treatment Plants.

Equipment conveying corrosives shall be of material that is corrosion resistant, such as fiberglass reinforced plastic (FRP) or stainless steel. If FRP ductwork is used, it shall have flame spread of less than 25, and a smoke propagation of less than 400, and be of fire resistant rating. Air containing flammable and explosive vapors or toxic gases shall not be recirculated.

Air conditioning may be required for pump stations with VFD's.

Depending upon classification, motors for supply and exhaust fans shall be explosion proof, totally enclosed fan cooled (TEFC) units.

C. Wet Well Ventilation

The pump station wet well receives and stores wastewater before it is pumped to the force main. Corrosive and hazardous gases are normally present in the wet well. These gases can become a safety hazard to operating personnel or can cause corrosion of building materials and equipment in the wet well. In order to minimize accumulation of gases inside the wet well, the wet well shall be flushed with fresh air by an adequately sized ventilation system.

Ventilation rates shall be in accordance with:

- 1. NFPA 820 Fire Protection in Wastewater Treatment Plants
- 2. Occupational Health and Safety Act (OSHA)

Pump station wet wells are classified into two types depending on their use;

- Accessible Wet Well.
- Sealed Wet Well.

ACCESSIBLE WET WELLS

Wet wells which require routine access for maintenance shall be provided with adequate fresh air ventilation in order to provide a safe environment for maintenance personnel, to prevent accumulation of explosive gases, and to minimize corrosion of equipment installed in the wet well. The internal surfaces of the wet well shall be lined with PVC for corrosion protection.

The following minimum ventilation criteria shall be used:

- 1. All accessible wet wells shall be provided with continuous ventilation of a minimum of 15 air changes per hour.
- 2. Where intermittent ventilation is required, the ventilation rate shall be at least 30 air changes per hour.

All electrical equipment and fans inside the accessible wet well shall be explosion-proof designed and manufactured for Class I, Division I, Group D. All other design criteria shall be in accordance with NFPA 820 Fire Protection in Wastewater Treatment Plants.

SEALED WET WELLS

Sealed wet wells shall be designed to be low maintenance. The internal surfaces of the wet well shall be lined with PVC for corrosion protection.

Sealed wet wells shall be provided with static vents to accommodate air displacement due to the rise and fall of the water level in the wet well. The vent shall have a minimum diameter of one-half the diameter of the incoming sewer. The vent pipe shall be connected to the nearest sewer maintenance hole where possible. Where the pump station is located away from any sensitive area, vent pipe could be extended above the roof line with a minimum of 15 feet from any window or fresh air inlet.

All electrical equipment inside the sealed wet well shall be classified in accordance with NFPA 820, Fire Protection in Wastewater Treatment and Collection System Facilities.

C. Odor Control

The need for odor control systems shall be evaluated for each project. Such evaluation shall be based on a life cycle cost of 20 years with major consideration of the power and chemical consumption, first cost, maintenance cost, reliability and efficiency of the system.

Wet well odor control shall consist of a water misting system. Activated carbon scrubbers, chemical scrubbers utilizing a chemical absorption process for removal of odors, or chemical or air injection systems may be necessary for odor control in other parts of a pump station.

For the chemical scrubbing systems, foul air from the plant process facility is introduced into the scrubber vessel with an atomized mist chemical solution containing sodium hypochlorite. Oxidation of odorous compounds occurs upon contact with the scrubbing mist, and is removed in the condensate. The scrubber shall be designed to remove a minimum of 99 percent of hydrogen sulfide in the foul stream. Acceptable chemical scrubber manufacturers are Calvert Environmental Co., San Diego, CA, and Quad Environmental Technologies, Corp., Highland Park, IL.

All odor control and ventilation equipment shall be suitable for continuous exposure to saturated hydrogen sulfide gas, sodium hypochlorite mist, sodium hydroxide mist and sulfuric acid. Electrical equipment shall have explosion proof enclosure designed for hazardous condition for Class 1, Division 1, locations.

For air pollution permits, consult South Coast Air Quality Management District.

D. Dry Well Ventilation

The pump station dry well is normally located adjacent to the wet well to house the pumps, valves, meters and other ancillary equipment.

The dry well and equipment rooms shall be designed for a ventilation rate of at least 15 air changes per hour or ventilation rate equivalent to cool internal heat load from the equipment whichever is greater or not greater than 60 air changes per hour. The sensible cooling ventilation rate shall be calculated as follows:

H = cfm x 1.09 x t

where:

H - Internal heat gain from equipment, Btu per hour

cfm - Air flow, cu ft per minute

t - Change in internal temperature, degree F. Use 10 degrees F for change in internal temperature as adequate for sensible cooling.

Where a pump station is equipped with variable frequency drives (VFD), the VFD shall be installed in an air conditioned room with 90 percent efficient outside air filters. VFD units are inherently sensitive to temperature, dust, moisture and other corrosive elements in the air. For constant speed pump stations, the motor control center (MCC) and control rooms shall be equipped with a ventilation fan and 90 percent efficient outside air filters. Pump and equipment room air inlets shall be provided with 30 percent efficient outside air filters. All air filters shall be provided with differential pressure gages to indicate when the filters are clogged, and flow detection devices connected to alarm signaling systems to indicate ventilation system failure.

E. Fire Protection System

Where required by NFPA or by the Fire Department, necessary fire protection systems shall be provided in required areas. For areas housing electrical equipment such as the motor control centers, computer rooms and control rooms, an approved type fire protection systems shall be provided.

F. Gas Detection System

Combustible gas detection equipment shall be provided in the wet well and dry well, and other areas where hazardous gas may be present, to record, activate alarms and/or to operate the ventilation system. The stationary gas detection system shall be capable of measuring concentrations of hydrogen sulfide, methane gas and/or petroleum vapor in the air.

The combustible gas sensor shall be DET-TRONICS Point Watch Infrared Hydrocarbon Gas Detector Model PIR9400 or approved equal. The sensor shall be mounted in the wet well such that it can be removable externally for maintenance and calibration. It shall be connected to the programmable logic controller (PLC). The PLC shall monitor the combustible gas sensor through the 4-20 mA signal which shall be proportional to combustible gas concentrations of zero to 100%. Two (2) PLC adjustable alarms shall be provided. 6% lower explosion level (LEL) shall indicate a warning, and 10% LEL shall indicate an alarm. Alarm beacons shall be installed in the dry well and the electrical room.

An entry control station shall be provided in a NEMA 4X stainless steel enclosure with vandal resistant hardware, and amber and green NEMA 4 vandal resistant pilot lights at or near each entry. They shall indicate a potentially dangerous condition in the pump station based on the loss of the ventilation system, combustible gas, loss of positive pressure in the electrical room, or loss of negative pressure in the dry well. Both lights shall be dark if there is a component or power failure. A lamp test switch shall be provided, which will activate all entry control system lights for ten seconds for testing.

G. Compressed Air System

For pump stations using surge tanks, air operated valves; pneumatic tools for maintenance purposes, and instrument air, a compressed air system shall be provided. The air system for pneumatic tools shall consist of a lubricated type air compressor, receivers, air dryers and necessary piping system. For an instrument air system, a dedicated non-lubricated type air compressor, receiver, dryer and necessary piping system shall be provided. Where the valve operators are designed as pump control valves with the option to have controlled closing during power failure, the air receivers shall be sized to store compressed air capable of stroking the air cylinders three (3) complete cycles between the specified operating pressures during power outages.

H. Hydraulic System

Pump stations equipped with hydraulic operated valves shall be provided with hydraulic systems. The hydraulic system shall be either a package system supplied with each valve, or one complete package to operate multiple valves. The system shall consist of an oil reservoir, hydraulic pumps, control valves, hydraulic cylinders, limit switches and nitrogen gas-filled accumulators where the valves are required to operate during power outages. The valve opening and closing ranges shall be specified. Final field adjustments shall be made during pump station start-up.

I. Noise Control

The pump station shall be designed to meet the minimum noise level requirement of the Municipal Code of the local jurisdictional agency and the Occupational Safety and Health Administration (CAL/OSHA). All mechanical equipment and enclosures shall be acoustically treated to bring the noise level down to an acceptable limit. These attenuation devices may consist of exhaust mufflers, sound isolators or acoustical panels.

The pump stations shall be designed with noise levels not more than 5 dBA above the ambient noise level as measured at the property line of the nearest recipient (neighbor). A 24 hour noise level reading shall be measured at the pump station site as basis of the design.

In the absence of actual field measurements, the presumed ambient noise level shall be deemed to be the minimum ambient noise level for each zone as follows:

Sound Level "A" Decibels

(In this chart, daytime levels are to be used from 7:00 A.M. to 10:00 P.M. and nighttime levels from 10:00 P.M. to 7:00 A.M.)

Presumed Ambient Noise Level (dBA)

<u>Zone</u>	<u>Day</u>	<u>Night</u>
Residential	50	40
Public Facility, Commercial, Recreational	60	55
Industrial	65	65

At the boundary line between two zones, the presumed ambient noise level of the quieter zone shall be used.

J. Sump Pumps

A sump pit shall be provided in all underground structures such as dry wells, valve and electrical vaults. The sump pit shall be equipped with an adequately sized plus a standby unit, each having a minimum capacity of 50 gpm. Submersible sump pumps shall be used and controlled by a duplex type control, an automatic alternator and a float switch level control. The control system shall be designed to start the standby pump when the lead pump fails to start or when the water level continues to rise while the lead pump is operating. Both pumps are to stop at low water level.

Sump pump discharge pipe, fittings and valves shall be Schedule 80 PVC pipe, with minimum diameter of 2-inches. Each sump pump discharge pipe shall be provided with a swing check valve and isolation gate valve mounted above, both in the vertical position. A common discharge manifold shall terminate inside the wet well with the wall penetration above the highest surcharge elevation of the wet well.

K. Spare Parts

Pump station electro-mechanical equipment shall be provided with spare parts necessary to ensure continuous operation. The recommended spare parts shall be determined by the project design engineer with assistance from the District Engineer. The following shall be the minimum list of spare parts:

- One set of pump and motor bearings for each size and model of pump unit.
- 2. One set of pump seals for each size and model of pump unit.
- 3. One set of pump and casing wear rings for each size and model of pump unit.
- 4. One set of pump and motor for each size and model of pumping unit.
- 5. One dozen fuses for each size of fuse.
- 6. A printed circuit board for each size and model of the variable frequency drives.

The spare parts shall be delivered to the project site no later than two (2) months prior to pump station start up. Spare parts required during testing and start-up shall be provided by the contractor.

17.14 Electrical Equipment

Electrical systems in the pump station consist of the power supply, power transformers, motor control centers, electric motors, electric variable speed drives, electrical wires and conduits, lighting fixtures, and other associated interface with the instrumentation and control systems.

A. Power Supply

The standard power supply to the pump station shall be 480 volts.

B. Motor Control Centers (MCC)

All motor starters and disconnect switches shall be installed in NEMA 3R Motor Control Centers (MCC). MCC rooms shall be located away from hazardous gas or other corrosive environments. Mechanical ventilation equipment shall be provided to maintain air circulation. All fresh air inlets to the MCC rooms shall be provided with 90 percent efficient inlet filters.

Where environmental problems exist in the pump station location, such as the presence of dust, moisture from sea water, or corrosive gas, the MCC room shall be designed to have adequate ventilation and provided with air cleaning equipment such as de-humidifiers, filters or carbon absorbers.

The MCC circuit breaker handles must be provided with safety interlocks.

C. Electrical Cables and Conduits

All electrical cables and conduits shall be designed in accordance with the NEMA Area Classification as required by the service area. All electrical conduits shall be

PVC coated galvanized rigid metallic conduits or Schedule 80 PVC. All conduits shall be sized for 100 year service. Spare conduits may be required. The minimum size conduit shall be 1-inch.

17.15 Instrumentation and Controls

The instrumentation and control system shall be designed to operate the pump station to match the flow characteristics of the service area. The control system shall consist of the wet well level control, flow metering equipment, pressure gages and switches, fire alarms and gas detection instruments.

A. Pump Control System

1. General

The pump control panel (PCP) provides manual or automatic control of the pumps, as well as visual indication of the pump station status and alarm conditions. The following status and alarm indicators are to be provided as a minimum:

<u>Status</u> <u>Alarms</u>

Power ON Light Wet Well HIGH LEVEL Alarm Light (from

Running Time Meter Ultrasonic)

Pump RUN Wet Well High High Level Alarm Light

HAND-OFF-AUTO selector switch Pump FAIL Alarm Light

Lights Test Pushbutton Motor winding HIGH TEMP Alarm Light Seal Test Pushbutton (for submersible pumps) Seal FAIL Alarm Light (for submersible

Flow Rate Indicator pumps)

Wet Well Level Indicator FAIL RESET pushbutton

Discharge Pressure Indicators

The pump(s) may be controlled either manually, or automatically, depending upon the position of the pump hand-off-auto selector switch. In the MANUAL mode, a pump is started by placing its hand-off-auto selector switch in the HAND position. In this mode, the pump will run continuously unless shut down by the "fail" interlocks.

In the AUTO mode, the pump is started and stopped by the wet well level, as measured by an ultrasonic level sensor. In the "Auto" mode, the pump will run until called to stop by wet well level, unless shut down by the "fail" interlocks.

In the AUTO mode, the pumps will alternate operation automatically after each pump down cycle. If the operating pump should fail, the next pump in the call sequence will start and operate each time the wet well level calls for a pump operation until the failed condition is cleared.

The pump controller shall be a solid state device, which provides operational set points, high level alarm, outputs to start and stop the pumps, and perform

pump alternation. The controller shall be a U.S. Filter D153U triplex controller/alternator or approved equal.

A float switch is to be installed in the wet well to provide an emergency high level alarm and a back up pump control system for the station. The emergency high level is to be indicated on the pump control panel and through the dialer. In this condition, the pump will operate for an adjustable time (0-5 minutes after emergency high level initiation), as set by the operator, and then will shut down. If the wet well level again rises to the emergency high level, the cycle will be repeated. The station can run indefinitely in this mode if necessary.

A "pump fail" alarm (for each pump) will be indicated at the pump control panel and transmitted to the automatic dialer system should any of the following conditions occur:

- Pump motor winding high temperature detected by sensors in the motor winding.
- Motor overload detected by the overload relay.

Each of the above "fail" conditions will lock-out the pump from operation. To reset a pump, the operator must visit the station, determine the cause of failure, correct the condition, and depress the "fail reset" pushbutton on the pump control panel.

For submersible pumps, a motor seal failure will also be detected and alarmed but will not stop pump operation.

2. Constant Speed Pump Control System

The operating sequence is applicable for multiple pump units installed in a smaller wet well. The pump station will start in sequence, pumps start and stop in the reverse order.

This sequence is recommended for the following reasons:

- a. To maintain uniform flow into the receiving system
- b. To provide smaller wet well storage volume and less number of motor starts per hour;
- c. To reduce sewer gas emission to the atmosphere by maintaining a constant water level in the wet well.

Variable Speed Drives.

Variable speed (matched-flow) pumps shall be used for the following conditions:

- a. Where more uniform discharge to the receiving system is required;
- b. Where there is not enough space in the pump station to accommodate installation of multiple smaller unit constant speed pumps;
- c. Where the wet well volume is limited to satisfy maximum starts per hour;
- d. Where sewer gas emissions to the atmosphere should be limited;

The variable speed drive pumps shall be controlled as follows:

- a. When the wet well level reaches the first set level, the lead pump will start and ramp to a minimum preset speed. As the flow increases, the pump speed will increase in proportion to the increase in flow in order to maintain the level in the wet well until the pump has reached its maximum speed.
- b. When the inflow to the wet well exceeds the maximum capacity of the lead pump, the control system will then start the lag pump. The lag pump will increase its speed while the lead pump will decrease its speed up to the point where the two pumps share the flow, both at the same speed. As the inflow increases, the two pumps will increase their speeds in proportion to the inflow until the pumps have reached the maximum pump design flow, in the case of two pump combination.
- c. A drop in wet well level equivalent to a decrease in pump station inflow will signal the pumps to slow down until a preset speed is reached. Then the lag pump will stop, and the lead pump will increase its speed in proportion to the inflow.
- d. Further drop in wet well level will signal the lead pump to slow down until the minimum level is reached, at which level, the lead pump will stop.
- e. In the event that either the lead pump or the lag pump fails, the wet well level will rise and the standby pump will be started at the same time the failure alarm is activated. The standby pump will be provided with a variable speed drive.

For pump stations equipped with more than two variable speed pumps, the same operating sequence will be followed.

Under no conditions will a force main velocity of less than 3 feet per second shall be allowed.

The variable speed drives shall be provided with bypass contactors to operate the pump at full speed when the VFD is not available.

4. Float Level Switch

The float level switches shall be used to detect the low-low level cut-off and the high-high water level alarm, and as an auxiliary system in the event of failure of the ultrasonic level control systems. When the water level in the wet well reaches the high-high level, the control system (US Filter CBIT B300 single stage controller or approved equal) shall initiate a timed pump down using all pumps. The pump station shall be capable of operating indefinitely in this mode. The float switch shall be direct acting with a single pole mercury switch which activates when the longitudinal axis of the float is horizontal and de-actuates when the liquid level falls 1-inch below the actuation level. The switch shall be encapsulated in a chemical resistant polypropylene casing with a firmly bonded electrical cable protruding. The entire assembly shall be watertight and impact resistant designed and manufactured for Class 1 Division 1, Hazardous Conditions. Float switches shall be Roto-Float as manufactured by Anchor Scientific or approved equal.

Submersible dewatering sump pumps located in dry wells and valve structures shall be controlled by float switches. Float switches shall be designed and manufactured suitable for the area classification of the sump pit.

5. Ultrasonic Level Control

The pump station's primary level controller shall be the ultrasonic level sensor. The transducers shall be hermetically sealed, self cleaning with built-in temperature compensation 6° beam angle, suitable for installation in a sewage pump station wet well.

Ultrasonic measuring systems shall be the Hydroranger with XPS-15 transducer as manufactured by Milltronics, or approved equal.

17.16 Supervisory Control and Data Acquisition (SCADA) System

To monitor and control the operation of the pump station remotely at a central station, SCADA system equipment shall be provided. The system shall consist of the Remote Telemetry Unit (RTU) located in the pump station connected to a computer at a designated central station. The signal to the central station shall be transmitted over spread spectrum radio.

The pump operation is initiated by a motor starter mounted in the Motor Control Center (MCC). The starter is controlled by a signal from the level sensor or push buttons or by local control automation, such as the remote telemetry unit.

The Central Computer System displays information such as graphics and tables; gathers historical data such as trends of pumping cycles, measurement of flows and pressures, equipment running time, number of pump starts per hour; and can remotely control the operation of the pump stations.

17.17 Pressure Gauges

In a wet well-dry well type pump station, pressure gauges shall be installed at the suction and discharge sides of each pump to measure the pump total dynamic head. The pressure gauges shall be at least 4-1/2 inches in diameter. Where seal flushing water is required, a pressure gauge and low pressure switch shall be provided to activate an alarm in case of loss of flushing water. A low flow alarm switch may be used in lieu of the pressure switch.

A pressure switch shall be provided between the pump and the check valve or pump control valve to activate an alarm in the event of failure of the valve to open or accidental closure of any isolation valve located at the pump discharge piping. A micro-switch attached to the valve shaft may be provided in lieu of the pressure switch.

All, pressure gauges and switches installed in a piping system carrying solids bearing fluids such as wastewater, sump pump discharge or chemical lines shall be provided with diaphragm seals and snubbers where pulsating flow is expected. The assembly shall be provided with an isolation ball valve for maintenance. Diaphragm seal material shall be compatible with the pressure and fluid being handled.

In a submersible pump station, a pressure gauge/switch shall be installed in the discharge pipe of each pump in the valve vault upstream of the check valve. The discharge pressures shall be indicated in the pump control panel.

17.18 Pump Station Facility

The pump station facility includes the pump station structure, buildings, electrical substation or transformer, access roads and other appurtenant equipment inside the property. The facility design shall incorporate access road and security. The architectural treatment shall blend with the surrounding area.

A. Building Design and Materials of Construction

The pump station usually consists of an underground concrete structure to house the wet well and the dry well. Where the pump station requires an above ground structure to house the electrical room, generator room, office area and maintenance shop, the above ground building shall be designed in accordance with the requirements of the Uniform Building Code and California Fire Code. In general, all buildings shall be cast-in-place concrete or masonry block wall construction.

Wet Well and Dry Well. The wet well and dry well shall be reinforced cast-in-place concrete with wall thickness to withstand the earth and seismic loads, and shall be heavy enough to resist floatation without earth skin friction resisting the outside surfaces when the wet well is empty.

The size and configuration of the wet well shall be designed in accordance with Section 17.5. The bottom of the wet well shall be sloped to at least 15 degrees and corners grouted to prevent accumulation of solids during operation.

The dry well shall be designed to provide the following:

- 1. Minimum of 42-inch clear working clearance between pumps and piping;
- Access doors, stairways and landing;
- Access opening for equipment installation, maintenance and removal;
- 4. Hoisting equipment or lifting hooks;
- 5. Adequate ventilation
- 6 Fire protection equipment where required.

17.19 Force Mains

The minimum diameter for a force main shall be 4 inches. The capacity of the force main shall be the design peak flow from the pump station. The minimum design velocity for a force main shall be 3.0 fps, and maximum allowed 5.0 fps for PVC and 6.0 fps for DIP.

Force mains shall continuously rise from the pump station to the terminal manhole to eliminate the need for air and vacuum release valves.

For new pump stations with phased development of the tributary area, dual force mains may be required. The District Engineer shall select the number of force mains that will be installed at each pump station.

