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February 22th 2019

Siemens Mobility Inc.

Proposal for the Conversion of City-Owned Streetlights for the City of Garden Grove

usa.siemens.com/intelligenttraffic

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Ana Neal
Public Works-Engineering
City of Garden Grove
11222 Acacia Parkway
Garden Grove, CA 92841

Steven Teal and Michael Hutchens
Siemens Mobility, Intelligent Traffic Systems
Address: 1026 E. Lacy Avenue
Anaheim, CA 92805
Telephone: (415) 246-7257
Date: February 18, 2019

Ms. Ana Neal;

Siemens Mobility, Inc., Intelligent Traffic Systems is honored to have the opportunity to present our streetlight conversion services to the City. We look to grow our partnership from our long standing relationship, having provided the City with on-call traffic signal maintenance services for many years.

Siemens has extenseive experience providing turnkey streetlight services for communities in Southern California and can extend this experience to the City of Garden Grove. Some of our key strengths are:

- **Your local maintenance provider**; currently providing traffic signal maintenance services for the City of Garden Grove and over 100 other communities in and around Orange County. Our technicians know the city and will be a great asset during the project.
- **Extensive experience installing LED street lights locally and nationwide**; Our staff have assisted dozens of cities in LED streetlight conversions. Our recent experience with Huntington Beach, Rialto, Rancho Palos Verde and the 11 Western Riverside County cities is unmatched. Siemens has installed over 30,000 LED fixtures in Southern California and over 200,000 LED street lights nationwide.
- **Our team provides a true turnkey solution- no subcontractors**; our in-house enginners, electricians, project managers and service account managers provide excellent services all under the same umbrella. This allows for complete transparency throughout the whole process and ensures there is no finger pointing if difficulty arises.

Our approach for delivering a high quality project to the City is summarized in the following steps:

1. Develop a key working group with City, SCE, and Siemens staff ensuring excellent communication. This allows for proper planning and scheduling throughout the project.
2. Perform a comprehensive audit of the City enabling a successful LED system design and asset database. Our audit team has performed numerous audits, yielding additional energy savings and verifying the eligible assets to convert to LED.
3. Create a detailed analysis of the City owned assets, creating a final project plan. Our engineers perform a deep dive into the data and optimize the final LED design.
4. Execute a successful and ontime LED installation, utilizing safe practices and experienced employees.
5. Provide additional maintenance services should the City need assistance.

The contact person for this project is Alex Valenti, Account Manager. He can be reached by phone at (415) 246-7257 and his email address is alex.valenti@siemens.com. Our office location is 1026 E. Lacy Ave., Anaheim, CA 92805. Phone: 714-456-9902.

Siemens would like to be part of the positive change you are making for the betterment of your residents, businesses, and environment. Thank you for giving us the opportunity to present you with our offer.

With kind regards,

Steven Teal
Director of Services, USA

Michael Hutchens
Head of Service Operations, West

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Siemens Background

In 1881, a Siemens AC Alternator, driven by a watermill, was used to power the world's first electric street lighting, introducing to the world a new way to make nighttime streets safer and useful and now our team leads the industry in installing LED technology. Siemens also excels in many other technology industries such as trains and light rail vehicles, traffic control systems, healthcare, automation and building technologies. Siemens has approximately 348,000 employees in more than 200 countries, and revenues of $86 billion.

Siemens in the U.S.

Siemens can look back on a 160-year history in the U.S. More than 50,000 employees work at more than 75 production locations in all 50 states. Siemens has approximately $22 billion of annual revenue in the United States, with $1.9 billion in sales in the state of California. With 83 offices throughout the state, Siemens currently employs 4,806 people in California, and utilizes dozens of sub-contractors and consultants; all of which combine to annual wages of $469.7 million.