17.20 Access Roads

Pump stations shall be designed with access roads for construction, operation and maintenance of the equipment. The roads shall have turning radii suitable for the size of vehicle, or heavy hoisting equipment necessary for installation, removal or delivery of equipment or supplies into the station. Pavement sections shall be able to support the load of the heaviest anticipated equipment to be used in the station. Where monorail hoists or traveling cranes are required, adequate headroom clearance shall be provided or loading docks can be used to limit the height of the building.

17.21 Flood Control

The pump stations shall be designed with pad elevation one foot above the expected value100-year flood elevation or the elevations indicated on the Flood Insurance Rate Maps in areas where detailed studies have been conducted, whichever is higher. Where available and current, information contained in the Orange County Public Facilities and Resources Department documents can be used to determine the expected value 100-year flood elevation.

All hydrologic and hydraulic calculations and design shall be in accordance with the standards of the jurisdictional flood control agency standards.

17.22 Grading and Area Drainage

The site drainage shall be designed to prevent standing water or the erosive effects of storm runoff. Pavement areas shall have a positive drain of up to 3%. Flow lines shall have a

minimum of 1% slope. Underground structures shall not be constructed in partially cut and partially fill. Where this condition exists, the site shall be over-excavated and re-stabilized. The pump station shall be designed not to float where high groundwater exists.

17.23 Soils Report

A geotechnical investigation shall be conducted to determine the underground soils conditions. The Soils report shall show the foundation design criteria, corrosiveness of soils and ground water, groundwater elevations if it exists, and possible hazardous materials underground. Cleaning of such materials shall be addressed in the construction contract, or can be awarded to a separate hazardous materials contractor as determined by the District Engineer.

17.24 Surveying

The control bench marks shall be referenced from the County of Orange records. Where existing survey and reference plans are available, field check existing data with the current datum and adjust all elevations to current datum where required. The location of the pump station shall be tied to a nearby street and to an existing property line. Basis of survey bearings and control shall be given if the local coordinate are established.

17.25 Security

The pump station site shall be provided with an 8 foot high chain link fence or masonry block wall fence, as directed by the District Engineer. The fence or wall shall be designed in accordance with applicable American Public Works Association Standards. The entrance gate shall be secured with a padlock. Where the pump station has a superstructure housing the motor control center and the generator, the building shall be equipped with intrusion alarms. Where there is no superstructure, the NEMA 3R enclosure housing the motor control center shall be equipped with an intrusion alarm. The alarms shall be connected to a horn mounted in the building, a red beacon light mounted outside the building or above the NEMA 3R enclosure, and remoted via telemetry to the main control system.

17.26 Water Supply System

The pump station water supply system shall be provided for pump seal water system, irrigation system, rest rooms and housekeeping hose downs. A backflow preventer shall be installed in the pipeline connecting the hose bibs, seal water and irrigation system. Seal water systems shall utilize air gap tanks, and not be directly connected to the water supply system. All piping shall be designed in conformance with the Uniform Plumbing Code.

17.27 Landscaping and Irrigation System

Plants selected shall be drought resistant and approved by the District Engineer. Irrigation system equipment shall utilize water saving kits that are controlled by automatic timers.

17.28 Construction

The pump station shall be constructed in conformance with the specifications and drawings. The pump station construction shall be administered and inspected by the Garden Grove Sanitary District, or its designated representative.

A. Shop Drawing Submittal and Shop Drawing Review

The Technical Specifications shall specify the requirements for shop drawing submittal and review process.

Once the project is awarded, shop drawing submittals shall be reviewed and accepted. The shop drawing review is one way to check compliance with the specifications. It also serves as a mechanism to get from the contractor the equipment as specified. Where a substitution to specified equipment is proposed to the construction project Design Engineer for review, the design project engineer shall be consulted.

B. Equipment Installation and Testing

The equipment installation and testing shall be specified in each equipment specification. Normally, the equipment shall be specified to be installed by the Contractor under the supervision of a certified factory representative. After installation, the Contractor shall conduct trial operation of the equipment, and make the necessary adjustments as required. When the equipment becomes operational, the Contractor shall test the equipment in the presence of the District's representative. The test shall include a performance test, simulating the manual and automatic operation, and checking of other components in compliance with the specifications. The test shall also include verification of all alarm functions. A continuous test using the actual process material shall be conducted without any breakdown prior to final acceptance.

C. Operation and Maintenance Manuals

The Operation and Maintenance Manual shall be prepared by the construction contractor based upon the plans and specifications, and assistance from equipment manufacturers, to clearly describe how the pump station shall operate under normal and emergency conditions, and how it should be maintained.

Final payment shall not be made to the Contractor until the Operation and Maintenance Manual is approved by the District Engineer.

D. Operator Training

Each pump station has unique operational requirements and some have equipment that requires familiarization by the station operators. The Contractor shall provide training, through respective authorized equipment representatives, to the station operators as specified in the Contract Documents.

18. INSPECTION AND TESTING OF GRAVITY SEWERS

18.01 <u>CCTV Inspection</u>

The Contractor shall perform Closed Circuit Television inspection (CCTV) of all gravity sewers to determine alignment, grade and damaged or defective pipe in place; after the pipe has been installed, backfilled and compacted to grade, tested for leakage, manholes raised to grade, but prior to final resurfacing, from manhole to manhole. CCTV inspection shall be recorded on DVD, and recording procedures shall conform to the requirements of Standard Specifications for Public Works Construction Section 500-1.1.5, Television Inspection, except that the maximum speed shall be 15 feet per minute. The recording shall continuously display the following on-screen data: contract number, project name, date, time, distance (in feet) from the insertion manhole, and manhole identification codes.

Two copies of the recording shall be submitted to the District for approval within two days of the CCTV inspection. CCTV recording shall be performed first with the pipe dry, and then immediately following clean water flowing in the pipe to clearly indicate vertical misalignments, sags or other defects. Should CCTV inspection indicate any faulty installation of the pipe, repairs or replacement shall be made at the Contractor's expense by a method approved by the District. Repaired and or replaced pipe and/or segments shall be retested and reinspected through CCTV at no additional cost to the District, until final acceptance is granted. Any sag greater than one (1) 0.25 inch in 100 feet of pipe reach shall be considered excessive, and the pipe shall be removed and reinstalled to proper grade.

18.02 **Gravity Pipe Leakage Tests**

All gravity sewer pipes and service laterals shall be tested for exfiltration and/or infiltration and deflection. All leakage tests shall be in conformance with Standard Specifications for Public Works Construction (SSPWC), "GREENBOOK" Section 306-1.4.1. Water exfiltration test shall be in conformance with SSPWC Section 306-1-4.2. Air pressure test shall be in conformance with SSPWC 306-1.4.4. All testing shall be performed in the presence of the District Inspector.

18.03 Manhole Leakage Tests

- 1. Leakage tests shall be made and observed by the District Inspector on each manhole. The test shall be the exfiltration test made as described below:
- 2. After the manhole has been assembled in place, all lifting holes and those exterior joints within 6 feet of the ground surface shall be filled and pointed with an approved non-shrinking mortar and the lining joints completed. The test shall be made prior to placing the shelf and invert. If the groundwater table has been allowed to rise above the bottom of the manhole, it shall be lowered for the duration of the test. All pipes and other openings into the manhole shall be suitably plugged and the plugs braced to prevent blow out.
- 3. The manhole shall then be filled with water to the top of the cone section. If the excavation has not been backfilled and observation indicates no visible leakage, that is, no water visibly moving down the surface of the manhole, the manhole may be

considered to be satisfactorily water-tight. If the test, as described above is unsatisfactory as determined by the District Inspector, or if the manhole excavation has been backfilled, the test shall be continued. A period of time may be permitted if the Contractor so wishes, to allow for absorption. At the end of this period, the manhole shall be refilled at the top of the cone, if necessary and the measuring time of at least 8 hours begun. At the end of the test period, the manhole shall be refilled to the top of the cone, measuring the volume of water added. This amount shall be extrapolated to a 24-hour rate and the leakage determined on the basis of depth. The leakage for each manhole shall not exceed 1 gallon per vertical foot for a 24-If the manhole fails this requirement, but the leakage does not exceed 3 gallons per vertical foot per day, repairs by approved methods may be made as directed by the District to bring the leakage within the allowable rate of 1 gallon per foot per day. Leakage due to a defective section or joint or exceeding the 3 gallon per vertical foot per day shall be the cause for the rejection of the manhole. It shall be the Contractor's responsibility to uncover the manhole as necessary and to disassemble, reconstruct or replace it as directed by the District Engineer. The manhole shall then be retested and, if satisfactory, interior joints shall be filled and pointed.

- 4. No adjustment in the leakage allowance will be made for unknown causes such as leaking plugs, absorptions, etc., i.e., it will be assumed that all loss of water during the test is a result of leaks through the joints or through the concrete. Furthermore, the Contractor shall take all steps necessary to assure the District Inspector that the water table is below the bottom of the manhole throughout the test.
- 5. If the groundwater table is above the highest joint in the manhole, and if there is no leakage into the manhole as determined by the Engineer, such a test can be used to evaluate the water-tightness of the manhole. However, if the District Engineer is not satisfied, the Contractor shall lower the water table and carry out the test as described herein before.

18.04 Pipe Slope

All gravity sewer pipe shall be laid to the line and grade shown on the plans and per Section 306.1.2 of "GREENBOOK," with a maximum allowable tolerance of 0.125 inch at the invert. The Contractor shall continuously check the grade of the pipe being installed through the use of laser line.

19. STANDARD SEWER NOTES

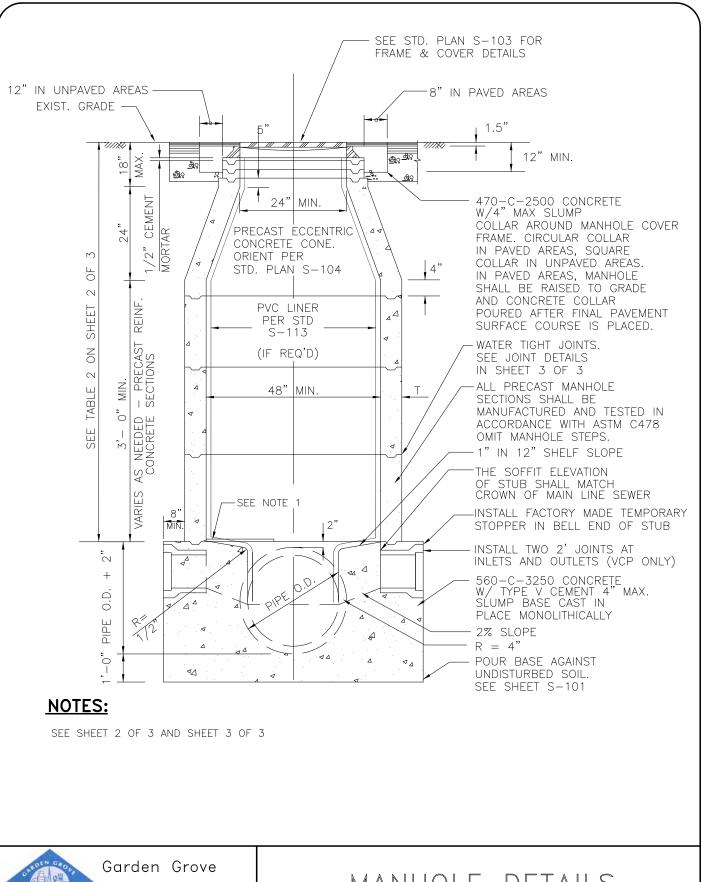
The following notes must appear on the plans under Standard Sewer Notes.

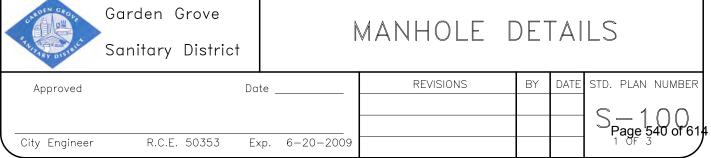
- A. The sewer Contractor shall have a copy of the Project Plans and Specifications, as well as the Garden Grove Sanitary District Design Criteria for Sewer Facilities on the job site.
- B. The Contractor shall obtain a City and/or County permit for work done on public right-of-way.
- C. The Garden Grove Sanitary District Office shall be called for inspection five (5) working days before start of work at (714) 741-5566.

- D. A pre-construction conference shall be held 48 hours before starting construction work.
- E. The Contractor shall expose all join points to the existing sewer system for verification of location and elevation before construction.
- F. Stations shown as 1+00.00 are sewer stations and are independent of all other stations.
- G. All laterals shall be staked by a surveyor before trenching and a complete set of cut sheets shall be supplied to the Contractor and the District Inspector.
- H. The District will inspect and test the sewer collection system and lateral sewers to the property clean-out. Privately owned sewer laterals from the property line clean-out will be inspected and tested by an approved contractor subject to the City of Garden Grove Building Department approval.
- J. All sewer lines shall be balled in the presence of the District Inspector before completion of all leakage tests.
- K. Pipeline leakage tests shall be made in the presence of the District Inspector, only after backfill has been completed, compaction tests on backfill have been made, and the backfill has been accepted by the District Inspector.
- L. All sewer main lines shall be inspected using a closed circuit television system. Two recordings shall be made of the inspection on a DVD disk in accordance with the Garden Grove Sanitary District Specifications for Video Inspection of Sewer Lines. One recording shall inspect the system constructed with no flow, and one shall conduct the inspection 15 minutes after flowing water in the sewer.
- M. The Contractor shall provide the Garden Grove Sanitary District with an as-built set of job prints with tie-down measurements for all laterals and manholes.
- N. Before final acceptance, the developer's engineer signing the plans shall furnish the Garden Grove Sanitary District with a set of as-built mylars of the sewer plan.
- O. Curbs, or pavement surfaces in alleys where sewer laterals exist shall be inscribed with an "S" indicating locations of all sewer laterals.
- P. Curbs shall be inscribed with ties for all manhole locations.
 - Add the following notes to plans having <u>on-site</u> work which will be dedicated to the District:
- Q. Trench backfill, on all sewer lines to be dedicated to the District, shall be compacted to a minimum of 90% relative density as determined by the five-layer test method (California 216G). Tests will be required every 300-feet of trench or as determined by the District Inspector. The developer shall submit written results of compaction testing to the District before acceptance. If in dedicated street or future street, compaction will be as required by governmental agency having jurisdiction, but no less than 90 percent relative compaction.

Appendix E-2

Standard Drawings





MANHOLE DETAILS NOTES:

- 1. PLACE TWO HALF MOON SHAPED TEMPORARY PLYWOOD COVERS (5/8" THICK MINIMUM) IN BOTTOM OF MANHOLE AFTER SHAFTS HAVE BEEN SET TO KEEP DEBRIS FROM ENTERING SEWER.
- 2. FOR DROP MANHOLE SEE STD. PLAN. S-102.
- 3. FOR MANHOLES LOCATED OUTSIDE PAVED AREAS, THE FRAME AND COVER SHALL BE SET A MINIMUM OF 0.1 FT. ABOVE FINISH GRADE IN SHOULDER AREAS, UNPAVED ROADS OR LANDSCAPING AREAS, AND 18" IN UNFINISHED AREAS.
- 4. ALL INLETS AND OUTLETS SHALL BE SUPPORTED WITH CONCRETE SUPPORTS PRIOR TO POURING MANHOLE BASE.
- 5. MANHOLE LOCATIONS SHALL BE MARKED ON CURB FACE.
- 6. WALL THICKNESS (T) SHALL BE MINIMUM 5" FOR 48" MANHOLES, 6" FOR 60" MANHOLES, 7" FOR 72" MANHOLES.
- 7. SIDES OF BASE SHALL BE EITHER FORMED OR POURED AGAINST VERTICAL SMOOTH EARTH.
- 8. SEE TABLE 1 AND 2 BELOW FOR MANHOLE DIAMETER SIZES AND DEPTHS
- 9. A PLASTIC SIGN SHALL BE ATTACHED 12 INCHES BELOW THE TOP OF MANHOLE FRAME WITH INSCRIPTION:

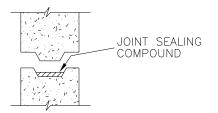
CAUTION PERMIT REQUIRED CONFINED SPACE VENTILATE BEFORE ENTERING

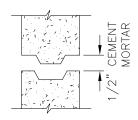
IN LETTERS NO SMALLER THAN $\frac{1}{2}$ INCH IN HEIGHT. ATTACH SIGN TO MANHOLE WALL WITH A MINIMUM OF 4 TYPE 316 STAINLESS STEEL SCREWS AND ANCHORS

TABLE 1								
SEWER MAIN (INCHES)	MAX BRANCH SIZE (INCHES)	MANHOLE SIZE SIZE (INCHES)	FRAME AND COVER (INCHES)					
8-15	10	48	30					
12-21	12	60	30					
24-36	15	72	36					

TABLE 2								
MANHOLE DEPTH TO COVER (FEET)	MANHOLE DIAMETER SIZE (INCHES)							
6 DR LESS	60″							
6.5 TO 12	48"							
12.5 TO 16	60″							
16 OR GREATER	72″							

A THE POLICE OF	Garden Grove Sanitary District	M	ANHOLE	DET	AIL	_S
Approved	Da	te	REVISIONS	BY	DATE	STD. PLAN NUMBER
City Engineer	R.C.E. 50353 E)	ур. 6–20–2009				Spage 541 of 61





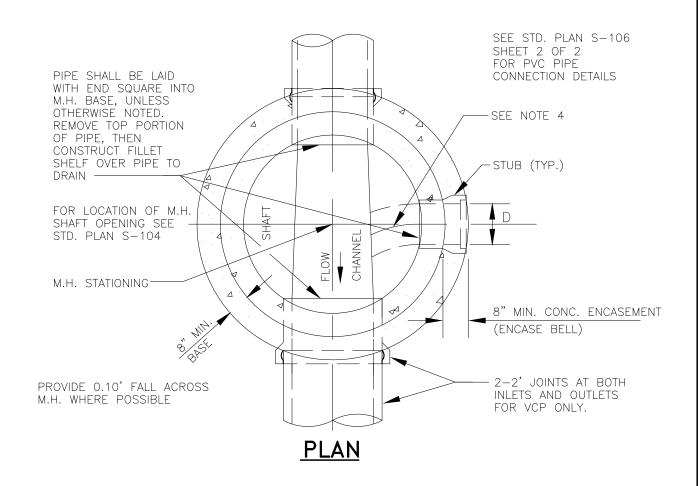
PLASTIC JOINT

MORTAR JOINT

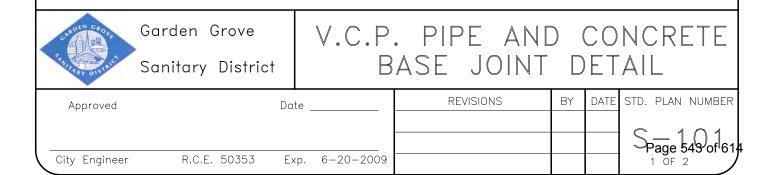
REQUIRED IN GROUNDWATER

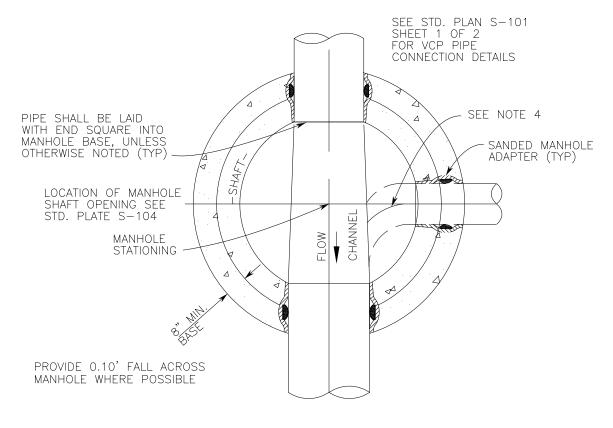
- MORTAR JOINTS SUFFICIENT MORTAR SHALL BE APPLIED ACROSS ENTIRE FACE OF JOINT SO THAT WHEN PRECAST UNITS ARE PLACED ON TOP OF ONE ANOTHER, THE MORTAR WILL SQUEEZE OUT BOTH THE INSIDE AND OUTSIDE WALL FACES. AFTER SETTING PRECAST UNITS, ALL JOINTS SHALL BE TOOL FINISHED, FLUSH.
- 2. <u>PLASTIC JOINTS</u> PREFORMED COLD—APPLIED, READY—TO—USE PLASTIC JOINT SEALING COMPOUND SHALL BE QUICK—SEAL AS SUPPLIED BY QUICKSET UTILITY VAULTS, RAM—NECK BY HENRY COMPANY, OR APPROVED EQUAL. MUST BE USED WHEN GROUNDWATER IS ENCOUNTERED.
- 3. APPLY A 6-INCH MINIMUM WIDTH OUTSIDE JOINT WRAP CENTERED OVER ALL SHAFT JOINTS IN GROUNDWATER AREAS AFTER APPLICATION OF BITUMINOUS DAMP PROOF COATING. JOINT WRAP SHALL BE RU116 RUBR-NEK BY HENRY COMPANY OR SEAL WRAP BY SEALING SYSTEMS, OR APPROVED EQUAL.
- 4. ALL JOINTS, INCLUDING BASE, SHALL BE CONSTRUCTED WATERTIGHT, FLUSH AND SMOOTH WITH A MATERIAL APPROVED BY THE INTERIOR LINING MANUFACTURER.
- 5. ALL JOINTS SHALL BE TONGUE AND GROOVE TYPE, INCLUDING BASE.