Siemens Mobility Intelligent Traffic Solutions (Siemens ITS)

Siemens Mobility ITS (Siemens ITS) is headquartered in Austin, Texas. Our areas of expertise are in the maintenance, repair, upgrading, and replacement of streetlights, traffic signals, and providing traffic management solutions. Siemens ITS has a broad range of expertise and experienced personnel including: registered professional energy engineers, project managers, International Brotherhood Electrical Workers (IBEW), Journeymen Electricians/Technicians, International Municipal Signal Association (IMSA), and Certified Technicians.

Siemens in California

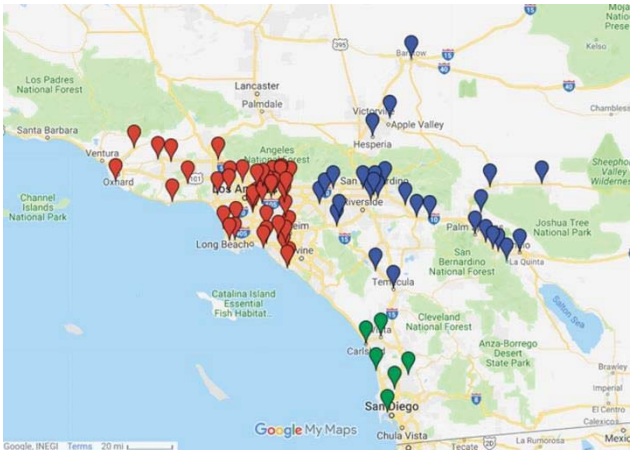
The Siemens ITS Regional Southern California offices are located in Riverside and in neighboring Anaheim, which will be the administrative office of service. Our regional staff is comprised of over eighty field and office staff. The field staff are spread across the region with assigned territories and currently there are technicians who service Orange County. The LED conversion will be staffed with experienced personnel who have recently completed LED conversion projects in Huntington Beach, Santa Ana among many others.

All members of our project team, from the technical and manufacturer side, to our field installers and maintenance technicians have worked together multiple times and bring many "lessons learned" that will directly benefit this project. In addition, our team participates in a number of leading industry associations at a national and local level, as seen above, which allows us to stay abreast of any new best practices in the industry.

What Makes Siemens Different?

Siemens is the only major Energy Services Company (ESCO) that has self-performed streetlight conversions and offers a true turnkey approach. This gives us unique insight as to the nature of the work, as well as full control over the work schedule, staff, and resources assigned to the project. This translates to a single point of contact for the City, with the benefit of knowing who to contact when necessary.

Siemens' staff are experts with the SCE process and LED street lighting services. Siemens is a leader in the SCE streetlight process - from initial asset evaluation, GIS auditing, photometric design, LED conversion and into system maintenance.



Siemens has an entire in-house street light and traffic signal maintenance organization. We are currently providing maintenance services for 400,000 street lights and 10,000 signalized intersections across the US. A snapshot of our current Southern California service territory and contracts is seen in the image to the left.

Siemens has recently been selected as the contractor for the Western Riverside Council of Governments streetlight program which will entrust Siemens to provide streetlight conversion and maintenance services for 9 communities and nearly 50,000 streetlights in Riverside County. Our staff and equipment are already in place and span the entire Southern California area and are the most experienced in installing LEDs.

Field Personnel & Equipment Resources

Siemens has a broad range of expertise and experienced personnel for the installation work. When staffing a project, we utilize our own full time union employees who are members of local International Brotherhood of Electrical Workers (IBEW) ensuring high quality resources performing work for the City.

In addition, Siemens' employees and equipment are dedicated for streetlight and traffic signal work. To best facilitate any work, we issue insulated bucket trucks to all our technicians and electricians. Each truck is equipped with all the necessary tools, equipment, and, where feasible, inventory to perform 100% of the assigned tasks. All vehicles are appropriately marked with the company logo, Department of Transportation (D.O.T.) markings. Employees are further equipped with a company phone, a tablet device, and laptop computer.