	ON CROLE	Garden Grove Sanitary District		MANHOLE	С	ET	AILS
	Approved	Do	te	REVISIONS	BY	DATE	STD. PLAN NUMBER
_	City Engineer	R.C.E. 50353 E	xp. 6-20-2009				Spage 1542 of 61



- 1. MANHOLE BASE SHALL BE CONSTRUCTED ON A FIRM, UNYIELDING, UNDISTURBED SUBGRADE OR APPROVED BEDDING. IF SUBGRADE IS YIELDING OR HAS BEEN DISTURBED, BASE SHALL BE CONSTRUCTED AS APPROVED BY THE DISTRICT ENGINEER.
- 2. UNLESS OTHERWISE DIRECTED BASE SHALL BE CONSTRUCTED OF 560-C3250 CONCRETE AND TYPE V CEMENT.
- 3. ALL VCP CONNECTING PIPES SHALL HAVE TWO (2) FLEXIBLE, GASKETED (BELL & SPIGOT) AND UNRESTRAINED JOINTS WITHIN THIRTY INCHES OF THE MANHOLE (2-2 JOINTS).
- 4. FOR PIPELINE SMALLER THAN 12 INCHES, THE RADIUS OF CENTERLINE CHANNEL SHALL BE ½ ID OF THE MANHOLE. FOR PIPELINE 12" AND LARGER, THE RADIUS OF INNER CHANNEL WALL SHALL BE ½ ID OF THE MANHOLE.

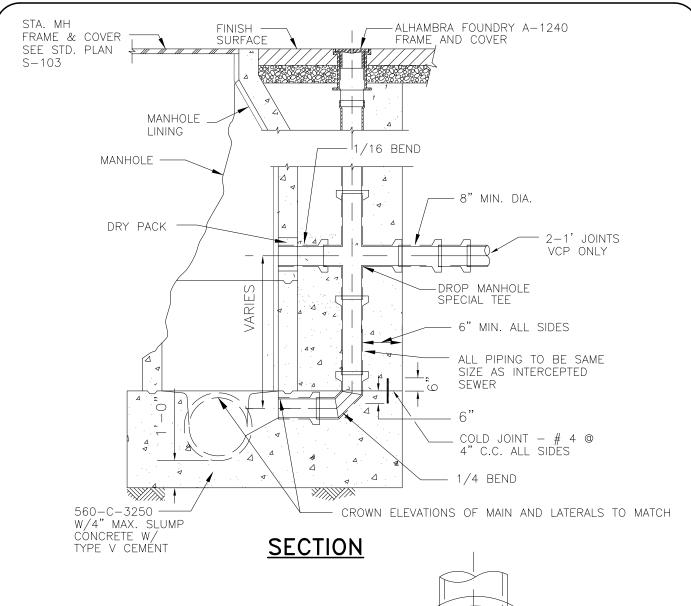




PLAN

- 1. MANHOLE BASE SHALL BE CONSTRUCTED ON A FIRM, UNYIELDING, UNDISTURBED SUBGRADE OR APPROVED BEDDING. IF SUBGRADE IS YIELDING OR HAS BEEN DISTURBED, BASE SHALL BE CONSTRUCTED AS APPROVED BY THE DISTRICT ENGINEER.
- 2. UNLESS OTHERWISE DIRECTED, BASE SHALL BE CONSTRUCTED OF 560-C-3250 CONCRETE AND TYPE V CEMENT.
- 3. SANDED MANHOLE ADAPTER SHALL BE USED FOR CONNECTING PVC PIPE TO CONCRETE MANHOLE BASE AS MANUFACTURE BY GPK INDUSTRIES OR EQUAL.
- 4. FOR PIPELINE SMALLER THAN 12 INCHES, THE RADIUS OF CENTERLINE CHANNEL SHALL BE $\frac{1}{2}$ ID OF THE MANHOLE. FOR PIPELINE 12" AND LARGER, THE RADIUS OF INNER CHANNEL WALL SHALL BE $\frac{1}{2}$ ID OF THE MANHOLE.

*	or the Crope	Garden Grove Sanitary District		. PIPE AND ASE JOINT			
	Approved	Da	te	REVISIONS	BY	DATE	STD. PLAN NUMBER
	City Engineer	R.C.E. 50353 Ex	кр. 6-20-2009				S-age 544 of 61

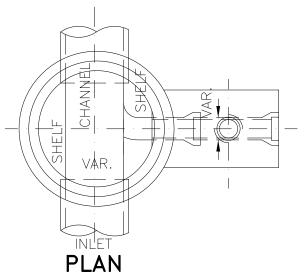


NOTES:

City Engineer

- DROP MANHOLE TO BE USED FOR SPECIAL SITUATIONS ONLY, AND SHALL NOT BE CONSTRUCTED WITHOUT APPROVAL BY GGSD.
- 2. ALL NEW OPENINGS CONSTRUCTED INTO MANHOLE SHALL BE DONE BY CORE DRILLING.

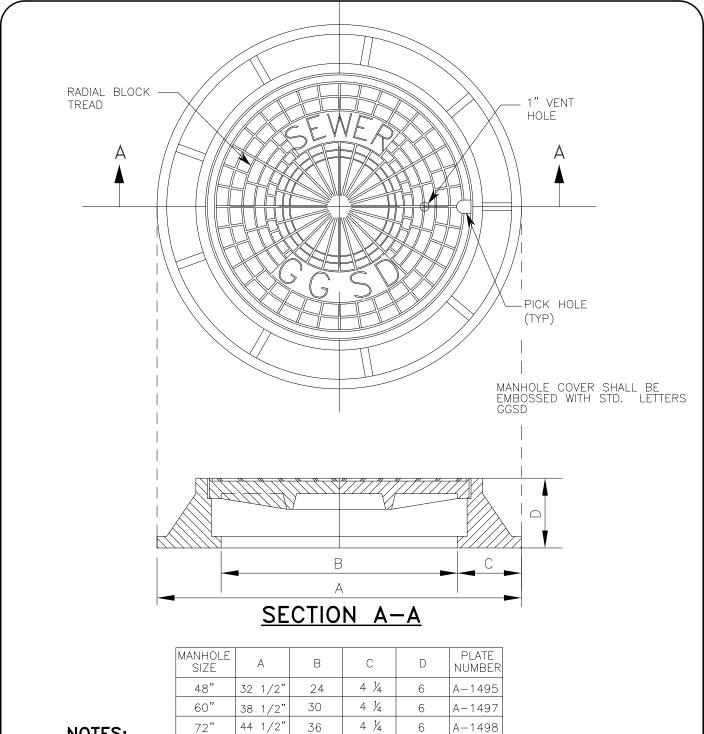
R.C.E. 50353



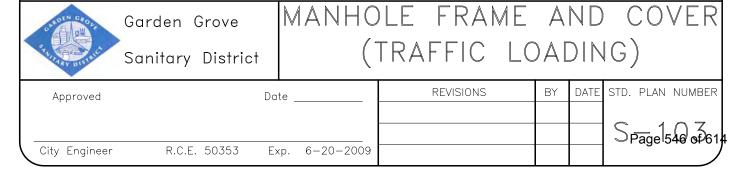
Spage 545 of 61

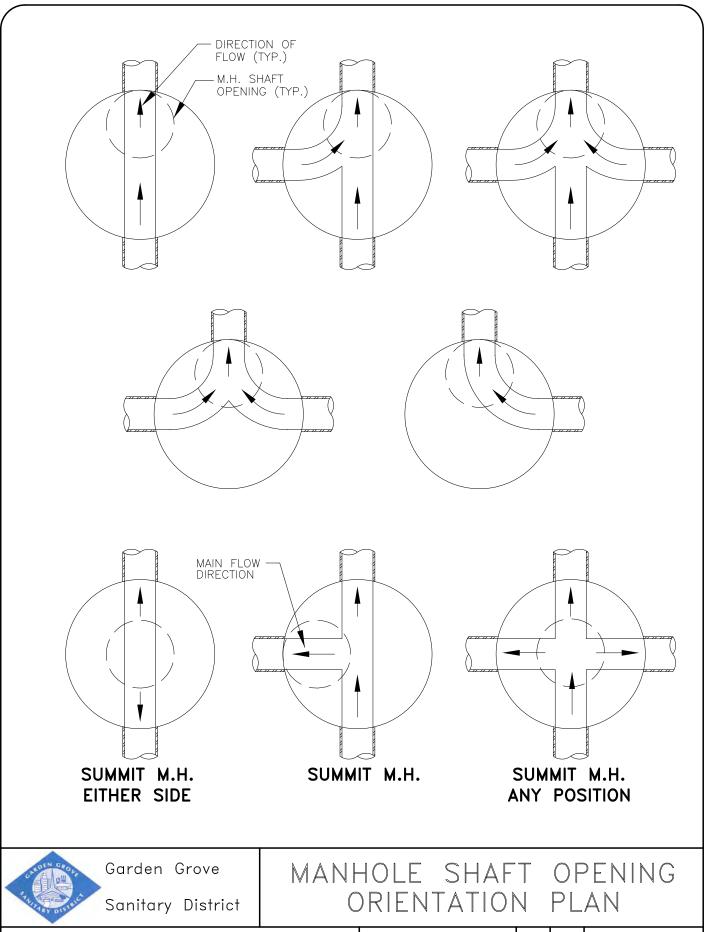
Garden Grove Sanitary District Approved SEWER DROP MANHOLE WITH CLEANOUT REVISIONS BY DATE STD. PLAN NUMBER

Exp. 6-20-2009

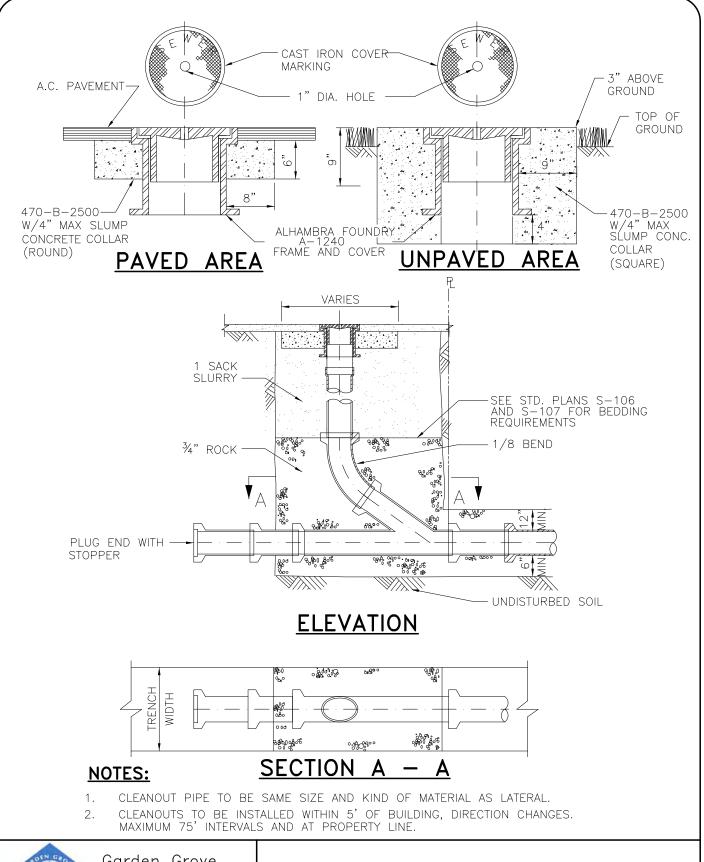


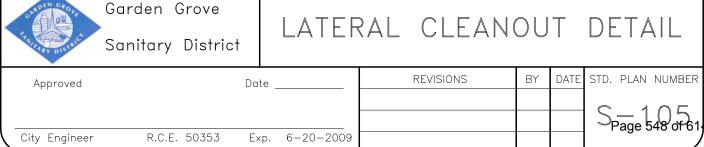
- WHERE FRAME AND COVER ARE SET 18" ABOVE GRADE, FOUR (4) 1/2" DIA. INSERTS FOR ADJUSTABLE STUDS SHALL BE CAST IN TOP GRADE RING, FRAME SHALL BE BOLTED TO GRADE RING.
- MANHOLE COVER AND FRAME SHALL BE AS MANUFACTURED BY ALHAMBRA FOUNDRY. FRAME AND COVER SHALL BE COATED WITH ASPHALT OR COAL TAR.

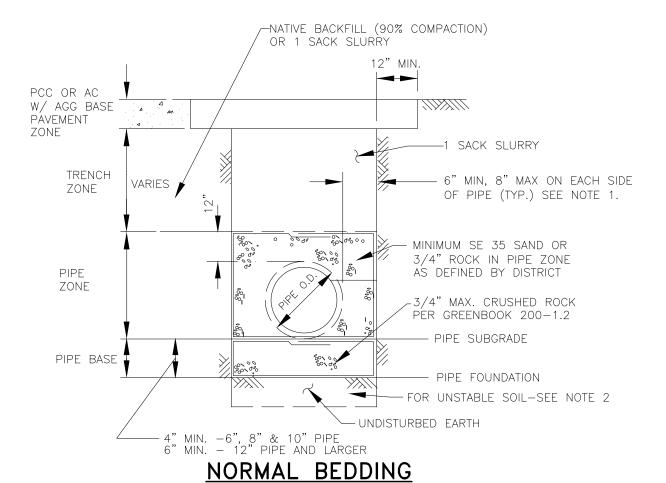




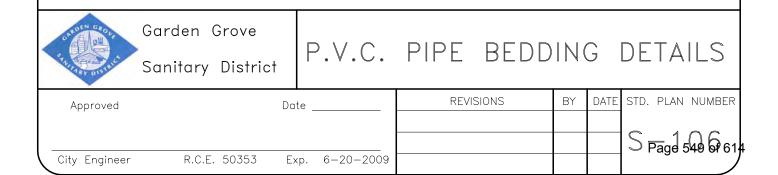
Approved Date ______ REVISIONS BY DATE STD. PLAN NUMBER Stylengineer R.C.E. 50353 Exp. 6-20-2009

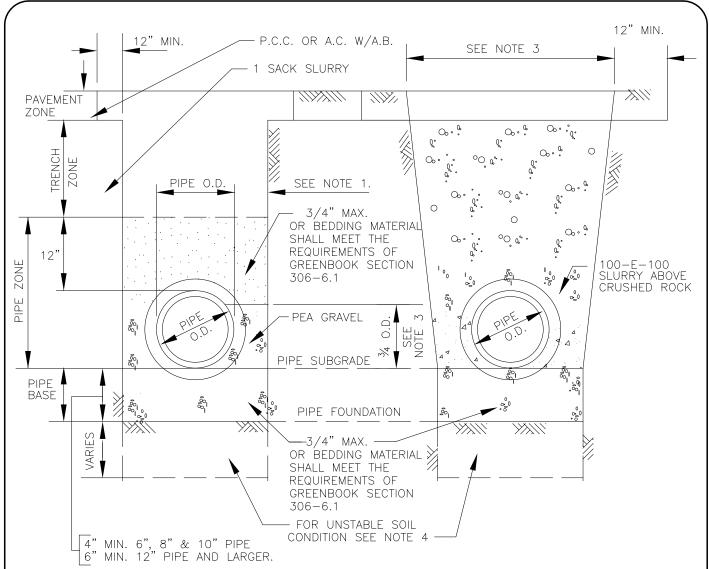






- 1. CONCRETE ENCASEMENT PER STD. DWG. S-108 SHALL BE USED WHERE THE TRENCH WIDTH AT THE UPPER LIMIT OF THE PIPE ZONE EXCEEDS THE MAXIMUM WIDTH SPECIFIED ABOVE.
- 2. IF UNSTABLE SOIL IS ENCOUNTERED, DISTRICT REPRESENTATIVE SHALL DETERMINE DEPTH OF REMOVAL AND THICKNESS OF FOUNDATION ROCK REFILL MATERIAL.
- 3. SEE STD. PLANS S-101 AND S-102 FOR MANHOLE DETAILS.
- 4. IF PIPE BASE IS AT OR BELOW THE GROUNDWATER LEVEL, GEOTEXTILE FILTER SHALL BE USED IN CONJUNCTION WITH BEDDING AND PIPEZONE MATERIALS.



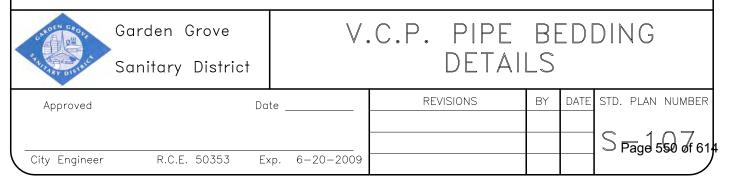


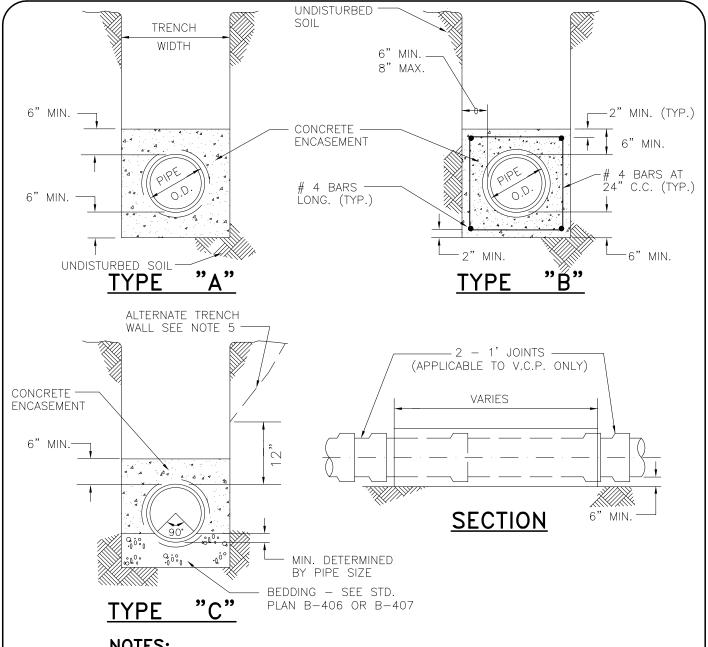
TYPICAL NORMAL BEDDING

OVERWIDTH BEDDING

SEE NOTE 2

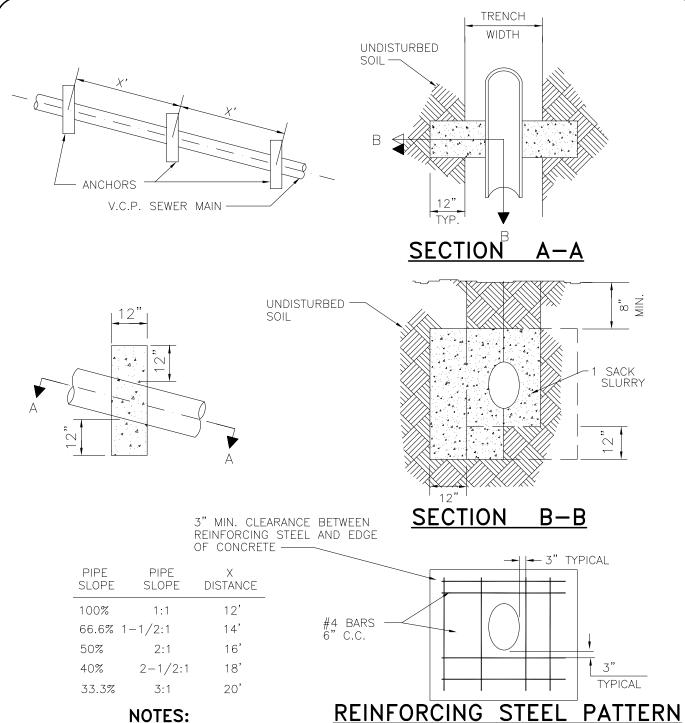
- 1. TRENCH WIDTH AT THE UPPER LIMIT OF THE PIPE ZONE SHALL BE WITHIN THE FOLLOWING LIMIT FOR TYPICAL NORMAL BEDDING.
 - (A) MAXIMUM TRENCH WIDTH-O.D. PIPE OR BELL PLUS 8" MAX. EACH SIDE OF PIPE.
 - (B) MINIMUM TRENCH WIDTH-O.D. PIPE OR BELL PLUS 6" MIN. EACH SIDE OF PIPE.
- 2. OVERWIDTH BEDDING SHALL BE USED WHERE THE TRENCH WIDTH AT THE UPPER LIMIT OF THE PIPE ZONE EXCEEDS THE MAXIMUM WIDTH SPECIFIED ABOVE.
- 3. MAXIMUM OVERWIDTH BEDDING TO BE DETEMINED IN FIELD BY THE DISTRICT REPRESENTATIVE ON THE BASIS OF OVERWIDTH EXCAVATED.
- 4. IF UNSTABLE SOIL IS ENCOUNTERED, DISTRICT REPRESENTATIVE SHALL DETERMINE DEPTH OF REMOVAL AND SIZE OF FOUNDATION ROCK REFILL MATERIAL.
- 5. IF PIPE BASE IS AT OR BELOW THE GROUNDWATER LEVEL, GEOTEXTILE FILTER SHALL BE USED IN CONJUNCTION WITH BEDDING AND PIPE ZONE MATERIALS.





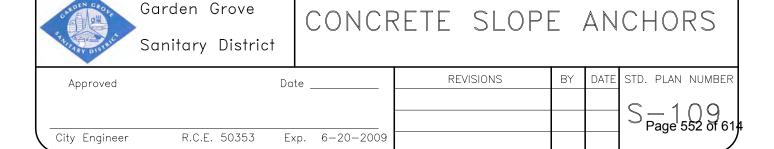
- CONCRETE ENCASEMENT SHALL BE USED WHEN COVER IS UNDER 4' OR OVER 20'. 1.
- ENCASEMENT TO BE PLACED AGAINST UNDISTURBED NATURAL GROUND OR FILL 2. COMPACTED TO 90% RELATIVE DENSITY.
- 3. NO. 4 GRADE 60 STEEL REINFORCING BARS SHALL BE PLACED AS SHOWN.
- TYPE OF CONCRETE ENCASEMENT TO BE USED SHALL BE SHOWN ON PLANS OR AS SPECIFIED BY DISTRICT REPRESENTATIVE TO MEET UNFORESEEN FIELD CONDITIONS. UNLESS NOTED OTHERWISE, ENCASEMENT SHALL BE 470-C-2500 WITH $4^{\prime\prime}$ MAX. SLUMP.
- WHERE SLOPED TRENCHES ARE USED, WALLS WILL NOT BEGIN TO SLOPE CLOSER THAN 12" FROM THE TOP OF THE PIPE.