Our vehicles include insulated bucket trucks with Altec Articulating Booms, full size cranes for pole replacement and transportation of poles, service vehicles, mini excavators, and dump trucks to respond to all traffic signal and street lighting situations including excavation and new construction. We also have numerous agreements with equipment companies to obtain any additional equipment quickly.

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Streetlight Experience

Siemens' ability to undertake this project is evidenced by our team's depth of experience to successfully complete LED streetlight retrofits and this is clearly demonstrated in the references below. Over the past 15 years, we have maintained and converted upwards of 250,000 streetlights in the U.S. to more energy-efficient fixtures. This work has included cobrahead streetlights, floodlights, and decorative lighting, such as acorn post-top, and shoebox style fixtures.

We have performed many streetlight conversion projects throughout California, some of which involved assisting the City in executing the asset acquisition of SCE owned assets. Below is a brief description of some of our recent marquee street light conversion project contracts we have executed, particularly those which involved the cut-over process:

- ***Huntington Beach, CA*** - Siemens has been a partner with the City of Huntington Beach throughout the SCE acquisition process of over 10,000 street light assets. From initial field assessments with SCE crews to verify the initial valuation approach, to negotiating the acquisition contract, to designing, installing and now maintaining the entire LED streetlight system. Siemens is the only contractor who has provided a community with a true turnkey solution in SCE territory. Our audit partner, CDM Smith assisted in the GIS audit of this City.
- ***Rialto, CA*** - Siemens has been a partner with the City of Rialto in the same way as we have with the City of Huntington Beach. This has consisted of performing a field audit, the development of an Investment Grade Audit report and successfully performing LED conversion services for 3,800 fixtures.
- ***Western Riverside Council of Governments (WRCOG), CA*** - Siemens has been selected by the 9 cities represented by WRCOG in Western Riverside County to provide conversion and maintenance services. In this 5-year professional services contract, Siemens is facilitating the SCE cut-over, installing all of the LED lights, and providing continued maintenance of close to 50,000 streetlights. This project is underway with anticipated completion at the end of 2019.
- ***Santa Ana, CA*** - Siemens is substantially complete performing a LED conversion project of 8,000 streetlights in the City of Santa Ana. This has included the design of the streetlight system and the phased approach in installing LED fixtures as the City has been acquiring the assets from SCE. This has expedited the installation process leading to maximizing energy cost savings.

A summary of LED projects performed by Siemens is as follows:

LED Streetlight Projects by Quantity of Streetlights				
1 – 999 streetlights	Fresno, CA	Benicia, CA	Sacramento County, CA	Galt, CA
	San Ramon, CA	Hercules, CA	Lafayette, CA	Novato, CA
	Ontario, CA	Piedmont, CA	Fremont, CA	Loomis, CA
	El Paso del Robles, CA	Larkspur, CA	American Canyon, CA	Modesto, CA
	Lafayette, CA	Novato, CA	Falmouth, MA	Weston, MA
	Fairhaven, MA	Wenham, MA	Westwood, MA	Sudbury, MA
	Dedham, MA	Westbrook, CT	Madison, CT	Derry, NH

1,000 - 4,999 streetlights	Santa Monica, CA	Rancho Palos Verde, CA	Rialto, CA	La Mesa, CA
	San Mateo, CA	Vacaville, CA	Highland, CA	Vallejo, CA
	Sacramento, CA	Turlock, CA	San Mateo, CA	Santa Monica, CA
	County of Marin, CA	Pittsfield, MA	Woburn, MA	Northampton, MA
	Lexington, MA	Dartmouth, MA	Natick, MA	Swampscott, MA
	Milton, MA	Old Saybrook, CT	Cheshire, CT	Lamar, TX
5,000 - 9,999 streetlights	Santa Ana, CA	Merced, CA	Manchester, NH	New Bedford, MA
	Nashua, NH	Newton, MA	Andover-Leominster, MA	College Station, TX
10,000+ streetlights	Western Riverside Council of Governments, CA (11 communities)	Knoxville, TN	Cape Light Compact, MA (23 communities)	Providence, RI

Project Team

Our project team consists of highly experienced professionals, with a great deal of streetlight and lighting control experience. They know the ins and outs of many of the technology providers and will use this knowledge to provide the City with an impartial review of different technologies. Drawing on their combined knowledge, and collaborating on a regular basis, the team will work hand-in-hand with the City to provide professional, top-notch level of service, satisfaction, and quality.