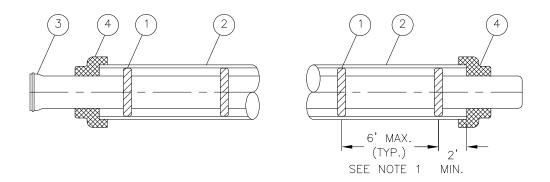
CHOIN CAOL	Garden Grove Sanitary District		NCRETE EN TYPE A, E	<i>- '</i> .	
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City Engineer	R.C.E. 50353 Ex	xp. 6-20-2009			S_age 551 of 61

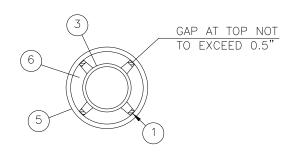


REINFORCING STEEL PATTERN

- SLOPES GREATER THAN 10% SHALL BE USED BY SPECIAL WRITTEN APPROVAL OF CITY.
- PIPE ANCHORS REQUIRED ON ALL SLOPES OF 3:1 OR STEEPER.
- ANCHOR SHALL EXTEND 12" INTO NATURAL UNDISTURBED SOIL. 3.
- CONCRETE SHALL BE 560-C-3250 W/4" MAX. SLUMP. 4.
- ANCHORS FOR TRAPAZOIDAL TRENCH SECTIONS WILL CONFORM TO TO TRENCH CROSS SECTION AND EXTEND 12" INTO UNDISTURBED SOIL.

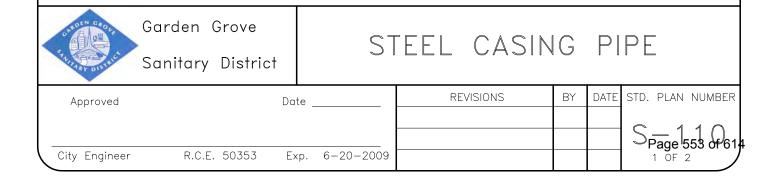


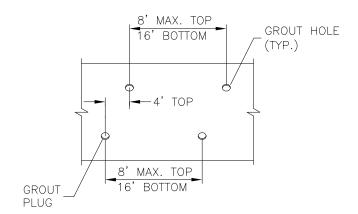


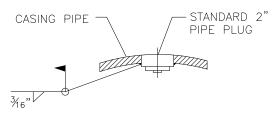


STEEL CASING DETAILS

- 1. STAINLESS STEEL CASING SPACER CENTER RESTRAINT POSITION (CASCADE MFG. OR EQUAL) SHALL BE ATTACHED TO CARRIER PIPE AT APPROPRIATE POSITIONS TO PROPERLY SUPPORT THE CARRIER PIPE WITHIN THE CENTER OF THE CASING INSTALLATION. SPACERS SHALL BE SET AT 6-FOOT INTERVALS FOR PVC AND DUCTILE IRON PIPE. A MINIMUM OF TWO (2) SPACERS PER JOINT SHALL BE PROVIDED FOR VCP.
- 2. ALL JOINTS OF STEEL CASING SHALL BE WELDED FULL CIRCUMFERENCE, MINIMUM CASING I.D. AND WALL THICKNESS SHALL BE 24-INCHES AND ½-INCH RESPECTIVELY, UNLESS APPROVED OTHERWISE BY THE CITY ENGINEER. STEEL CASING SHALL BE CATHODICALLY PROTECTED.
- 3. CARRIER PIPE SHALL BE PVC SDR 26, EXTRA STRENGTH VITRIFIED CLAY OR CERAMIC EPOXY LINED DUCTILE IRON PIPE, AS APPROVED BY THE CITY ENGINEER. CARRIER PIPE SHALL BE AIR TESTED PRIOR TO FILLING OF ANNULAR SPACE. INVERT ELEVATIONS SHALL BE VERIFIED PRIOR TO FILLING OF ANNULAR SPACE.
- 4. EACH END OF CASING SHALL BE SEALED WITH CONCRETE MORTAR OR MANUFACTURED CASING END COVER.
- 5. PERIPHERY OF CASING SHALL BE PRESSURE GROUTED.
- 6. ANNULAR SPACE SHALL BE FILLED WITH LEAN GROUT.
- 7. UNLESS NOTED OTHERWISE, CASING SHALL BE INSTALLED BY JACK AND BORE, AND/OR TUNNEL METHOD. IF OPEN-CUT INSTALLATION OF CASING IS ALLOWED, BACKFILL SHALL BE IN ACCORDANCE WITH STD. PLANS S-106 AND S-107.
- 8. UPSTREAM AND DOWNSTREAM ELEVATIONS OF CARRIER PIPE SHALL BE VERIFIED PRIOR TO FILLING OF ANNULAR SPACES.

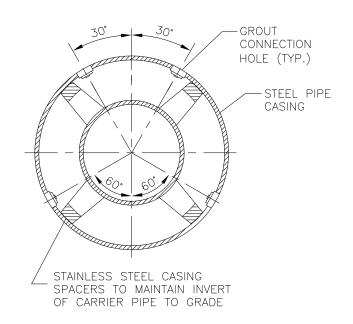




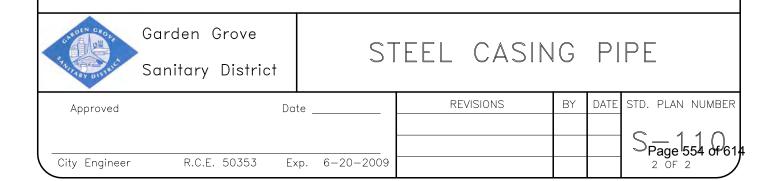


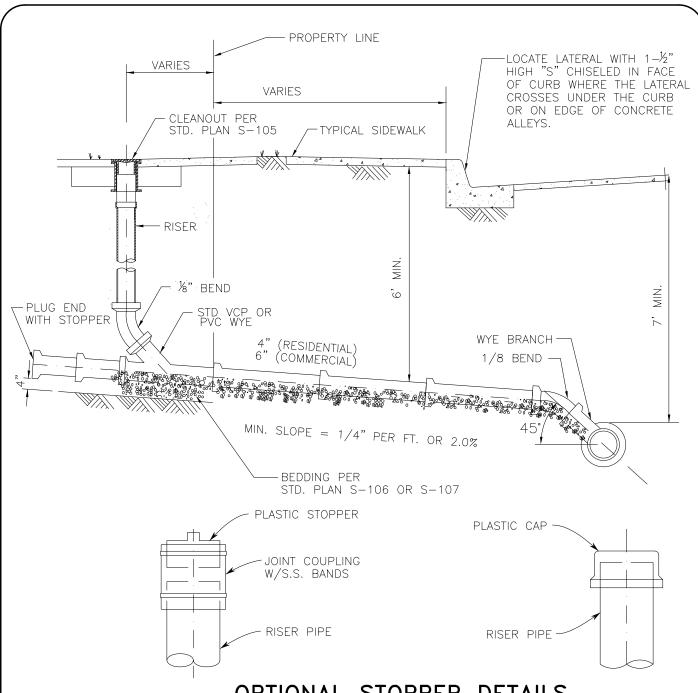
GROUT PLUG DETAIL

CARRIER PIPE SIZE (INCHES)	MIN. CASING SIZE (INCHES)
8-15	24
18	30
21	33
24	36



STEEL CASING DETAILS

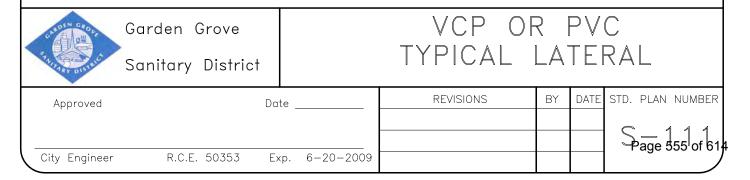


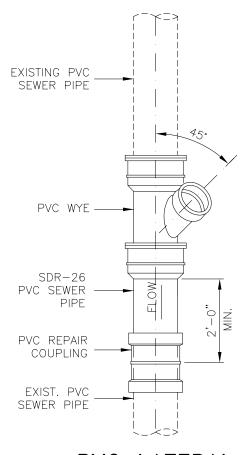


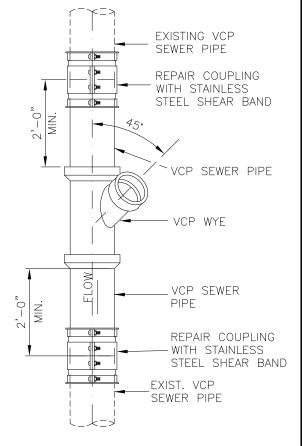
NOTES:

OPTIONAL STOPPER DETAILS

- 1. LATERAL SIZE TO BE DETERMINED ON THE BASIS OF TOTAL NUMBER OF FIXTURE UNITS DRAINED, BUT IN NO CASE SHALL THE LATERAL DIAMETER BE LESS THAN FOUR INCHES FOR SINGLE OR MULTIPLE FAMILY RESIDENTIAL AND SIX INCHES FOR COMMERCIAL OR INDUSTRIAL LAND USES.
- 2. LATERAL TO BE INSTALLED TO PROPERTY LINE.
- 3. IF LATERAL NOT BUILT, PLUG WYE BRANCH WITH STOPPER.
- 4. IF RISER NOT BUILT, PLUG LATERAL AT \mathbb{P}_{2} .



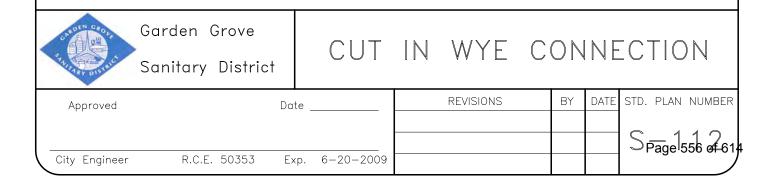


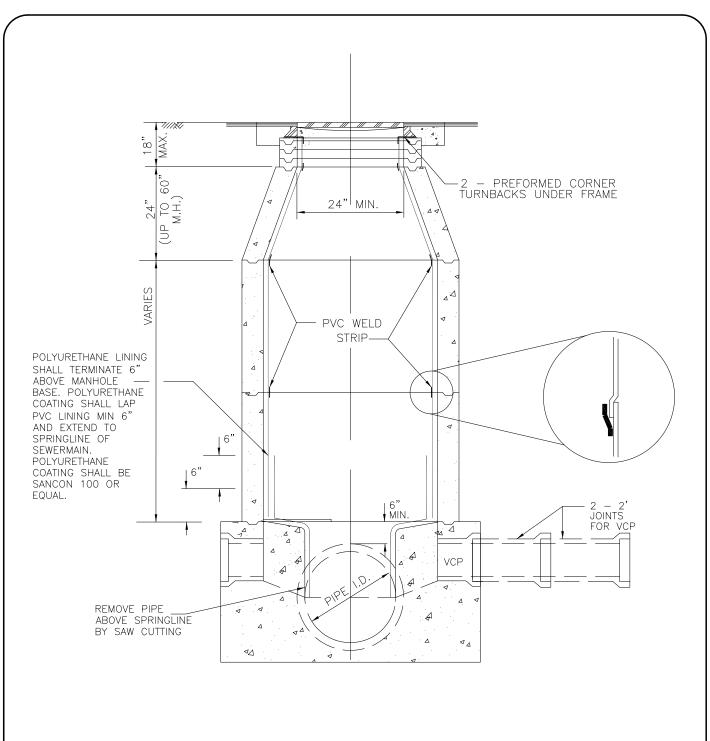


PVC LATERAL CONNECTION

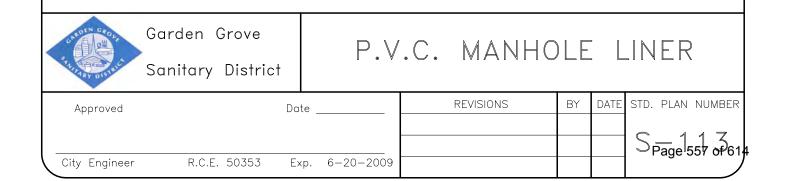
VCP LATERAL CONNECTION

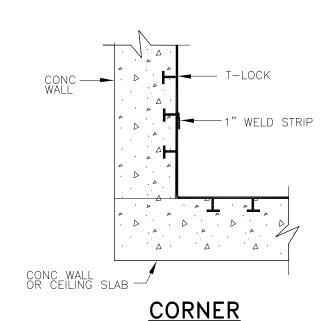
- THE SADDLE CONNECTION SHALL BE SECURED WITH 470-C-2500 W/4" MAX SLUMP CONCRETE ENCASEMENT AFTER THE CONNECTION IS APPROVED BY THE DISTRICT REPRESENTATIVE.
- 2. ALL CHIPS, DIRT, EPOXY, MORTAR, AND CONCRETE SHALL BE KEPT OUT OF THE SEWER.
- 3. DAMAGED PIPE SHALL BE REPLACED.
- 4. 8" AND LARGER CONNECTIONS SHALL BE BY STANDARD OR DROP MANHOLES.

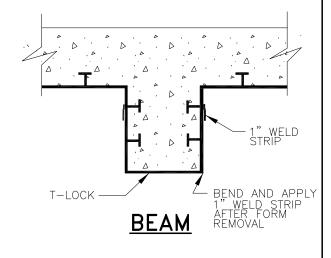


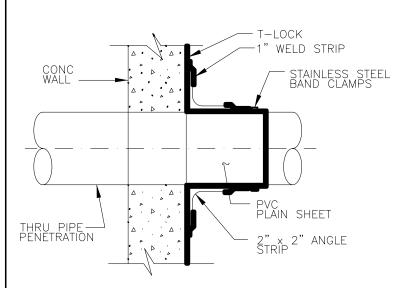


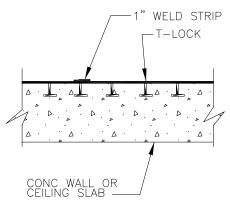
SEE STD. PLANS S-101, S-102, S-103 FOR MANHOLE DETAILS



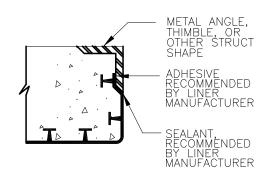








SPLICE



METAL EMBED

PIPE PENETRATION

NOTE

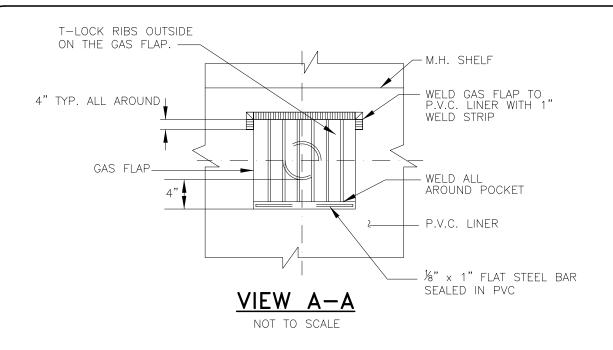
- 1. AT BUTT JOINTS, INSTALL 1" WELD STRIP ON FRONT AND BACK.
- 2. LINER RIBS SHALL BE ORIENTED VERTICALLY ON VERTICAL SURFACES.

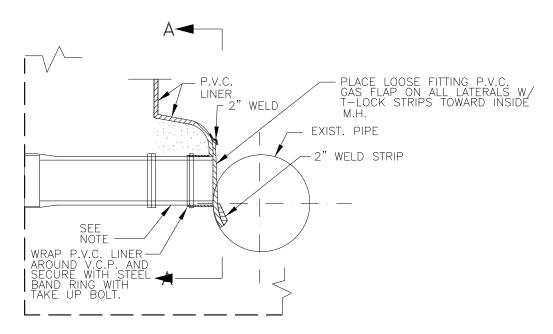
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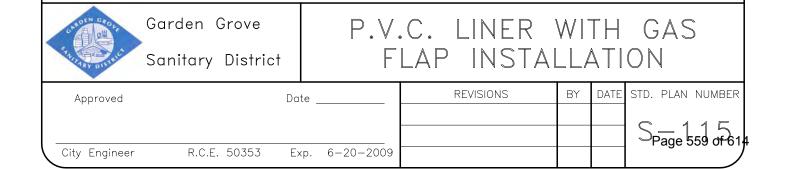


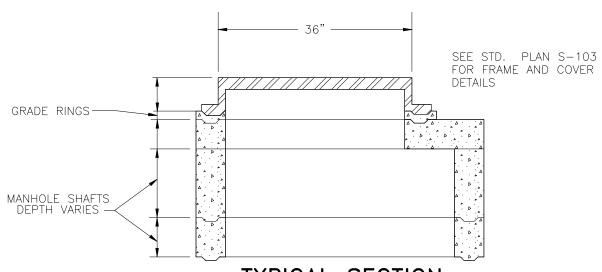


PLAN

NOTE

FOR INSTALLATION AT EXISTING M.H., REMOVE INTERFERING CONCRETE AT END OF EACH LATERAL AND EXTEND VCP AS SHOWN. GROUT IN PLACE. EXTEND PVC M.H. LINER OVER GROUT AND INSTALL GAS FLAP AS SHOWN.





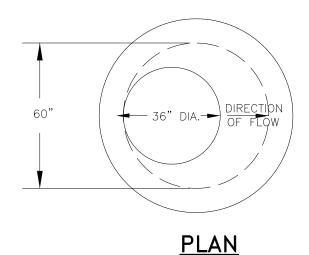
TYPICAL SECTION FLAT TOP MANHOLE

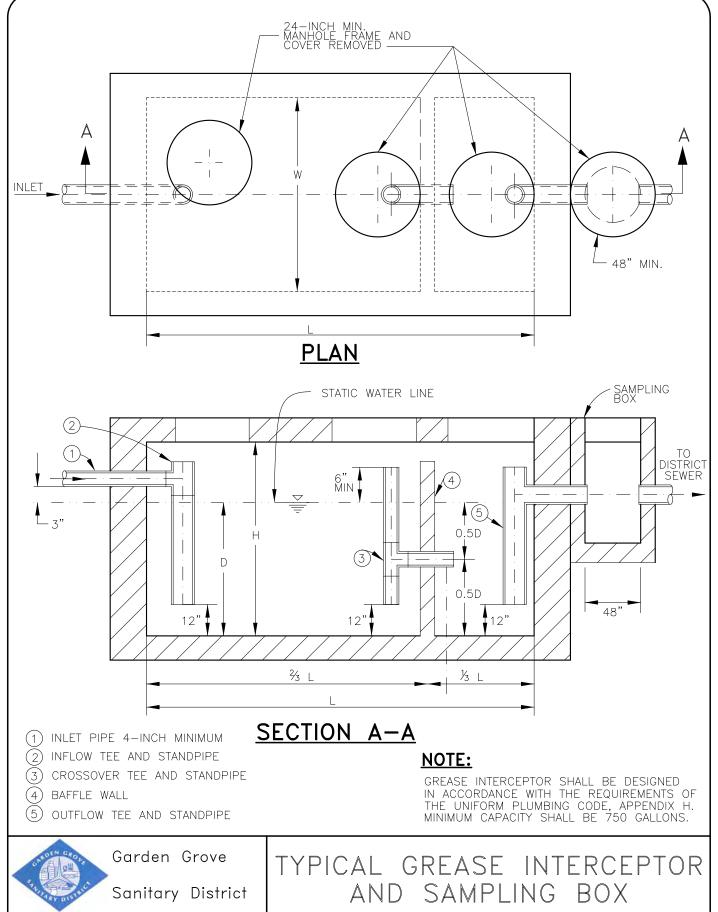


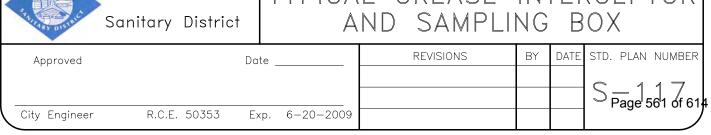
FLAT TOP COVER

NOTES

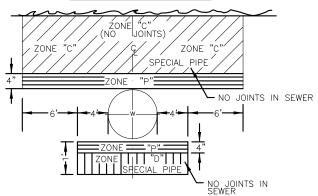
- 1. CONSTRUCTION SHALL BE IN ACCORDANCE WITH STD. PLAN S-101 AND S-103
- 2. REINFORCED CONCRETE MANHOLE, QUIKSET OR APPROVED EQUAL.
- 3. USE OF FLAT TOP MANHOLE REQUIRES WRITTEN DISTRICT APROVAL.







NEW SEWER



PERPENDICULAR CROSSING

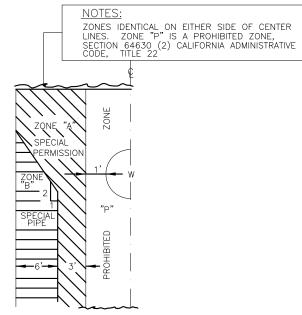
NOTE: "P" IS A PROHIBITED CONSTRUCTION ZONE

NEW SEWER BEING INSTALLED
ZONE SPECIAL CONSTRUCTION REQUIRED FOR SEWER

- A SEWER LINES PARALLEL TO WATER MAINS SHALL NOT BE PERMITTED IN THIS ZONE WITHOUT APPROVAL FROM THE RESPONSIBLE HEALTH AGENCY AND WATER SUPPLIER.
- B A SEWER LINE PLACED PARALLEL TO A WATER LINE SHALL BE CONSTRUCTED OF:
 - 1. EXTRA STRENGTH VITRIFIED CLAY PIPE WITH COMPRESSION JOINTS.
 - 2. PLASTIC SEWER PIPE WITH RUBBER RING JOINTS, DR 26.
 - 3. DUCTILE IRON PIPE WITH COMPRESSION JOINTS.
 - 4. REINFORCED CONCRETE PRESSURE PIPE WITH COMPRESSION JOINTS (PER AWWA C302-74).

A SEWER LINE CROSSING A WATER MAIN SHALL BE CONSTRUCTED OF:

- C 1. DUCTILE IRON PIPE WITH HOT DIP BITUMINOUS COATING AND MECHANICAL JOINTS. NO JOINTS WITHIN 10' EITHER SIDE OF WATER.
 - 2. A CONTINUOS SECTION OF CLASS 200 (DR 14 PER AWWA C900) PVC PIPE OR EQUIVALENT, CENTERED OVER THE WATER PIPE BEING CROSSED.
 - 3. A CONTINUOS SECTION OF REINFORCED CONCRETE PRESSURE PIPE (PER AWWA C302-74) CENTERED OVER THE PIPE BEING CROSSED.
 - 4. ANY SEWER PIPE WITHIN A CONTINUOUS STEEL PIPE SLEEVE.



PARALLEL INSTALLATION

(CONT.)

- D A SEWER LINE CROSSING A WATER MAIN SHALL BE CONSTRUCTED OF
 - 1. A CONTINUOUS SECTION OF DUCTILE IRON PIPE WITH HOT DIP BITUMINOUS COATING AND MECHANICAL JOINTS CENTERED ON THE WATER PIPE BEING CROSSED.
 - A CONTINUOUS SECTION OF CLASS 200 (DR 14 PER AWWA C900) PVC PIPE OR EQUIVALENT, CENTERED ON THE WATER PIPE BEING CROSSED.
 - A CONTINUOUS SECTION OF REINFORCED CONCRETE PRESSURE PIPE (PER AWWA C302-74) CENTERED ON THE WATER PIPE BEING CROSSED.
 - 4. ANY SEWER PIPE WITHIN A CONTINUOUS STEEL PIPE SLEEVE.
 - 5. ANY SEWER PIPE MATERIAL ENCASED IN REINFORCED CONCRETE PER STD. DWG. S-108 TYPE "B".



DESIGN CRITERIA FOR SEPARATION OF WATER AND SEWER MAINS

Approved		Date _		REVISIONS	BY	DATE	STD. PLAN NUMBER
							Spage 562 of 61
City Engineer	R.C.E. 50353	Exp.	6-20-2009				



GARDEN GROVE SANITARY DISTRICT FATS, OIL AND GREASE (FOG) CONTROL PROGRAM FOR FOOD SERVICE ESTABLISHMENTS



What's In Your Sink? Help Control The Grease Monster





BINDER CONTENTS

ACCESS LETTER

BMP FACT SHEET

CONTACT LIST

BROCHURES

POSTERS



GARDEN GROVE SANITARY DISTRICT

11222 ACACIA PARKWAN PIO BOX 30TO GARDEN GROVE COLFTORNIA 92842

MAR 01 2004

TO:

Owners and Managers of Food Service Establishments

SUBJECT:

Food Service Grease Control Program

The Garden Grove Sanitary District (GGSD or District) maintains the public sewer system serving your business on behalf of the City of Garden Grove and is required under new laws to institute a comprehensive grease control program. Grease from restaurants and other food preparation businesses are causing sewer line blockages and spills. The sewer spills end up in the storm drain system and waterways and are a significant cause of ocean water pollution.

In order for the GGSD to comply with the new regulations, the District is developing a new grease control program with your assistance. The first step is for a GGSD representative to visit your facility and review the kitchen equipment, drains, grease interceptor or grease trap (if existing), maintenance logs, kitchen best management practices, spill prevention and clean up practices, the menu, grease usage, and disposal practices.

The person visiting your facility will have proper identification and a copy of this letter. This person will be an employee of EEC, a consultant to the GGSD for this project. Information will be provided on the importance of minimizing grease discharges to the sewer system and recommendations for reducing discharges.

The regulations requiring the new grease control program could include substantial fines for sewer spills and non-conformance, therefore, your cooperation is a necessity.

Thank you for your participation and cooperation. If you have any questions, please call the GGSD at (714) 741-5956.

Sincerely,

Environmental Services Coordinator



GARDEN GROVE SANITARY DISTRICT

11222 ACACIA PARKWAY, P.O. BOX 3070, GARDEN GROVE, CALIFORNIA 92842

Kitchen Best Management Practices (BMP's)

Sinks and Drains

Drain Screens

- Be installed on all drains
- Have openings between 1/8" and 3/16"
- Be removable for ease of cleaning
- Be frequently cleaned (dispose of the screened solids to the trash)

Grease Container Usage

- Pour all liquid oil and grease from pots, pans, and fryers into a waste grease container
- Prior to washing, scrape solidified fats and grease from pots, pans, fryers, utensils, screens, and mats into a container
- Use recycling barrels or bins with covers for onsite collection of grease and oil
- Empty grill top scrap baskets or boxes into a container

<u>Dishwashing</u>

- Use rubber scrapers, squeegees, or towels to remove food and all visible fats, oils and grease from cook and serving ware prior to dishwashing
- Dry wipe remaining food and fats, oils and grease into trash can prior to dishwashing

Spill Prevention and Clean-up

Proactive Spill Prevention and Clean-Up Procedure BMPs

- Develop and post spill procedures
- Develop schedule for training employees about procedures
- Designate a key employee who monitors clean-up

Spill Prevention BMPs

- Empty containers before they are full to avoid accidental spills
- Provide proper portable container to transport materials without spilling
- Use a cover to transport grease materials to a recycling barrel

Spill Clean-up BMPs

- Block off sink and floor drains near the spill
- Clean spills with towels and absorbent material
- Use wet cleanup methods only to remove trace residues

Absorbent Materials and Towel Usage

- Use disposable absorbent materials to clean areas where grease may be spilled or dripped
- When using paper towels, use food grade paper to soak up oil and grease under fryer baskets
- Use towels to wipe down work areas
- Use absorbent materials under colanders in sinks when draining excess meat fat

Food Waste Disposal/Recycling

 Used or spent oil and grease generated from fryers and other cooking equipment can be recycled through a rendering or recycling company.

Food Grinders

 Food grinders should not be used in kitchens because the resulting large volume of food solids may clog drain pipes and/or fill grease traps and interceptors.

Employee Education

- An Education Program on the BMPs should be implemented consisting of:
 - New employee training program
 - Frequent refresher training program
 - Kitchen BMP signage

Ngay 14, Thang 1, Nam 2004

THÔNG CÁO: Người Chủ và Giám Đốc cua Chổ Lam Việc Thúc An VÊ: Chưng Trinh Chế Ngư Dầu Mổ Cho Các Việc Làm Thúc Án

Garden Grove Sanitary District (GGSD/District) giữ gin hệ thống ống công nước cho dân chúng dung cho kinh doanh, đại diện cho thành phố Garden Grove. Theo luất mỗi, chính phủ phải thành lập một chứng trình đây đủ chế ngư dâu mỗ. Dâu mỗ của nhà hàng và các tiệm lam thực ăn hay lam công dây ngắn chặn và tran ra. Chất bân trong ông công chảy vào lưu vực sông, sau đó đưồng sông; và là một li do trầm trong đã lam nước biến ô nhiệm.

Vì chính phủ theo luật mới, chính phủ đang khai triển một chủng trinh chế ngữ dầu mỗ cũng või sử giúp đổ của quy vị. Buốc đầu tiên là có người đại diện cho GGSD tổi chỗ việc và xem xet kỳ đổ dụng trong nhà bếp, cổng để tháo nước, may bắt dầu (nếu có), số ghi các việc giữ gin, phương pháp thu xếp nhà bếp, phương pháp ngắn cần sử đổ ra và quét dọn, danh sách chọn lưa thức ăn, cách dùng dầu mỗ và sự vut bố.

Người đại diện mà di xem chố việc sẽ có thể chứng minh đang hoàng và mang theo thỏ nay. Người nay làm cho hàng EEC, Inc., từ vấn cua GGSD cho vụ nay. Sẽ có thông tin về sự quan trọng bốt đi dấu mỏ tha trong hệ thống công rãnh và sử khuyên bảo.

Điều lệ mà cần chủng trinh chế ngư dấu mỗ mỗi này sế có tiến phát nặng nếu ông cổng nước tran ra và nếu không theo luật lệ, do đó, công tác của quy vị cần thiết.

Cam on cho sự tham gia và công tác cuả quy vị. Nếu có câu hỏi nào, xin liên lạc tôi tại GGSD (714) 741-5375.

Sincerely,

. Holman, III

Environmental Sorvices Coordinator



GARDEN GROVE SANITARY DISTRICT

11222 ACACIA PARKWAY, P.O. BOX 3070, GARDEN GROVE, CALIFORNIA 92842

Phường Pháp Thu Xếp Nhà Bếp (BMPs)

Hồ Rửa Chén Bát Và Cổng Tháo Nước

Đổ che cống tháo nước

- Xếp đặt trên tất ca công tháo nước
- Se có lo giữa 1/8" và 3/16"
- Se tháo ra được dễ rua để dang
- Se rua thường xuyên (vút những đổ loc trong thung rác

Cách Dùng Binh Đủng Dâu Mổ

- Đổ tất cả nước dầu mỗ từ chạu và chảo vào trong binh đựng dầu mỗ thứa
- Trước khi rữa, cha mập mổ và dầu mổ đã đặc lại ra chạu, chảo,
 đồ dùng, đổ che, và tham trải vào trong binh
- Dyng lại thung có nắp đậy để lay được mổ và dâu trên địa điểm
- Đổ ra vật thưa thải trong rồ hoặc thung nương bếp vào trong

Rua Chen Bat

- Dùng độ cạo loại cao su và cái chốt bằng cao su hoặc hay là khán để tấy sạch đồ ăn và tất cá dầu mỗ trong thấy được ra các đồ dùng nấu ăn trước khi rửa chén
- Lâu khô đổ án thủa, vã dầu mỗ vão trong thủng rác trước khi rửa chén

Phương Phap Ngan Can Sư Tran Ra Va Quet Don

Phương thức thực hành cho sự tran ra ngắn cấn và quét dọn

- · Khai triển và dán lên phương thực sự trần ra
- Xếp đặt chường trình để luyện tập cộng nhân về phương thức
- · Chi định một công nhân chính để kiểm thính việc quét dọn

Ngan cấn sự tran ra

• Đổ ra bình trước khi đầy để tránh đánh đổ bất ngỏ

- Sua soạn thung đáng hoạn để chuyển chổ đổ để không đổ ra
 Dùng nắp lúc chuyển chổ đổ dấu mổ tới hợp dùng lại

Quet Don Sd Tran Ra BMPs

- Can ra công tháo nước ở trong hồ rủa chén và dưới dắt gần chố dánh đổ ra
- Dọn nước đổ ra với khán và đổ thẩm
- Dung cách quét dọn đổ ướt chỉ lấy ra vật dư còn lại

Cách Dùng Đổ Thấm Và Khản Lau

- Dụng đồ thấm có thể bố đi không xài nữa để dọn chỗ mà dấu mổ có thể đổ hay chảy ra nhỏ ra
- Lúc dung khắn lau, dung giấy loại dung cho đô ăn để làm thâm dầu mỗ ở dưới rố chiến
- Dung đổ thẩm ở dưới rá lọc trong hỗ rua chén lúc rút thịt mỗ thủa

Vứt Bố Đồ An Và Sư Dùng Lại

Dầu mổ tử chảo chiến và đồ nấu khác có thể dùng lại qua hẳng tai che

May Xay Độ An

• Máy xay đổ ắn sẽ không được dùng trong nhà bếp tại vì có nhiều vật dư thữa đổ an có thể đóng ngẹt ông tháo nước va/ hoặc hay la lam đầy máy bắt dầu mổ

Huấn Luyện Công Nhân

- Sế lam cho xong Chung Trinh Học Thức về BMPs gồm có:
- Chưng trình huấn luyện cho công nhân mối
- Chưng trình huấn luyển ôn lại thường xuyên
- Lam bang cho nha bep BMP

PARA:

Dueños y Gerentes De Establecimientos De Servicios De Comida

SUBJETO:

Programa Nuevo Para El Control De Grasas

El Distrito Sanitario de la Ciudad de Garden Grove (GGSD ó El Distrito) mantienen el servicio publico de el alcantarillado que sirve su negocio de parte de la Ciudad de Garden Grove, y esta requirido bajo nuevas leyes de instituir un programa comprensivo de control de grasas. Grasas que vienen de restauranes y de otros negocios de preparacion de comida estan causando obstrucciones o derrames en las lineas de la alcantarilla. Los derrames que vienen de la alcantarilla terminan en el sistema de drenaje de lluvias y desvios de agua, los cuales son una causa significante de la contaminacion del agua del mar.

En orden para que el GGSD pueda compluir con las nuevas regulaciones, El Distrito esta desarrollando un nuevo programa para el control de grasas con su ayuda. El primer paso comienza con un representante del GGSD visitando su establecimiento para revisar su equipaje de cocina, desagues, interceptores de grasas (si existen), constancias de mantenimiento, buenas practicas de manejamiento de cocina, prevencion de derrames, practicas de limpieza, el menu, uso de grasas, y metodos de eliminacion de basura.

La persona que visite su establecimiento tendra identificacion apropriada y una copia de esta carta. Esta persona sera un empleado de la firma EEC, quienes estan sirviendo como consultores para el GGSD en este proyecto. Informacion se hara disponible sobre la importancia de minimizar los descargos de grasa que llegan al sistema de la alcantarilla, como tambien recomendaciones para reducir estos descargos.

Las regulaciones requiriendo el nuevo programa de control de grasas podrian incluir multas considerables por descargos a la alcantarilla y por no conformar con las regulaciones. Por eso, su cooperacion es muy importante y necesario.

Gracias por su participacion y cooperacion. Si tiene qualquier pregunta, porfavor llame al GGSD al 714-742-5375.

Sinceramente,

Coordinaçor De Servicios Ambientales

배출하는 폐유를 규칙적으로 처리 합시다

가든그로브 위생 관리처 (Garden Grove Sanitary District) 는 업소 와 거주에서 사용 하는 공동 하수도를 관리함으로 여러분에게 이 편지를 보냅니다. 식당에서 내보내는 폐유가 오래되면 거리로 나가는 하수도 가 막히면서 오염이 여러군데로 퍼지고 또 직접바다로 흘러내려가 모든 환경을 파괴합니다. 앞으로 깨끗한 환경을 유지하기 위한 세로운 법을 여러분께서 지켜야 합니다.

가든 그로브 위생 관리처 (GGSD) 는 새로 세워진 법을 지키기 위하여 여러 분 의 협조가 필요합니다. 첫째로, 위생 관계자들이 여러분 식당에 시찰하여 주방에 있는 도구, 배수설비, 유지를 걸러낼 수 있는 장치 가 준비되여있나 살표볼것입니다.

그리고 식당에 일람표 가있어 주방을 규칙적으로 종업원들이 깨끗이 정리하는 것을 기록하고 또 식당에서 제공하는 음식이 폐유를 많이 버리는 종류인 가 살펴볼 예정입니다. 그리고 만약하수도가 폐유로 막히면 어떤방법으로 처리할수있나 위생관계자 에게 보여드려야 하며, 마지막으로 여러분이 어떤방법으로 유지 처리하나 질문할것입니다.

가든그로브 시 는 식당 "위생 환경회사" (Environmental Engineering Contract Inc) 와 계약되여 이 회사 직원위생 관계자가 여러분 식당에 들려주방을 검사할예정이며, 관계자께서는 그의 신임장 신분증과 이 편지를 여러분에게 보여드릴것입니다.

새로 계획한 폐유 감소 사항에 여러분의 협조가 필요하며 잘지켜주십시오. 앞으로 법을 위반하게 되면 벌금을 지불하게됩니다.

여러분의 협력을 간청하며 질문이 있으시면 가든그로브 위생 행정부로 연락 하시고 또 언어에 어려운점이 있으시면 경찰국 유태경 에게 연락하십시오.

(dsb: 74**1-5**375

从A.J. Holmon 드림 유태경: 741-5592



GARDEN GROVE SANITARY DISTRICT

11222 ACACIA PARKWAY, P.O. BOX 3070, GARDEN GROVE, CALIFORNIA 92842

주방을 제일 깨끗하게 관리하는 방법

배수 찌꺼기 체

모든배수에 배수채를 끼십시오.

배수채의 구멍사이는 1/8~3/16 인치가 되는 것을 사용하십시오.

체는 이동적인 것을 사용하여 쉽게 뺏다 낄수있어야 합니다.

채에 찌꺼기가 많이 모이면 쓰레기 통으로 버리십시오.

유지 통 사용 방법

냄비나 접시에서 버리는 액체 와 굳은유지 는 커다란 폐유통에 배치하십시오.

설거지 하기전에 미리 냄비나 접시에 굳어있거나 묻어있는 유지는 휴지를 이용하여 닦아 내십시오.

유지를 재생하는 통에 넣으시고 채워지면 재생회사에 연락하여 처리하는 방법으로 하십시오.

석쇠에 늘러붙은 찌꺼기를 긁어낸다음 쓰레기통에 배치하십시오.

설거지

접시에 남아있는 음식, 또는 주방 도구 등을 설거지하기 전에 문어있는 유지를 종이행주를 사용하여 잘닦아내십시오.

비수관 유출

미리 배수관 유출 때 쉽게 처리할수있게 준비하십시오. 종업원들에게 유출에 관한방법을 미리 알려 주십시오. 종업원중에 유출 때 감시할 수 있는 사람을 정해놓으십시오.

유출당시에

주방에 쉽게 이동 할 수 있는 유지통이 있어야 하며 운반할 때 흘리지 않도록 조심하십시오.

유지재생통을 이동할 때 통뚜껑을 덮고 유지재생통으로 옮기십시오.

유지재생통을 실수로 쓸어트리면 바닥에 유지를 흘릴수가있으니 유지재생 통에 유지가 다차기 전에 미리 배치하십시오.

만약 유지재생통이 실수로 쓸어지면 주방바닥에 내려가는 배수관이 있으면 흘러내려가지 않도록 걸래로 막으십시오.

하수오물이나 잔여 물을 딱으실때는 물이나 청소하는 세제로 닦으십시 오.

물질흡수하는 도구 와 천종류 의 걸래

흘린폐유를 치우실때는 사용후 버릴 수 있는 흡수하는 종이나 걸래를 사용하십시오.

튀김 이나 기름이 흐르는 음식 밑에는 기름을 흡수하는 종이행주를 사용하십시오.

요리 하는 근처 치우실때는 종이, 또는 깨끗한 천종류의 행주를 사용하십시오.

요리한 음식에서 기름이 많이 흘르면 여과기를 사용하고 밑에는 종이행주로 바치십시오.

버리는 음식 과 유지제생

버리는 요리기름 이나 도구들은 유지재생 회사에서 갖고갑니다.

음식 가는기계

음식가는 기계에 많은 찌꺼기를 깨끟지 딱아 낸다음 물로 씻어내시고 배수관으로 내려가는 곳에 찌꺼기 건어내는 채를 끼여 놓으십시오.

종업원 가르키기

주방에서 위생적으로 일할 수 있는 방법 은 새로 채용한 종업원이 자세히 유지에 관한점을 알아야 합니다.

가끔 일하시는 분들은 위생에 관한 것을 반복하십시오.

규칙의 기호를 종업원들이 볼수있게 걸어놓으십시오.



GREASE TRAP / INTERCEPTOR MAINTENANCE LOG

FACILIT'	Y NAME:		LOCATION:				
DATE	SERVICED BY WHOM	TYPE OF SERVICE (pumping/hauling, repair, etc.)	Disposal Site (if known)	Volume Pumped	SERVICE COMMENTS (volume pumped, problems, etc.)		
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LATERAL SEWER LINE MAINTENANCE LOG

FACILIT	Y NAME:	LOCATION:						
DATE	SERVICED BY WHOM	TYPE OF SERVICE (rodding, jetting, repair, etc.)	SERVICE COMMENTS (problems, observations, etc.)					
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EMPLOYEE BMP TRAINING LOG

FACILITY NAME:	LOCATION:						
	MUTIAL TO A WING DATE		REFRESHER	TRAINING			
EMPLOYEE NAME	INITIAL TRAINING DATE						
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RECYCLABLE GREASE (YELLOW GREASE) PICKUP / DISPOSAL LOG

FACILITY NAME:							
DATE	PICKED UP BY WHOM	SERVICE COMMENTS (volume collected, etc.)					
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CITY OF GARDEN GROVE PUBLIC WORKS

William J. Dalton Mayor

Mark Rosen Mayor Pro Tem

Harry J. Krebs Council Member

Mark Leyes Council Member

Janet Nguyen Council Member

February 15, 2005

Dear Food Service Establishment,

Grease is the number one cause of sewer line blockage. Grease from restaurants and food establishments hardens in the lines and blocks the flow, causing backups and sewer spills. These spills can enter the storm drain and pollute the ocean, causing beach closures.

Renderers are companies that collect Fats, Oil, Grease (FOG) from Food Service Establishments (FSEs). The renderer then properly disposes of the collected grease.

The 2 most common products rendered from an FSE are yellow grease and brown grease.

- Yellow grease: from bulk deep fat frying operations and oil/water separator units.
- Brown grease: from grease traps and interceptor waste.