The table below is a listing of these personnel, their role, and how much time will be devoted to successfully completing this project.

Team Member	***Location***	***Role***	***Project Time***
Gary Kotchekov *Project Manager*	Anaheim, CA	Construction management, staffing and billing	25-35%
Kylon Waterbury *Senior Energy Engineer*	Austin, TX	Network control design and technology advisor	25-35%
Alex Valenti *Account Manager/Principal Agent*	El Cerrito, CA	Contract development and customer liaison	10-15%
Steve Teal *Director of Services*	Riverside, CA	Overall responsibility for Customer Services	20%
Michael Hutchens *Area Operations Manager*	Riverside, CA	Management of project staff and crews	20%
Christopher Slocum *Construction Field Supervisor*	Anaheim, CA	Managing and scheduling field crews	100%

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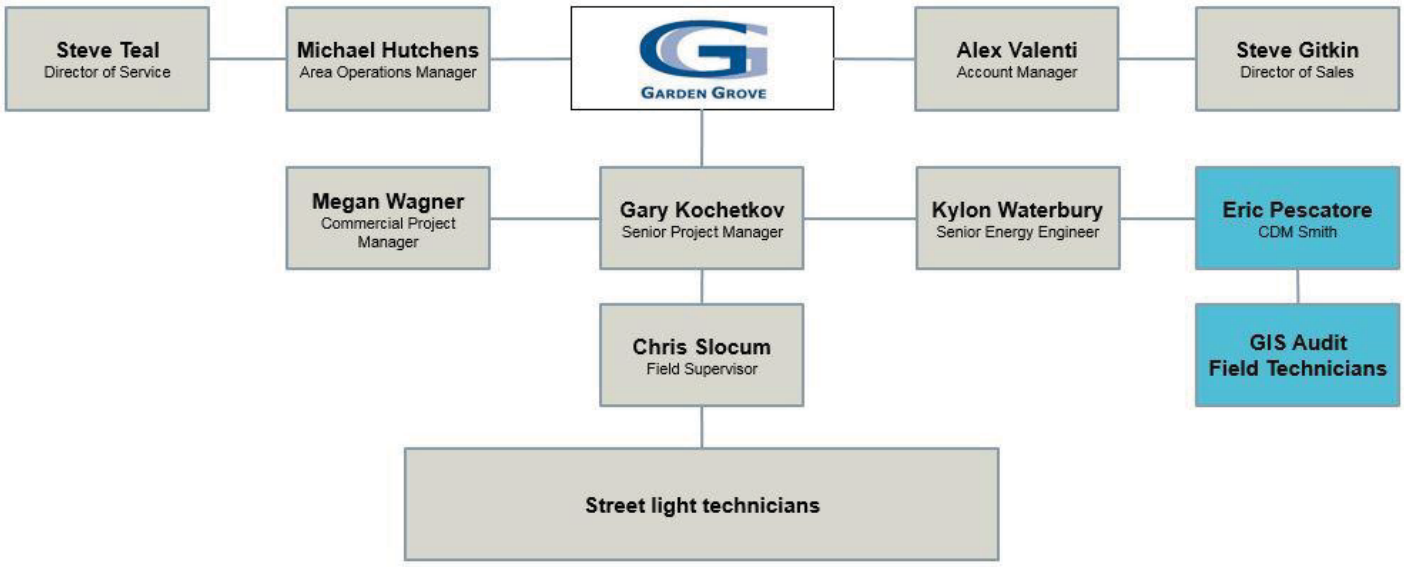
Audit Subcontractor