The following businesses provide rendering services. Please note that the City of Garden Grove does not endorse the following contractors and their services:

Baker Commodities 4020 Bandini Blvd. Los Angeles, CA 90023 (323) 269-6177 Darling International P.O.Box 58725 Los Angeles, CA 90058 (213) 680-8963

OCP (Orange County Pumping) P.O. Box 10415 Santa Ana, CA 92711-0415 714-505-9662

Martinez Pumping Grease Trap Service P.O.Box 39144 Downey, CA 90239 (626) 625-6051 Martin Feed & Cattle, Inc. 7080 Summer Ave. Corona, CA 92880 (909) 737-7617

Triple "A" Pumping & Jetting Services, Inc. P.O. Box 54026 Irvine, CA 92619 (949) 855-7836

Southwest Processors 4120 Bandini Blvd. Los Angeles, CA 90023 (323) 269-9876

Coast Packing Company P.O.Box 58918 Vernon, CA 90058 (323) 277-7700 S.M.C. Grease Specialist P.O. Box 1343 Corona, CA 92878 951-788-6042

To insure proper disposal of your grease, we encourage you to use the services of a grease renderer.

If you have any questions, please contact me at (714) 741-5564.

Sincerely,

Amabelle S. Padilla Sr. Environmental Services Specialist



GARDEN GROVE SANITARY DISTRICT

11222 ACACIA PARKWAY, P.O. BOX 3070, GARDEN GROVE, CALIFORNIA 92842

GARDEN GROVE SANITARY DISTRICT (GGSD) CONTACT LIST - WHO TO CALL

GARDEN GROVE SANITARY DISTRICT (GGSD)/CITY OF GARDEN GROVE (Sewer Spills/Overflows/Back-ups)

Phone:

(714) 741-5395

After Hours: (714) 741-5704

GARDEN GROVE SANITARY DISTRICT (GGSD) FOG PROGRAM (Administration/Inspections):

Phone:

(714) 741-5375

7:30 p.m. to 5:30 p.m. Monday-Friday

OTHER IMPORTANT PHONE NUMBERS

Orange County Healthcare Agency (Environmental Health Section)

Phone:

(714) 667-3600

After Hours: (714) 628-7008

County of Orange RDMD (storm drain)

Phone:

(714) 567-6363

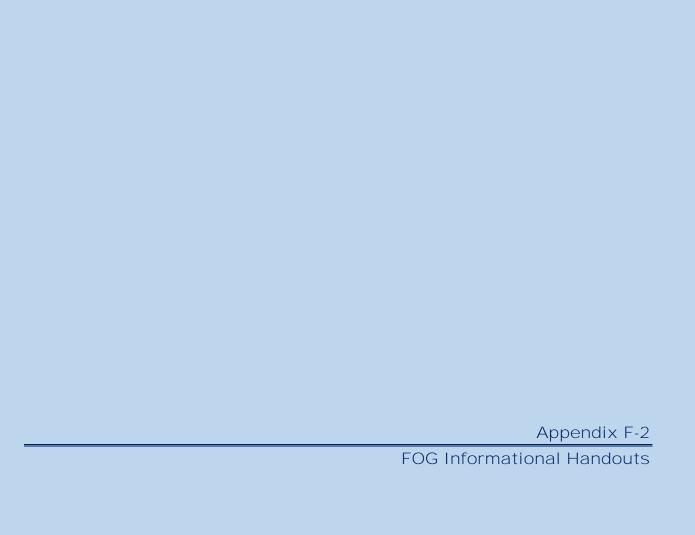
After Hours: (714) 628-7008 Control 1

Regional Water Quality Control Board - Santa Ana Region

Phone:

(909) 782-4130

After Hours: (800) 852-7550 Office of Emergency Services





Spill Response Agencies

City of Garden Grove Fire Department (714) 741-5600 or if there is an emergency dial 911

City of Garden Grove Environmental Compliance Division (714) 741-5375

Orange County Resources and Development Management Department (714) 567-6363

Household Hazardous Waste Disposal

City of Garden Grove Department of Public Works (714) 741-5375

Report Illegal Dumping

City of Garden Grove Environmental Compliance Division (714) 741-5375

To Report a Clogged Catch Basin

City of Garden Grove Department of Public Works (714) 711-5375

For more information about storm drain protection or additional brochures, please call the City of Garden Grove Public Works Department at (714) 741-5375.

This brochure is one of a series of pamphlets describing storm drain protection measures.

Pamphlets include:

- Painting
- Food Service Industry
- Fresh Concrete and Mortar Application
- General Construction and Site Supervision
- Heavy Equipment and Earth Moving Activities
- Landscaping, Gardening and Pest Control
- Home Repair and Remodeling
- Automotive Maintenance and Car Care
- · Roadwork and Paving.



Published by:
City of Garden Grove
Public Works Department
Environmental Compliance Division

Preventing Storm Water Pollution During

Maintenance Practices for Your Business



A guide for:

- Commercial Businesses
- Industrial Businesses
- Property Management Companies
- Commercial and Industrial Property Owners

Ocean Pollution Prevention: It's Up To Us

Garden Grove has two drainage systems; sewers and storm drains. The storm drain system was designed to prevent flooding by carrying excess rainwater away from city streets out to the ocean. Because the system contains no filters, it now serves the unintended function of carrying urban pollution straight to the ocean.

This pamphlet tells you how to prevent ocean pollution from "stormwater" or "urban runoff." Rain, industrial and household water mixed with pollutants creates stormwater pollution. The pollutants include: oil and other automotive fluids, paint and construction debris, yard and pet wastes, pesticides and litter.

Urban runoff pollution flows to the ocean through the storm drain system, which takes water and debris straight from the streets to the ocean. Each day 100 million gallons of polluted urban runoff enter the ocean untreated, leaving toxic chemicals in our surf and tons of trash on our beaches.

Urban runoff pollution contaminates the ocean, closes beaches, harms aquatic life and increases the risk of inland flooding by clogging gutters and catch basins.

These Best Management Practices (BMPs) will ensure a cleaner city and ocean.

Business Maintenance Problems:

Common business maintenance practices include outdoor area washing, outdoor storage of materials and routine parking lot cleaning. All of these activities can contribute to urban runoff and ocean pollution if not conducted or managed properly. Materials and wastes blown or washed into a street, gutter or storm drain have direct impacts on the ocean.

Pollution from parking lots and outdoor area washing include sediment, oil, litter, pesticides and heavy metals. Sediment can clog the gills of fish, block light transmission and increase ocean water temperatures, all of which harm sea life, disrupting

the food chain upon which both fish and people depend.

Solutions:

Keep Work Areas Clean

 Handling, storing and disposing of materials properly can prevent pollutants from entering the storm drains.

Cleaning Outdoor Areas

- If you wash your building, sidewalk or parking lot, you must contain the water. Use a shop vac to collect the water and contact the Garden Grove Sanitary District at (714) 741-5090 for proper disposal information. Do not allow the wash water to enter the street, gutter or storm drain.
- Use a damp mop, broom or scrub brush to clean floors and sidewalks.

Landscape Maintenance

- Compost grass clippings, leaves and sticks.
 Do not sweep or hose vegetative clippings to the street, gutter or storm drain.
- Irrigate slowly and inspect the irrigation system for leaks, overspray and runoff. Report problems to the property management.
- Do not apply fertilizers or pesticides with in 100 feet of waterways or if rain is expected within 48 hours.

Handling Materials & Wastes

- Do not dump any toxic substance or liquid waste on the pavement, ground or near a storm drain. Even materials that seem harmless such as latex paint or biodegradable cleaners can damage the environment.
- Call your trash hauler to replace leaking dumpsters or dumpsters missing lids.
- Keep dumpster lids closed. This prevents litter and trash from blowing out of the dumpster Page 584 of 614 and rainwater from entering the dumpster.

 Keep the area around the dumpster clear of trash and debris. Do not overfill the dumpster.

Material Storage

- Store materials indoors or undercover and away from storm drains.
- Properly label materials and wastes. Educate employees with Material Safety Data Sheets.
- Place all 55 gallon drums on secondary containment pallets or in a bermed area.

Spills

- Do not hose down or use water on spills.
- Use dry cleaning methods to clean up dry spills, such as sweeping or mopping.
- Use cat litter, towels or rags to absorb wet spills.
 Dispose of all non-hazardous waste into the trash and hazardous waste appropriately.
- Prepare and use spill clean up kits in areas where hazardous or liquid wastes are stored. Include safety equipment and clean up materials appropriate to the type and quantity of material that could spill. Pour cat litter, sawdust or cornmeal on spills.

Employee & Customer Education

- Educate your employees. Include water quality training in new employee orientation and conduct annual review sessions.
- Educate your customers. Raise both employee and customer awareness by stenciling storm drains near the work place with the stencil: "No Dumping: This Drains to the Ocean."

Recycle

- Recycle all paper wastes, ink cartridges, glass and aluminum. Request recycle dumpsters from the property management.
- Recycle paints, solvents and other materials. For more information about recycling and collection centers, visit www.oclandfills.com

Ocean Pollution Prevention: It's Up To Us

Garden Grove has two drainage systems; one is the sewer system and the other is the storm drain system. The sewer system carries away wastes from indoor areas, such as sinks and toilets,

to a treatment plant where it is cleaned prior to discharging to the ocean. The storm drain system is designed to prevent flooding by carrying excess rainwater away from city streets out to the ocean. Because the system contains no filters, it now serves the unintended function of carrying urban pollution straight to the ocean.

This pamphlet tells you how to prevent ocean pollution from "stormwater" or "urban runoff."

Rain, industrial and household water mixed with pollutants creates stormwater pollution. The pollutants include: oil and other automotive fluids. paint and construction debris, yard and pet wastes, pesticides and litter.

Urban runoff pollution flows to the ocean through the storm drain system, which takes water and debris straight from the streets to the ocean. Each day 100 million gallons of polluted urban runoff enter the ocean untreated, leaving toxic chemicals in our surf and tons of trash on our beaches.

Urban runoff pollution contaminates the ocean, closes beaches, harms aquatic life and increases the risk of inland flooding by clogging gutters and catch basins.

Use of the Best Management Practices (BMPs) explained in this brochure will aid in assuring a cleaner city, protection of human health and water quality and prevention of ocean pollution.

Food Service Establishment Maintenance Problems:

Common food service establishment maintenance practices include cleaning kitchen equipment, disposing of waste cooking oil, cleaning outdoor areas and dish washing. All of these activities can contribute to urban runoff and ocean pollution if not conducted or managed properly. Materials and wastes washed or discharged into the street, gutter or storm drains have direct impacts on the ocean.

Solutions:

Cleaning Kitchen Equipment

- · Wipe off fats, oils and grease (FOG) and food residues from kitchen equipment, such as floor mats, hood filters and cooking equipment, prior to washing in the sink. Do not wash off any kitchen equipment or trash cans in an outdoor area where the wash water can flow to a street, parking lot or storm drain.
- All waste FOG and food scraps that have been wiped from cooking equipment should be thrown into the trash, not washed down the sink.

Washing Dishes

- Wipe off all utensils and dishes into a trashcan prior to washing.
- · Place mesh screens in all sinks and floor drains to prevent food scraps from being washed down into the sewer system.
- All food grinders or garbage disposal devices are required to be removed.

Grease and Waste Oil Disposal

- Grease control devices, such as grease traps and grease interceptors, provide the function of removing latent FOG and suspended food particles from wash water. Grease control devices will facilitate the separation of FOG and food particles so only water can pass through to the sewer system.
- · All grease traps and grease interceptors are required to be pumped out by a permitted company at least once every 6 months.
- · All waste oil should be drained into a waste oil drum, not down the sink or thrown into a trashcan or dumpster. Waste oil containers should be kept clean and covered with a lid at all times. If possible, store the waste oil drum inside of a building or in an enclosure.
- · Prevent spills of waste oil by not overfilling waste oil containers.
- · When employees are disposing of waste oil into designated containers, prevent spills be carrying out smaller loads of waste oil for disposal.
- All receipts for waste oil pick up and grease control device cleaning should be kept for review by inspectors.
- For a list of waste oil recycling companies please visit www.ciwmb.ca.gov/foodwaste/renderer.htm or call Garden Grove Environmental Compliance Page 585 of gayer spills present a hazard to human health, water Division at (714) 741-5375.

Spill Clean-Up

- Use dry clean up methods, like sweeping, wiping or mopping, to clean up spills.
- · Never wash or hose down spills to the street, gutter, parking lot or other outdoor area.
- Always have a spill kit readily available for immediate response to clean up spills. Spill kits should include an absorbent material, gloves and rags. All employees should be trained on the proper use of spill kit contents and spill clean up procedures.
- If the spill travels off of your facility property, please call (714) 741-5375.

Outdoor Area Cleaning

- · If any outdoor area, including sidewalks, outdoor seating, dumpster areas or outdoor storage areas need to be cleaned use dry cleaning methods, like sweeping.
- If any outdoor area needs to be cleaned with a liquid, it should first be swept to remove all dirt, trash and debris from the area. Then use a mop or scrub brush to clean areas where needed. Never hose off outdoor areas or allow wash water to travel off of your property.

Dumpster Area Maintenance

- Sweep up and remove all trash and debris from the dumpster area floor and surrounding the dumpster
- When employees are not in the process of disposing of trash or waste oil, keep dumpster lids and waste oil container lids closed.
- Do not pour liquids into dumpsters and double bag all leaking trash bags that are going to be disposed of in the dumpster.

Washwater Disposal

- Dispose of all washwater, like mop water, into a mop sink or sewer drain.
- Never throw washwater out in a parking lot, street, alley or storm drain.

Sewer Spills

- A sewer spill that is from a restaurant usually is caused by FOG. When FOG is washed down sinks it sticks to the sides of sewer pipes and builds up, reducing the capacity of the sewer line and eventually a sewer spill occurs.
- If your food service establishment has a sewer spill or you notice water flowing out from a grease control device, a manhole or sewer cleanout in the parking lot or street you are required to contact the City immediately at (714) 741-5375 or after hours at (714) 741-5704.

quality and the environment.



Spill Response Agencies

City of Garden Grove Fire Department (714) 741-5600 or if there is an emergency dial 911

City of Garden Grove Environmental Compliance Division (714) 741-5375

Orange County Resources and Development Management Department (877) 89-SPILL

Household Hazardous Waste Disposal

City of Garden Grove Public Works Department (714) 741-5375

Report Illegal Dumping

City of Garden Grove Environmental Compliance Division (714) 741-5375

To Report a Clogged Catch Basin

City of Garden Grove Public Works Department (714) 741-5375

For more information about storm drain protection or additional brochures, please call the City of Garden Grove Public Works Department at (714) 741-5375 or visit www.garden-grove.org/storm.

This brochure is one of a series of pamphlets describing storm drain protection measures.

Pamphlets include:

- Automotive Maintenance
- Food Service Establishments
- Fresh Concrete and Mortar Application
- General Construction and Site Supervision
- Heavy Equipment and Earth Moving Activities
- Home Repair and Remodeling
- Landscaping, Gardening and Pest Control
- Maintenance Practices for Your Business
- Painting
- Pet Waste
- Pool Maintenance
- · Roadwork and Paving



Published by:
City of Garden Grove
Public Works Department
Environmental Compliance Division

Preventing Storm Water Pollution At

Food Service Establishments



A guide for:

- Restaurants
- Grocery Stores
- Cafeterias

- Hood filters, fry baskets, grill tops, grill top scrap baskets and cooking surfaces should be sprayed with degreaser and be wiped down prior to washing.
- Train staff on proper kitchen maintenance procedures (i.e. dishwashing, grease spill control, equipment cleaning etc.) to ensure excess grease is not entering the sewer. Employees should be trained at least 1 time per year, and documentation of the training should be made available for inspectors to review.
- Grease control devices, such as a grease interceptor or grease trap, should be serviced at a minimum of every six months. Keep receipts and documentation of grease control device servicing and pumping available for inspectors to review.
- If your facility does not have a grease control device, it is recommended that you regularly service your private sewer line by hydrojetting or using a snake/cable.
- If your food service establishment has a sewer spill or you notice water flowing out from a grease control device or a manhole or sewer cleanout in the parking lot or street, you are required to Contact the City immediately at (714) 741-5375 or after hours at (714) 741-5704.

The State now requires that the City of Garden Grove enforce limitations on the amount of FOG and other debris that enters the sewer system. If your food service establishment is not implementing proper maintenance procedures to prevent FOG from entering the sewer system and a sewer spill occurs, you may be subject to fines and the City may seek to recover expenses incurred from the cleanup of your facilities sewer spill.

Preventing FOG from entering the sewer system from your food service establishment by implementing these kitchen best management practices will reduce the likeliness of sewer spills occurring and potential fines being levied.

For questions regarding sewer spills or to request training material, contact the Environmental Compliance Division at (714) 741-5375 or Garden Grove Sanitary District at (714) 741-5395.



SEWER SPILL PREVENTION for Households and Food Services

Establishments

GARDEN GROVE

SANITARY DISTRICT

GARDEN GROVE SANITARY DISTRICT

13802 Newhope Street Garden Grove, CA 92843

Phone: 714-741-5395 Fax: 714-638-9906

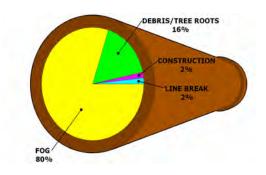
Email: PublicWorks@ci.garden-grove.ca.us Website: www.garden-grove.org/storm



Page 587 of 614

What Causes Sewer Blockages?

Sanitary sewer systems are designed to handle used water, human body waste and toilet paper. When fats, oils and grease enter the system, sewer blockages may occur. Based on sewer spill reports, most sewer blockages are caused by fats, oils and grease (FOG).



FOG can harden along the walls of the sewer lines and block the flow, causing backups, overflows and sewer spills. These backups are dangerous because sewage can enter the storm drains, which flow untreated to the ocean and ultimately these backups can cause beach closures, affect public health and the health of the environment.

Helpful Tips For Households

 Pour cooking oil into waste-grease cans for disposal. You can refrigerate used grease in a container until its ready for disposal.

BEFORE WASHING DISHES:

- Scrape off all dishes, grills, cooking surfaces and dry wipe remaining food and FOG into trashcans.
- Dispose of spent oil and grease generated from cooking equipment into waste-grease cans.
- Do not use hot water and soap to wash grease down the drain.
- Place a drain screen in sink/shower to catch solids/hair.

DO NOT USE TOILET AS A TRASH CAN:

 Use TRASH CAN for meat scraps, fat, leftovers, coffee grounds, egg shells, cat litter, baby diapers, baby wipes, feminine napkins, hair, cotton balls, Q-Tips and Kleenex.

INSPECT YOUR YARD FOR SIGNS OF POSSIBLE TREE ROOT INSTRUSION:

 Periodically have your service laterals cleaned out. Invasive tree roots and grease are the biggest causes of sewer blockages.

REMINDER

Property owners are responsible for the maintenance, repair, and cleaning of the sewer lateral from the house to the public sewer system.

Page 588 of 614

WHAT IS THE CITY DOING?

The mission of the Garden Grove Sanitary District is to continue to adequately address the sewer system's capacity and structural deficiencies and comply with the State Waste Discharge Requirements. A Capital Improvement Plan was developed in accordance with findings contained in the District's System Evaluation and Capacity Assurance Plan and it's Sewer System Rehabilitation Plan. As part of the Capital Improvement Plan, an ongoing schedule of sewer improvements at various site locations are in progress to address the deficiencies that will in turn; decrease the potential of having Sanitary Sewer Overflows and enable development throughout the City.

Helpful Tips For Food Service Establishments

- Place screens in all drains, including mop sinks, floor drains, multicompartment prep sinks and hand sinks.
- Employees should practice scraping off all dishes and dry wiping remaining food and FOG into trashcans prior to dishwashing.
- Food grinders (garbage disposals) should not be used in kitchens because the resulting large volume of food solids may clog sewer lines and/or fill grease traps and interceptors.
- Dispose of spent oil and grease generated from fryers and other cooking equipment into waste oil containers.
 Keep receipts and documentation of waste oil disposal available for inspectors to review.





Registered Liquid Wastehauler Vehicles

County of Orange, Health Care Agency, Environmental Health 1241 E. Dyer Road, Ste. 120 Santa Ana, CA 92705 (714) 433-6287

This listing can also be found on the web at: http://ochealthinfo.com/civicax/filebank/blobdload.aspx?BlobID=14743

NOTE: This listing is for informational purposes only and does not constitute an endorsement or guarantee of any company or service that may be provided. Companies listed may have had one or more Liquid Waste Hauling Vehicles inspected and legally registered by this Agency. Registrations are valid through December 31, 2015.

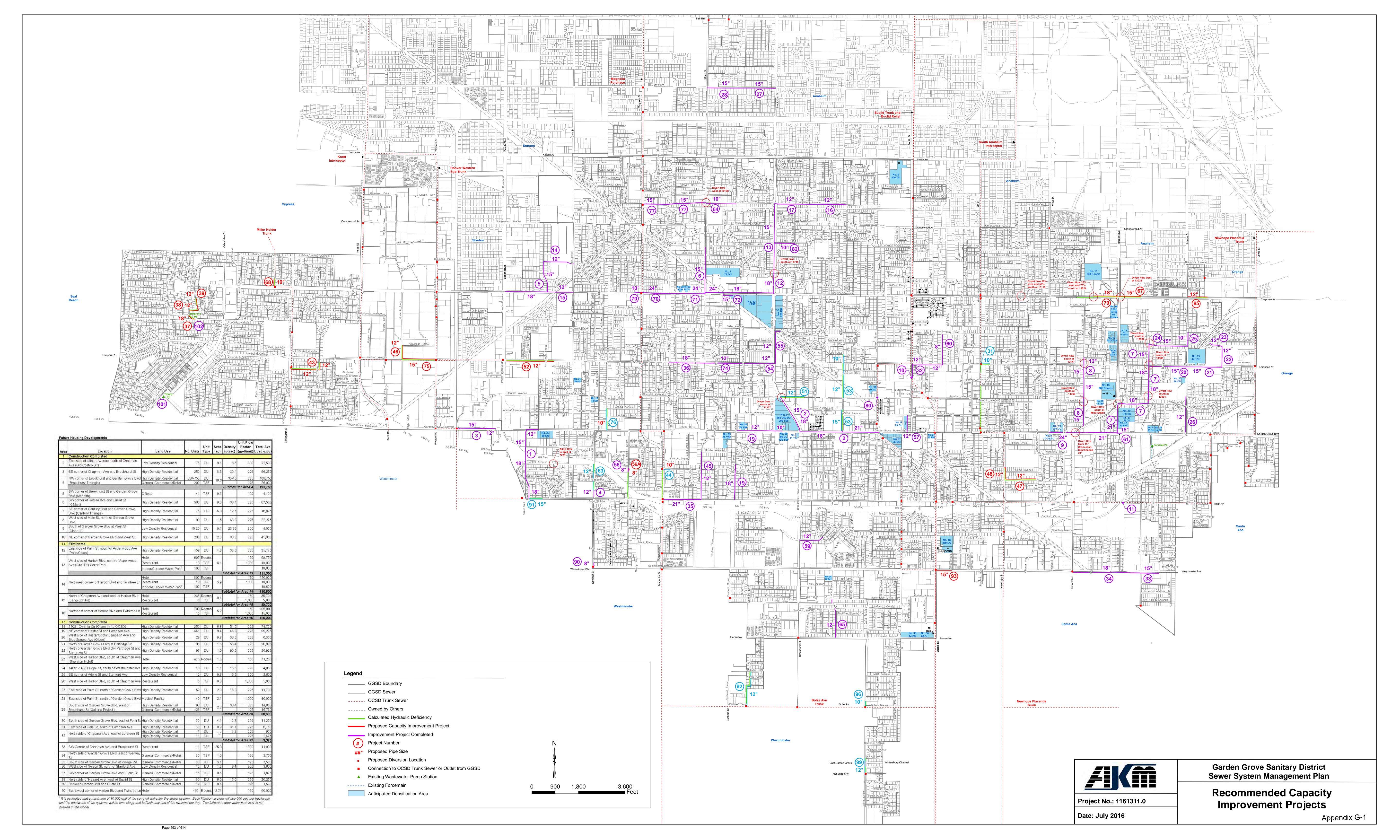
Each Company Indicated The Following Services Were Available:

Company Name	Business Phone:	Grease Interceptor	Grease Trap	Chemical Toilet	Septic Tank	Holding Tank/ Cesspool	Pipeline Blockage	Clarifier	Boat/ Ship	Rec. Vehicle
Los Indios Party Rental and Porta	714-478-4544			•						
Martinez Pumping	(626) 625-6051		✓							
OCBioFuel	(949) 289-5504	✓	✓					✓		
Ameriguard Maintenance Service	(800) 347-7876	✓	✓							
O.C. Vacuum, Inc.	(562) 984-8178				✓		✓	✓		
Diamond Environmental	(760) 744-7191			✓	✓					✓
C&A Cesspool & Septic Tank	(714) 554-6582	✓	✓	✓						✓
Golden State Pumping	(800) 491-1461			✓	✓					✓
Jimni Systems, Inc.	(949) 770-7654	✓	✓		✓			✓		
Mobile Harbor Services - Newport	(949) 515-8658								✓	
Rightway Portable Toilets	(951) 674-8608			✓						
LA Grease Solutions	(323) 232-2629	•	✓							
AAA Septic	(714) 836-6621		✓		✓	•	✓		✓	✓
Robert's Waste & Recycling	(714) 557-2533			✓					✓	✓
A & J Portables, Inc	(562) 299-8582			✓						
Triple "A" Pumping, Inc.	(714) 628-0900	✓	✓		✓	✓	✓	✓		
Clean Harbors Environmental Ser	(310) 764-5851	•	✓		✓	✓		✓		
Buster Biofuels	(760) 294-9400	•	✓							
A-1 Septic	(714) 779-0775	✓	✓		✓	✓	✓			✓
National Construction Rentals	(714) 285-0243			✓						
So Cal Sanitation, LLC	(800) 850-8871			✓	✓					
Liquid Environmental Solutions	(858) 481-8106	✓	✓							
A-Throne	(562) 981-1197			✓	✓					
1st Jon, Inc.	(714) 529-8646			✓	✓					✓
R.E. Commodities	(951) 830-7315	•	✓							
JN Grease Service	(951) 343-1221	•	✓					✓		
Right Angle Solutions Inc	(951) 934-3081	•	✓	✓	✓	✓	✓	✓	✓	✓
Andy Gump, Inc.	(661) 251-7721			•						

Each Company Indicated The Following Services Were Available:

Company Name	Business Phone:	Grease Interceptor	Grease Trap	Chemical Toilet	Septic Tank	Holding Tank/ Cesspool	Pipeline Blockage	Clarifier	Boat/ Ship	Rec. Vehicle
Universal Waste Systems, Inc.	(562) 941-4900	•	✓	✓	✓	✓		✓		✓
American Environmental, Inc.	(800) 669-2783	✓	✓		✓	•	•	✓		
G.G. Garcia Plumbing, Pumping	(714) 744-8912	✓	✓	•	✓		•			
Ocean Blue Environmental Svs	(562) 624-4120	✓	✓	•	✓	✓	•	✓	✓	✓
Pumpty Dumpty	(714) 585-1969								✓	
West Coast Environmental Servic	909-465-5800/9	✓	✓		✓			✓		
Orange County Pumping	(714) 505-9662	✓	✓		✓	✓	✓	✓		✓
Darling International	(714) 556-7867	✓	✓		✓			✓		
A-1 Coast Temporary Services	(310) 325-3300			✓						
Farris Septic	(800) 978-7900				✓	✓				
SoCal Pumping Co.	(866) 479-4976	✓	✓							
Royal Flush Pumping	(888) 656-2551								✓	
Western Sump Services	(888) 900-0960	✓	✓		✓					
Double Barrel Environmental Svs	(909) 499-6959						✓	✓		
Ancon Marine	(562) 326-5905	✓	✓	✓	✓	✓	✓	✓	✓	
SMC Grease Specialist	(951) 788-6042	✓	✓							
Susy Party Rentals	(714) 329-1031			✓						
Canyon Septic Services	(714) 649-3226	✓	✓	✓	✓	✓		✓		
Three Stars	(714) 293-9232			✓						
Shoemaker's Enviro-Tech	(661) 296-2394	✓	✓					✓		





Appendix G-2

Ordinance No. 10

ORDINANCE NO. 10

AN ORDINANCE OF THE GARDEN GROVE SANITARY DISTRICT
AFFIRMING ESTABLISHED SEWER USER FEES FOR SEWER SERVICES WITHIN
GARDEN GROVE SANITARY DISTRICT SERVICE AREA, CLARIFYING EXISTING
PROVISIONS, AND AUTHORIZING FUTURE AUTOMATIC ADJUSTMENTS IN SEWER
USER FEES TO ACCOUNT FOR INFLATION

District Counsel Summary

This Ordinance affirms existing established sewer user fees and related Garden Grove Sanitary District regulations, implements annual inflationary adjustments to sewer user fees for a period of five (5) years, confirms existing regulatory language that property owners are subject to a separate sewer user fee for each portion of a parcel served by a separate metered water service, confirms that sewer user fees may be billed to and/or paid by tenants along with bills for water service, but property owners remain ultimately responsible for the payment of all sewer user fees applicable to their property, and clarifies that tenants paying sewer user fees are also eligible for rebates or refunds, where applicable.

THE BOARD OF DIRECTORS OF THE GARDEN GROVE SANITARY DISTRICT hereby finds as follows:

- A. On September 13, 2005, the Garden Grove Sanitary District Board of Directors (Board of Directors) adopted Ordinance No. 7 establishing revised Sewer User Fees for sewer services within the Garden Grove Sanitary District (District) service area.
- B. Ordinance No. 7 implemented a new Sewer User Fee structure, based on the use of the sewer system, in order to generate sufficient revenue to operate, maintain, replace, and upgrade the system to adequate capacity and make repairs mandated pursuant to Order No. R8-2002-0014, General Waste Discharge Requirements for Sewage Collection Agencies in Orange County, issued by the Regional Water Quality Control Board, Santa Ana Region (the 2002 Order).
- C. The 2002 Order required all sewer collection agencies to prepare a Sewer System Management Plan (SSMP) to address the capacity deficiencies; structural deficiencies; fats, oils and grease control; and proper funding, operation, and maintenance of their sewer systems. Pursuant to the 2002 Order, the District prepared and adopted a SSMP, which included a System Evaluation and Capacity Assurance Plan and Rehabilitation and Replacement Plan.
- D. In conjunction with the SSMP, in 2005, the District prepared an updated Financial Analysis and Rate Study resulting in the development of a Capital Improvement Program and an enhanced maintenance program in compliance with the 2002 Order, along with a financial model to evaluate the rate structure necessary to generate sufficient revenues to allow the District to meet its obligations. The 2005 Financial Analysis and Rate Study was submitted to the

Board of Directors and made available to the general public at a Public Hearing prior to the adoption of Ordinance No. 7.

- E. Ordinance No. 7 and the revised charges for sewer service established through Ordinance No. 7 were based on the findings and recommendations set forth in the 2005 Financial Analysis and Rate Study, as such recommendations were revised based on comments received at the Public Hearing.
- F. In 2006, the 2002 Order was superseded by Order No. 2006-003-DWR, Statewide General Waste Discharge Requirements for Sanitary Sewer Systems, issued by the State Water Resources Control Board (the 2006 Order). The 2006 Order continues to require implementation of an SSMP and mandates that local sewer collection agencies establish proper rate structures to adequately fund the operation, maintenance, repair and replacement of their sanitary sewer systems.
- G. The District has subsequently continued to inspect and evaluate its sanitary sewer system facilities and to update its SSMP to reflect necessary identified structural and capacity deficiencies. Amendments to the District's SSMP reflecting these updates were adopted by the Board of Directors in 2009 and 2011.
- H. In conjunction with these SSMP updates, District staff and consultants have updated the financial model developed pursuant to 2005 Financial Analysis and Rate Study, conducted an evaluation of the adequacy of the existing rates to satisfy the District's obligations, and prepared an updated Financial Analysis (which is made a part of the public record of the Public Hearing) that updates and supplements the 2005 Financial Analysis and Rate Study, and that recommends continued implementation of the rate structure established pursuant to Ordinance No. 7, including continued implementation of annual inflationary increases based on the Engineering News Record's Cost Index for the Los Angeles Area.
- I. Government Code Section 53756 authorizes any agency providing sewer service to adopt a schedule of fees or charges authorizing adjustments for inflation for a period not to exceed five (5) years.
- J. The purpose of this Ordinance is to authorize annual inflationary adjustments to the Sewer User Fees in accordance with Government Code Section 53756, affirm the existing Sewer User Fees as originally authorized by Ordinance No. 7, and to make such other changes to the District's regulations pertaining to Sewer User Fees as are necessary to conform to existing law and/or to clarify certain provisions. The amounts set forth in Table A of Subsection 3.B. of this Ordinance reflect the current legal rates and charges, as lawfully established and adjusted in accordance with Ordinance No. 7 and State law, and do not reflect new or additional increases in the rates and charges imposed by the District for sewer services.

- In support of this Ordinance and the charges for sewer service as K. provided for on Table A herein, the 2005 Financial Analysis and Rate Study and the updated Financial Analysis, as approved hereby by the Board of Directors, has resulted in the development of a Capital Improvement Program and an enhanced maintenance program consistent with the goals and policies of the Board of Directors and the public, which also provide for the construction of necessary improvements to eliminate existing capacity deficiencies in the system, accommodate projected increased flows and the rehabilitation and refurbishment of existing facilities. The Board of Directors further finds that programming annual inflation adjustments in sewer service charges over a period of years is appropriate and ensures adequate revenues to finance the improvements and programs necessary to eliminate existing capacity deficiencies in the system, accommodate projected increased flows, rehabilitate, replace, and refurbish existing facilities, and retire any necessary or prudent debt incurred to finance such improvements in a reasonable manner and over a reasonable period of time. The Board of Directors also finds that such Sewer User Fees are reasonably related to, and do not exceed the cost of providing sewer services.
- L. The financial requirements of the District, as shown in reports prepared by staff and consultants relating to the sewerage system, are based on current, reliable information and data relating to population estimates, wastewater flow, capital facilities' needs, and increased proper maintenance, and are expected to be realized in each year as described in the reports.
- M. The revenues derived under the provisions of this Ordinance will be used for the acquisition, construction, reconstruction, maintenance, and operation of the sewage collection facilities of the District; to repay principal and interest on debt instruments; to repay Federal and State loans issued for the construction and reconstruction of said sewerage facilities, if any, together with costs of administration and provisions for necessary reserves.
- N. The owners or occupants of properties upon which all fees and charges established and/or affirmed by this Ordinance are levied discharge wastewater to the District's collection facilities. The costs of operating and maintaining said facilities have constantly increased due in part to increased regulatory requirements to upgrade the collection system including, but not limited to, the Order No. 2006-003-DWQ, Statewide General Waste Discharge Requirements for Sanitary Sewer Systems, issued by the State Water Resources Control Board on May 2, 2006.
- O. The need for upgraded and improved maintenance of the sewage collection facilities is required to protect the public health and safety, and to preserve the environment without damage.
- P. The Sewer User Fees levied by this Ordinance are to allow the District to recover the reasonable costs to provide a service to individual properties which have been improved for any of numerous types of uses. The basis for the

respective charge is the request of the owner of property or a structure thereon, for the benefit of him/her/itself, or the occupants of the property, to receive a service based upon actual use, consumption, and disposal of wastewater to the District's system in lieu of disposal by other means.

- Q. The Board of Directors has determined the following with regard to the Sewer User Fees established and/or affirmed by this Ordinance: (i) such fees and charges are not imposed as a condition of approval of a development project, as defined in California Government Code Section 66001; (ii) such fees and charges are established upon a rational basis between the fees charged each customer and the service and facilities provided to each customer of the District; (iii) the revenues derived from such fees and charges do not exceed the estimated reasonable cost to provide the sewer service for which the fees and charges are levied; (iv) the revenues derived from such fees and charges shall not be used for any other purpose than that for which the fees and charges are imposed; (v) such fees and charges do not exceed the proportional cost of the sewer service attributable to each consumer; (vi) such fees and charges are imposed on sewer services which are actually used by or immediately available to the consumer; (vii) such fees and charges are not levied for general governmental services; and (viii) the rates and charges are not discriminatory or excessive, are sufficient under Government Code section 54515, comply the provisions or covenants of any outstanding revenue bonds of the District payable from the revenues of the District, comply with the provisions of Title 5, Division 2, Chapter 6 of the California Government Code, and are in compliance with all other applicable law.
- R. The Sewer User Fees adopted and/or affirmed herein will not necessarily result in an expansion of facilities to provide for growth outside the existing service area. The adoption and/or affirmation of these Sewer User Fees will not result in any specific project, nor result in a direct physical change in the environment.
- S. The District is required by Federal and State law, including the Federal Water Pollution Control Act, also known as the Federal Clean Water Act (33 U.S.C. 1251, et seq.), and the Porter-Cologne Water Quality Control Act (California Water Code Sections 13000 et seq.) to implement and enforce a program for the regulation of wastewater discharges to the District's sewers.
- T. In accordance with Proposition 218, notice of a Public Hearing to consider the proposed adjustments in sewer rates and charges and containing such information required to be included pursuant to California law was mailed to all record owners of affected property to the addresses as they appear on the latest equalized assessment roll and to all District customers located on the affected parcels at the addresses to which the District customarily mails the billing statements.

- U. On February 14, 2012, in accordance with applicable legal requirements, the Board of Directors conducted a duly noticed Public Hearing to consider the proposed adjustments in sewer rates and charges set forth herein, at which time all those who wished to speak for or against the proposed adjustments in sewer rates and charges were heard and the Board of Directors heard all objections and protests to the proposed adjustments in sewer rates and charges. The District received 88 written protests against the proposed adjustments in sewer rates and charges, which does not constitute a majority protest, as defined in Proposition 218.
- V. Pursuant to California Government Code Section 66016 notice of the time and place of this Public Hearing, including a general explanation of the matter to be considered and a statement that the data required by Government Code Section 66016 has been available for public review at the District, was mailed to interested parties requesting notice at least fourteen (14) days prior to the Public Hearing.
- W. Pursuant to California Government Code Section 66016 the District made available to the public the updated Financial Analysis, and other data documenting the estimated costs required to provide services for which the proposed modified rates and charges will be levied and the revenue sources anticipated to provide the services.
- X. All fees and charges established and/or affirmed herein have been approved by the Board of Directors at a noticed public meeting, all in accordance with applicable provisions of law.
- Y. The adoption of this Ordinance and the establishment of such rates and charges is statutorily exempt under the California Environmental Quality Act ("CEQA") pursuant to the provisions of Public Resource Code Section 21080(b)(8) and Section 15378 and Section 15273 of the CEQA Guidelines because, (i) the increased rates and charges are for the purpose of meeting operational and maintenance expenses of the District, and (ii) the rates and charges constitute the creation of funding mechanism/other governmental fiscal activity that does not involve any commitment to any specific project which may result in a potentially significant physical impact on the environment.

The Board of Directors of the Garden Grove Sanitary District hereby ordains as follows:

<u>Section 1</u>: <u>Purpose and Scope</u>. The purpose of this Ordinance is to establish Sewer User Fees required to be paid by property owners for the services and facilities furnished by the District in connection with its sewage collection system. Revenues derived under the provisions of this Ordinance shall be used for the acquisition, construction, reconstruction, maintenance, and operation of the wastewater collection facilities of the District; to repay principal and interest on

debt instruments; or to repay federal and state loans, if any, issued for the construction and reconstruction of said sewerage facilities, together with costs of administration and provisions for necessary reserves.

Section 2: Sewer User Fees. Commencing with the effective date of this Ordinance, the owner(s) of each parcel of real property located within the District that is improved with structures designed for residential, commercial, industrial, school, or other use and which, at the request of the owner or the owner's predecessor-in-interest, is connected to the District's system, shall pay a monthly Sewer User Fee or monthly Sewer User Fees based on the respective class of users, in the sum or sums, as set forth in Section 3 of this Ordinance, below. Property owners are subject to a separate Sewer User Fee for each portion of a parcel served by a separate metered water service. The District's billing to, and/or periodic acceptance of payment from, a tenant shall not relieve the owner(s) of a parcel of property from the obligation to pay any unpaid Sewer User Fees due pursuant to this Ordinance.

<u>Section 3</u>: <u>Establishment of Sewer User Fees</u>. Based on the engineering and financial studies, and pursuant to provisions of California Health & Safety Code Section 5471, the following sewer service charges are hereby established.

A. <u>Sewer Service Rate Formula</u>. The owner of each parcel of land connected to the District's sewer collection system shall be assigned to one or more customer classes, based on property use, and shall pay a monthly sewer service charge for each portion of the parcel served by a separate metered water service, computed according to the following formula:

Base Rate (according to customer class), plus Usage Charge of \$0.86 per hundred cubic feet ("HCF") of water used per month during the bi-monthly period of lowest consumption (determined annually, based on analysis of 12 months of water billing data), not to exceed the Maximum Billing Cap designated for each customer class.

B. <u>Customer Classes and Rates</u>. The following sewer customer classes and rates are hereby established:

TABLE A

User Class	Base Rate	Maximum Billing Cap
Residential – SFR		
and Duplex	\$ 3.98/metered d.u.	\$ 12.61
Car Wash	\$ 58.78	\$185.86
Church	\$ 14.28	\$ 45.16
Commercial 1*	\$ 3.98	\$ 12.61

Commercial 2*	\$ 7.98	\$ 25.23
Commercial 3*	\$ 15.95	\$ 59.09
Commercial 4*	\$ 31.90	\$118.17
Commercial 5*	\$ 59.83	\$232.37
Commercial 6*	\$ 79.78	\$252.32
Hotels/Motels	\$ 79.78	\$252.32
Private School	\$ 41.29	\$130.58
Hospital	\$223.37	\$706.48
Industrial	\$ 44.11	\$139.52
Laundromat	\$ 54.83	\$173.36
Multi-Unit Residential**	\$ 33.76/water meter	\$106.83
Public School	\$ 53.35	\$168.69

"Commercial 1 through Commercial 6" set forth above are defined to mean commercial, retail and related uses collectively, unless otherwise set forth specifically in the matrix, and includes any other land use not described in the above stated matrix. Further, the General Manager of the District, or his designee, shall make administrative determinations as necessary to determine in individual cases the most applicable land use category for a particular property. In so doing, the General Manager, or his designee, shall utilize the land use matrix for land uses as set forth in Garden Grove Municipal Code Section 9.16.020.030.

**Where individual units are not connected directly to the sewer system, a charge of \$1 per month, per unit will be assessed in addition to the base rate and usage charge rate for this user class.

*Commercial Class Rates are based upon those persons or entities who consume metered water quantities in accordance with the following schedule:

Class #	Per 100 cu. Ft. of Water/Month
1	0 - 10
2	10.1 - 20
3	20.1 - 50
4	50.1 - 100
5	100.1 - 200
6	200 or greater

C. Adjustments for Inflation. The usage charge, base rates and maximum billing caps established in Sections 3.A. and 3.B. above will be adjusted for inflation annually on July 1, commencing July 1, 2012, and continuing through July 1, 2016, based on the same percentage as the percentage of increase in construction costs between March 1 of the calendar year immediately preceding March 1 of the then current calendar year, based on the Engineering News Record

Construction Costs Index – Los Angeles Area, without further action by the Board of Directors. However, if the inflation adjustment in any year exceeds six (6) percent under the inflation index set forth above, the amount of the inflation adjustment shall be presented to the Board of Directors for final legislative determination. The General Manager of the District, or his designee, shall cause notice of any automatic adjustment made pursuant to this Subsection (C) to be given pursuant to Subdivision (a) of Government Code Section 53755, as it may be amended from time to time, and/or other applicable law, not less than thirty (30) days before the effective date of the adjustment.