CDM Smith will be our subcontractor for the audit portion of this project. During the Audit Phase, CDM Smith will visit each city-owned streetlight and document the associated attributes and GIS coordinates. The Siemens-CDM Smith partnership is not a new collaboration; recently Siemens and CDM Smith have worked together on streetlight LED conversion projects for the City of Huntington Beach and dozens of other communities in the United States. Siemens and CDM Smith have a proven track record of working well together supporting the goals of the communities they have served. CDM Smith has developed a customized, cloud-based ArcGIS online (AGO) program that gives accurate information of the city's current streetlight system and fixtures and is updated in real time by field personnel during auditing and retrofitting work.

CDM Smith is a global water, environment, transportation, energy and facilities firm helping public and private clients improve the environment and infrastructure- with eight offices in California. Founded in 1947 as a three-person firm, the company has grown and diversified into a multidisciplinary staff of 5,000. CDM Smith's project office for this effort would be located in nearby Los Angeles. By listening carefully to each client's unique concerns—technical, financial, regulatory, community, construction, and operational—they deliver the right total solution for each client's needs.

CDM Smith offers expertise and flexibility, from initial concept through design, construction, commissioning, and operations for a variety of environmental engineering services to federal, regional, state and municipal agencies; industries, public, and private organizations; and individuals. Their services have supported projects ranging from small pilot-scale studies and specialized consultation to complex national studies requiring a multidisciplinary approach.

Organizational Chart



Project Approach

A streetlight conversion project, at its most basic, is straightforward: convert existing lights to more efficient LED fixtures. The process is very similar across our territory and across the country. However, there are several detailed steps that must take place to ensure a successful project, as detailed in this section.

Phase 1- GIS Field Audit of City Owned Streetlights

Siemens will conduct a field audit of the City owned streetlight poles to verify and document the location and attributes of each streetlight. This will result in a final inventory of City owned streetlights to be converted.

The following is a step-by-step overview of the audit process:

1. Our audit team will review the available SCE inventory information provided by the city and create a baseline inventory. Our approach will be to create a base layer of the SCE owned LS-1 lights and then perform the field audit of all other lights in the City right-of-way, to ensure all City-owned streetlights are inventoried. It is our experience that there are significant discrepancies in the SCE data and this is the opportunity for the City to establish accurate data.
2. In addition, the Siemens team will coordinate with City staff to understand if there are any specific Home Owners Associations (HOA's) or other areas located in the City that may be excluded from this effort. Proper planning at this phase reduces confusion later in the program.
3. Once a baseline inventory is finalized, a field verification will be completed by CDM Smith. This survey will include several teams of individuals in order to complete the data collection effort as scheduled.
4. Once CDM Smith has completed their field work, Siemens performs a quality check and an audit report is generated, detailing the results of the field work.
5. Siemens then compares this data with the information from the SCE inventory and creates an updated list of fixtures to be converted. We will then have a review meeting with City staff to finalize the scope of work and develop an implementation plan.

CDM Smith has a great deal of experience nationally as well as in California. They will staff their audit teams to accurately complete the work in the timeframe that the City requires. We anticipate that the audit will take 2 weeks for the City of Garden Grove.

Attribute Information

During the field audit many attributes will be collected for each streetlight. Below is an example of some of the data collected during the audit and incorporated into the database:

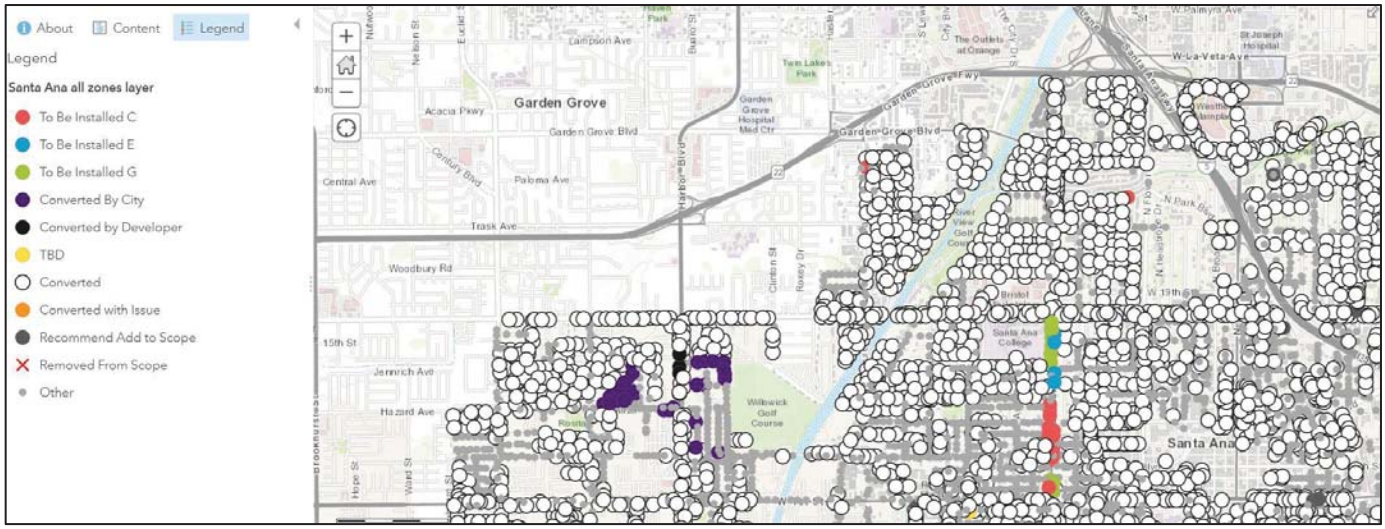
- Fixture quantities
- Pole location (street address)
- Pole location (latitude and longitude)
- Pole material type
- Pole condition (Good, Fair, Poor)[1]
- Fixture Type
- Fixture Wattage
- Mast arm length

[1] Any pole that is deemed poor will have a detailed description of issues identified and pictures documented. Any conditions that would be considered dangerous to the public will be reported to the City immediately.

GIS Mapping

We have used GIS mapping in all of our most recent projects, and our customers would report that GIS mapping has been a key component to the successful execution of the project and the maintenance to follow. The map below is from our current project in neighboring Santa Ana. The GIS mapping is used in order to:

1. Reconcile the SCE billing inventory to actual field conditions,
2. Create a tool for tracking the audit,
3. Expedite installations by clearly displaying fixtures converted/not converted, and
4. Provide the customer with a future asset management tool at the end of the project



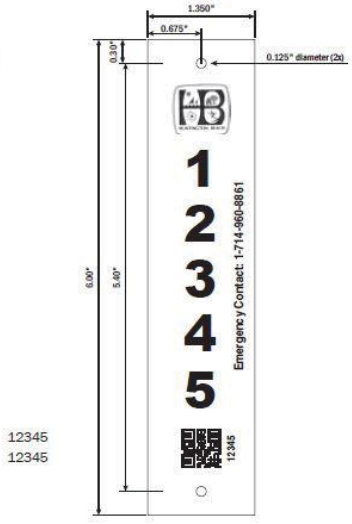
Scope of Work Finalization

With the completion of the field audit, Siemens will conduct a meeting with City staff to finalize the scope and develop the bill of materials. This will include a detailed review of the data collected, utilizing the mapping tool, where Siemens and City staff will collaborate on reviewing the entire City. Siemens will then develop a final scope of work document, containing the executable scope items, reporting documentation and a final project schedule, including implementation and completion phases.

Siemens has experienced installing all of the major LED fixtures, including Leotek and GE, and can provide input on the design of the LED streetlight system at no additional cost to the City.