Section 4: Rebates or Refunds.

- A. <u>Exemptions</u>. It is the intent of the District that the legal owner(s) and/or tenants of parcels of real property otherwise subject to the levy and payment of the Sewer User Fees as prescribed herein, be relieved, in whole or in part, from the payment of said fees, in certain circumstances and under conditions prescribed herein, and be entitled to either a rebate or a refund with respect to fees paid, as more specifically set forth in subparagraphs 4.B. and 4.C. below, provided an inequity is established or a billing error is proven, as specified in subparagraphs 4.B. or 4.C.
- B. <u>Application for Rebate</u>. Any property owner or tenant made responsible by the property owner for payment of the Sewer User Fees may apply to the District for a rebate of Sewer User Fees paid to the District by establishing that an incorrect classification of the property, or portion thereof, has been made by the District. An applicant for a rebate must establish, by proof satisfactory to the General Manager of the District, or his designee, that an inequity exists between the amount of the charge paid and the amount of wastewater discharged to the District's system, resulting in an incorrect classification. Satisfactory proof shall establish that either:
- (1) The principal water use is agricultural or horticultural and wastewater is not discharged from the property to the District's system; or
- (2) The property, or applicable portion thereof, is devoted to any other use wherein the amount of wastewater discharged to the District's system is significantly less on a regular basis than the amount that would normally be expected to be discharged by the class of property in question.

Satisfactory proof shall include, but not be limited to, documentation showing actual water usage for each billing cycle during the entire period for which the rebate is sought.

The amount of any rebate shall not reduce the charge payable by any property owner, whose property is connected to the District's system, to less than

the charge would be if the property was assigned to the single family residential user class.

- C. <u>Application for Refund</u>. Any property owner or tenant may apply to the District for a refund of Sewer User Fees paid to the District by establishing that the amount paid was pursuant to an error in the amount billed or the amount paid. The applicant for a refund must submit proof satisfactory to the General Manager of the District, or his designee, that a billing error has been made by the District or the County Tax Collector. Such proof shall include, but not be limited to, proof that:
- $\ensuremath{\text{(1)}}$ The owner's parcel of property is not connected to the District's system; or
- (2) The property has not been classified in the proper land use category; or
 - (3) A clerical error has been made.
- D. <u>Limitations Period</u>. Applications for rebates and refunds shall be deemed to be governed by the provisions of California Revenue and Taxation Code Sections 5096 and 5097, allowing for refunds for a period of four (4) years from the date of payment of the second installment of the bill claimed to be either inequitable or incorrect.
- E. <u>Determination</u>. All applications for rebates or refunds of the Sewer User Fees will be determined by the General Manager of the District, or his designee, who, based on the submitted proof, may grant a full or partial rebate or refund.
- F. Administrative Fee. At the time of filing the application for rebate or refund, the property owner shall pay the District an administrative fee for the processing of such application. The amount of the fee shall be equal to the total of all fees and charges imposed on the District by any other public entity, such as the Orange County Tax Collector, the Orange County Auditor, or the Orange County Recorder, in connection with the rebate or refund.
- G. <u>Underpayment</u>. In the event the District determines that, due to a billing or payment error, or to inequity in the amount billed, a property owner has underpaid annual Sewer User Fees payable to the District, the District may, within four (4) years after the date of mailing of the tax bill:
- (1) Collect the amount of any deficiency directly on the County Tax Roll;

- (2) Off-set the amount of any deficiency against any amounts that the District determines is owing, by the District, to the property owner, as a rebate or refund under this Ordinance; or
- (3) Submit, directly to the property owner, a bill for the amount of any deficiency, that shall be due and payable within thirty (30) days of the invoice date and that, if not paid, shall become a lien on said property.
- Section 5: Collection of Sewer User Fees Within the City of Garden Grove. Pursuant to the provisions of California Health & Safety Code Section 5471, the Board of Directors hereby elects to have the Sewer User Fees for parcels within the corporate boundaries of the City of Garden Grove collected with the charges of the City of Garden Grove's water utility, and that these charges may be collected on the same bills as the water charges, or on separate bills, as may be determined by the City of Garden Grove. Bills for Sewer User Fees applicable to a parcel of property, or a portion thereof, may be provided solely to and/or paid by the same person(s) to which bills for water charges are provided, even if not the owner(s) of the property. Notwithstanding the foregoing, the owner(s) of such property shall be and remain responsible for payment of all Sewer User Fees applicable to the property.
- Section 6: Collection of Sewer User Fees Outside the City of Garden Grove. Pursuant to the provisions of California Health & Safety Code Section 5473, the Board of Directors hereby elects, in its discretion, to have the Sewer User Fees for those areas outside of the corporate boundaries of the City of Garden Grove collected on the tax roll in the same manner, by the same persons, and at the same time as, together with and not separately from, the general taxes of the District.
- Section 7: Severability. If any section, subsection, subdivision, sentence, clause, phrase, word or portion of this Ordinance is, for any reason, held to be invalid by the decision of any court of competent jurisdiction, such decision shall not affect the validity of the remaining portions of this ordinance. The Garden Grove Sanitary District Board of Directors hereby declares that it would have adopted this ordinance and each section, subsection, subdivision, sentence, clause, phrase, word or portion thereof, irrespective of the fact that any one or more sections, subsections, subdivisions, sentences, clauses, phrases, words or portions thereof be declared invalid.
- <u>Section 8:</u> The President shall sign and the District Secretary shall certify to the passage and adoption of this Ordinance, and this Ordinance shall take effect immediately upon adoption.

Adopted this 14 th day of February 2012.									
ATTEST:				/s/ BRUCE A. BROADWATER PRESIDENT					
<u>/s/ KATHLEEN</u> SECRETARY	N BAILOR			T NESTBERT					
STATE OF CA COUNTY OF C CITY OF GARI	RANGE)	ss:						
certify that the Grove Sanitar	I, KATHLEEN BAILOR, Secretary of the Garden Grove Sanitary District, hereby certify that the foregoing Ordinance was duly adopted by the Board of the Garden Grove Sanitary District at an Adjourned Regular Meeting held on the 14 th day of February 2012, by the following vote:								
	MEMBERS:	(0)	NONE	IES, NGUYEN, BROADWATER					
				/s/ KATHLEEN BAILOR					

SECRETARY

GARDEN GROVE SANITARY DISTRICT SEWER BUDGET FY 2010-11 - 2012-13 (\$000)

FUNDS AVAILABLE	2011-12 Adopted Budget	FY 11-12 Projected Year End	FY 12-13 Proposed Budget	FY 13-14 Forecast
BEGINNING BALANCE	\$ 625.1	\$ 625.1	\$ 189.1	\$ 1,048.1
BOND PROCEEDS (Annual Allocation)	0.0	0.0	0.0	0.0
REVENUES	10,242.3	10,242.3	10,620.0	10,959.0
RATE ADJUSTMENT	0.0	0.0	0.0	0.0
FUNDS AVAILABLE	10,867.4	10,867.4	10,809.1	12,007.1
OPERATION EXPENDITURES				
OPERATIONS				
LABOR	2,507.2	2,375.7	2,613.7	2,718.0
CONTRACTUAL SERVICES	1,125.0	1,125.0	1,168.2	1,215.0
COMMODITIES	238.2	238.0	233.5	243.0
VEHICLE / EQUIPMENT RENTALS	241.7	241.7	253.7	264.0
INSURANCE	41.7	41.7	41.7	43.0
ADMIN SUPPORT COSTS	512.2	512,2	524.6	546.0
BOND ISSUANCE COSTS	0.0	0.0	0.0	0.0
DEBT SERVICE	1,462.3	1,462.3	1,463.3	1,463.0
LATERAL LOAN PROGRAM	0.0	0.0	0.0	0.0
OPERATING RESERVE	250.0	250.0	0.0	0.0
SEWER SYSTEM CONTINGENCY RESERVE	0.0	0.0	0.0	0.0
TOTAL OPERATION EXPENDITURES	6,378.3	6,246.6	6,298.7	6,492.0
SEWER CAPITAL				
CAPITAL REPLACEMENT	1,431.7	1,431.7	1,462.3	1,506.2
NEW CAPITAL IMPROVEMENTS	3,000.0	3,000.0	2,000.0	2,000.0
CAPITAL EXPENDITURES	4,431.7	4,431.7	3,462.3	3,506.2
TOTAL EXPENDITURES	10,810.0	10,678.3	9,761.0	9,998.2
FUNDS AVAILABLE	10,867.4	10,867.4	10,809.1	12,007.1
EXPENDITURES	10,810.0	10,678.3_	9,761.0	9,998.2
ENDING BALANCE	\$ 57.4	\$ 189.1	\$ 1,048.1	\$ 2,008.9

				i i					
User Class	Maximum Monthly Units		Maximum Bi-Mo Units	New Unit Rate	07/01/12 Mo. Base Rate	07/01/12 Mo. Max Billing Cap (\$0.8627 x	07/01/12 Bi-Mo Base	07/01/12 Bi- Mo. Max Billing Cap (\$0.8627 × 2.5% = \$0.8843)	
Residential - SFR	10.00	_	20,00	0.88	\$ 4.08	\$ 12.92	\$ 8/16	\$ 25.84	
Duplex	10.00	L	20.00	0.88	\$4.08	\$ 12.92	\$ 8,16	\$ 25.84	
Car Wash	147.30		294.60	. 0,88	\$ 60.25	\$ 190.51	\$ 120,50	\$ 381.02	
Church	35.80	Ш	71.60	0.88	\$:14.64	\$ 46.30	\$ 29.28	\$ 92.60	
Commercial 1*	10.00	Ц	20.00	0.88	\$ 4.08	\$ 12.92	\$ 8.16	\$ 25.84	
Commercial 2*	20.00	Ц	40.00	:::: 0.88	\$ 8.18	\$ 25.87	\$ 16.36	\$ 51,74	
Commercial 3*	50.00		100.00	0.88	\$ 16,35	\$ 60.57	\$ 32.70	\$ 121.14	
Commercial 4*	100.00		200.00	88,0	\$ 32,70	\$ 121.13	\$. 65.40		
Commercial 5*	200.00		400.00	0.88	\$ 61.33	\$ 238.19	\$ 122.66		
Commercial 6*	200,00	+	400.00	0.88	\$. 81.77	\$ 258.63	\$:163,54	\$ 517.26	
Hotels / Motels	200.00		400.00	0.88	\$81.77	\$ 258.63	\$ 163.54	\$ 517.26	
Private School	103.50		207.00	88.0	\$ 42.32	\$ 133.85	\$ 84.64	\$ 267.70	
Hospital	560.00		1,120.00	0.88	\$ 228.95	\$ 724.16	\$.457.90	\$ 1,448.32	
Industrial	110.60		221.20	0.88	\$ 45.21	\$ 143.01	\$ 90.42	\$ 286.02	
Laundromat	137.40	Ц	274.80	0.88	\$ 56.20	\$ 177.70	\$ 112:40	\$ 355.40	
Multi-Unit Residential **	84.70		169.40	0.88	\$ 34.60	\$ 109.50	\$ 69.20	\$. 219.00	+ \$1 per uniVmo
Public School/GGUSD	133,70	Ц	267.40	0.88	\$ 54.68	\$ 172.91	\$ 109,36		-
Public School/Non-GGUSD	133,70		267.40	0:88	\$. 54.68	\$ 172.91	\$ 109.36	\$ 345.82	
Fire Service Aoriculture				!					•
Parks	_								
Public Sch Fire Spr Landscape				ı					
	Residential - SFR Duplex Car Wash Church Commercial 1* Commercial 2* Commercial 3* Commercial 5* Commercial 6* Hotels / Motels Private School Hospital Industrial Laundromet Multi-Unit Residential ** Public School/GGUSD Public School/Non-GGUSD Fire Service Agriculture Parks	User Class	User Class	Monthly Units	New Units	Maximum Maximum Bi-Mo New Unit 2.5% ENR	Maximum Maximum Maximum Bi-Mo Units Bi-Mo Units Rate 2.5% ENR 2.5% 2.	Maximum Monthity Units Maximum Monthity Month	Maximum Maxi

Page 607 of 614

Agenda Item - 2.b.

Garden Grove Sanitary District

INTER-DEPARTMENT MEMORANDUM

To: Scott C. Stiles From: Kathy Bailor

Dept.: General Manager Dept.: City Clerk

Subject: Receive and file the minutes Date: 9/27/2016

from the June 28, 2016, meeting. (Action Item)

Attached are the minutes from the meeting held on June 28, 2016, for the Sanitary District Board to review and take action to receive and file.

ATTACHMENTS:

Description Upload Date Type File Name

June 28, 2016, minutes 9/19/2016 Backup Material sd-min_06_28_2016.pdf

MINUTES

GARDEN GROVE SANITARY DISTRICT BOARD OF DIRECTORS

Regular Meeting

Tuesday, June 28, 2016

Community Meeting Center 11300 Stanford Avenue, Garden Grove, CA 92840

Member Bui attended the meeting remotely via Skype from Waikiki Beach Marriott, 2552 Kalakaua Avenue, Honolulu, Hawaii, 96815

CONVENE MEETING

At 6:30 p.m., President Phan convened the meeting in the Council Chamber.

ROLL CALL PRESENT: (5) President Phan, Members Beard, Bui, Jones,

Nguyen

ABSENT: (0) None

ORAL COMMUNICATIONS

Speakers: Dorit Harrell, John Holm, Charles Mitchell, Clay Bock, Winston

Covington, Josh McIntosh, Maureen Blackmun, Demian Garcia-Monroy

RECESS

At 7:15 p.m., President Phan recessed the meeting.

RECONVENE

At 7:25 p.m., President Phan reconvened the meeting with all Members present.

MINUTES (F: Vault)

It was moved by Member Jones, seconded by Member Beard that:

The minutes from the meeting held on May 24, 2016, be received and filed.

The motion carried by a 5-0 vote as follows:

Ayes: (5) Beard, Bui, Jones, Nguyen, Phan

Noes: (0) None

PUBLIC HEARING - REPORT DETAILING FEES TO BE COLLECTED ON THE TAX ROLL FOR SEWER SERVICES OUTSIDE THE CITY LIMITS; AND ADOPTION OF A RESOLUTION AUTHORIZING THE COLLECTION ON THE TAX ROLL OF FEES FOR SEWER SERVICE PROVIDED BY THE GARDEN GROVE SANITARY DISTRICT OUTSIDE THE CITY LIMITS (F: S-60.1)

Following staff's presentation, President Phan declared the Public Hearing open and asked if anyone wished to address the Sanitary District on the matter.

Speakers: None.

There being no response from the audience, the Public Hearing was declared closed.

The Deputy Secretary announced that no protests were received; therefore, there is not a majority protest.

It was moved by Member Jones, seconded by Member Nguyen that:

Resolution No. 3760-16 entitled A Resolution of the Garden Grove Sanitary District Board authorizing charges for sewer services in the areas of the District that extend beyond the Garden Grove City limits and do not receive water services from the City of Garden Grove to be collected on the Tax Roll, be adopted.

The motion carried by a 5-0 vote as follows:

Ayes: (5) Beard, Bui, Jones, Nguyen, Phan

Noes: (0) None

PUBLIC HEARING - REPORT OF DELINQUENT ACCOUNTS FOR REFUSE COLLECTION AND DISPOSAL SERVICE BILLS; AND ADOPTION OF A RESOLUTION AUTHORIZING IMPOSITION OF LIENS ON PARCELS WITH DELINQUENT ACCOUNTS (F: S-60.2)

Following staff's presentation, President Phan declared the Public Hearing open and asked if anyone wished to address the Sanitary District on the matter.

Speakers: None.

There being no response from the audience, the Public Hearing was declared closed.

The Deputy Secretary announced that no protests were received; therefore, there is not a majority protest.

It was moved by Member Jones, seconded by Member Beard that:

Resolution No. 3761-16 entitled A Resolution of the Board of Directors of the Garden Grove Sanitary District of Orange County, California, adopting a report and certifying a statement of delinquent and unpaid charges for refuse collection and disposal services to be collected on the property tax roll, be adopted.

The motion carried by a 5-0 vote as follows:

Ayes: (5) Beard, Bui, Jones, Nguyen, Phan

Noes: (0) None

PUBLIC HEARING - REPORT DETAILING FEES TO BE COLLECTED ON THE TAX ROLL FOR REFUSE COLLECTION AND DISPOSAL SERVICES IN IMPROVEMENT DISTRICT NO. 1; AND ADOPTION OF A RESOLUTION AUTHORIZING THE COLLECTION ON THE TAX ROLL OF REFUSE COLLECTION AND DISPOSAL FEES FOR IMPROVEMENT DISTRICT NO. 1 (F: S-60.1)

Following staff's presentation, President Phan declared the Public Hearing open and asked if anyone wished to address the Sanitary District on the matter.

Speakers: None.

There being no response from the audience, the Public Hearing was declared closed.

The Deputy Secretary announced that no protests were received; therefore, there is not a majority protest.

It was moved by Member Jones, seconded by Member Beard that:

Resolution No. 3762-16 entitled A Resolution of the Board of Directors of the Garden Grove Sanitary District authorizing refuse collection and disposal charges for Improvement District No. 1 to be collected on the tax roll, be adopted.

The motion carried by a 5-0 vote as follows:

Ayes: (5) Beard, Bui, Jones, Nguyen, Phan

Noes: (0) None

PUBLIC HEARING - RESOLUTIONS APPROVING THE GARDEN GROVE SANITARY DISTRICT ANNUAL BUDGET FOR FISCAL YEAR 2016/17, AND REAPPROPRIATING PROJECT BALANCES AND ENCUMBRANCES FROM FISCAL YEAR 2015/16 (F: S-34.1)

Following staff's presentation, President Phan declared the Public Hearing open and asked if anyone wished to address the Sanitary District on the matter.

Speakers: None.

There being no response from the audience, the Public Hearing was declared closed.

Resolution No. 3763-16 entitled A Resolution of the Board of Directors of the Garden Grove Sanitary District adopting an annual budget for Fiscal Year 2016-17, be adopted.

The motion carried by a 5-0 vote as follows:

Ayes: (5) Beard, Bui, Jones, Nguyen, Phan

Noes: (0) None

<u>PUBLIC HEARING - RESOLUTION SETTING THE FISCAL YEAR 2016-17 GARDEN</u> <u>GROVE SANITARY DISTRICT APPROPRIATIONS LIMIT</u> (F: S-34.1)

Following staff's presentation, President Phan declared the Public Hearing open and asked if anyone wished to address the Sanitary District on the matter.

Speakers: None.

There being no response from the audience, the Public Hearing was declared closed.

Resolution No. 3765-16 entitled, A Resolution of the Board of Directors of the Garden Grove Sanitary District establishing the amount of increase in appropriations in accordance with Article XIII B of the California Constitution as amended by Proposition 111, be adopted.

The motion carried by a 5-0 vote as follows:

Ayes: (5) Beard, Bui, Jones, Nguyen, Phan

Noes: (0) None

JOINT ACTION WITH THE CITY COUNCIL: CONTRACT TO MAMCO, INC. FOR CITY PROJECT NO. 7405, AND SANITARY DISTRICT PROJECT NOS. 7834 AND 7837-EAST GARDEN GROVE STORM DRAIN AND SEWER IMPROVEMENTS
(F: 92.proj.7405)(F: 92.proj.7834) (F: 92.proj.7837)

Sanitary District Action:

Following staff's presentation and Sanitary District Board discussion, it was moved by Member Beard, seconded by Member Nguyen that:

A contract be awarded to Mamco, Inc., for Sanitary District Project Nos. 7834 and 7837 that includes City Project No. 7405 - East Garden Grove Sewer Improvements Project for a total amount of \$1,876,543.21; and

The General Manager be authorized to execute the agreement, and make minor modifications as appropriate thereto, on behalf of the District.

The motion carried by a 5-0 vote as follows:

Ayes: (5) Beard, Bui, Jones, Nguyen, Phan

Noes: (0) None

City Council Action:

Following staff's presentation, and City Council discussion, it was moved by Council Member Jones, seconded by Council Member Phan that:

A contract be awarded to Mamco, Inc., for City Project No. 7405 that includes Sanitary District Project Nos. 7834 and 7837 - East Garden Grove Storm Drain Improvements Project for a total amount of \$1,876,543.21; and

The City Manager be authorized to execute the agreement, and make minor modifications as appropriate thereto, on behalf of the City.

The motion carried by a 5-0 vote as follows:

Ayes: (5) Beard, Bui, Jones, Nguyen, Phan

Noes: (0) None

IN CONNECTION WITH RESOLUTIONS APPROVING THE GARDEN GROVE SANITARY DISTRICT ANNUAL BUDGET FOR FISCAL YEAR 2016/17, AND REAPPROPRIATING PROJECT BALANCES AND ENCUMBRANCES FROM FISCAL YEAR 2015/16 (F: S-34.1)

Acting City Attorney Sandoval announced that the Sanitary District Board would need to consider the adoption of a Resolution reappropriating certain Fiscal Year 2015-16 project balances and encumbrances for the Fiscal Year 2016-17, which was provided at the meeting.

It was moved by Member Jones, seconded by Member Nguyen that:

Resolution No. 3764-16 entitled A Resolution of the Board of Directors of the Garden Grove Sanitary District reappropriating certain Fiscal Year 2015-16 Project Balances and Encumbrances for the Fiscal Year 2016-17, be adopted.

The motion carried by a 5-0 vote as follows:

Ayes: (5) Beard, Bui, Jones, Nguyen, Phan

Noes: (0) None

ADJOURNMENT

At 10:29 p.m., President Phan adjourned the meeting. The next meeting is scheduled for Tuesday, September 27, 2016, at 6:30 p.m. at the Community Meeting Center, 11300 Stanford Avenue, Garden Grove, California.

Teresa Pomeroy, CMC Deputy Secretary