Pole Tags

Siemens has designed a prototype pole tag concept that can be affixed to all pole types throughout the City. The pole tag is a thin anodized aluminum utility tag that can be configured with many different characters. Siemens will work with the City to determine the most appropriate numbering convention. This option allows for full customization including any alpha-numeric combination, logos, emergency numbers and more. An example tag design is shown here.



Siemens will affix the pole tags on all City-owned poles (except the safety lights) during the LED conversion. During the pole tagging process an asset database will be created that will incorporate the new asset ID numbers. This database will allow Siemens and City staff to access asset location, attributes, maintenance related activities, as well as, allow members of the community

to report outages.

Phase 2- LED Installation

Siemens will develop a City specific project plan which will include pre-construction meetings, staging of material, installation and maintenance activities. Before any work begins, Siemens Project Manager will confer with City staff and finalize the plan to ensure it fits the City's needs.

Siemens assumes that four in-person meetings will be needed and that there will be periodic progress calls throughout the program. The in-person meetings will be a project kick off, audit and design review, LED conversion pre-construction meeting and a project close out meeting. Any additional meetings will be welcomed, should the City require them.

Siemens will have a dedicated field supervisor, project manager, commercial project manager, project coordinator, and warehouse staff to support the project. Siemens staff will use Microsoft Project to track the overall progress of the project and to create overview progress reports, as well as mobile technology that will track progress in real time through the use of tablets in the field.

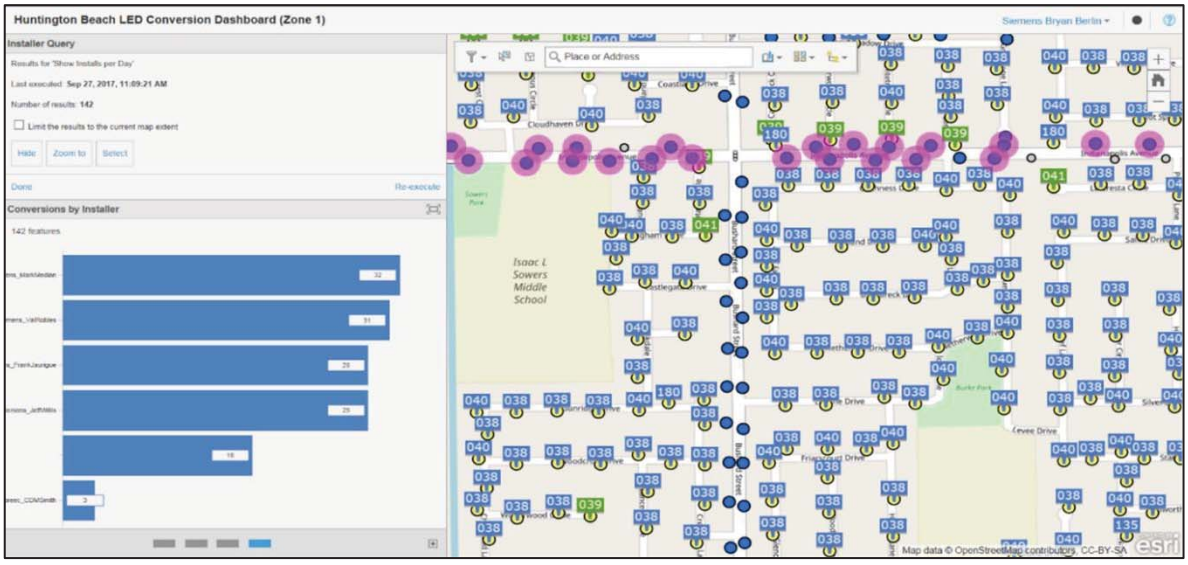
Siemens' Project Manager will staff work crews as necessary to adhere to schedule requirements to ensure that any delays related to fixture delivery or weather events are minimized. Again, a critical component of this effort is to communicate project status on a weekly basis. All LED installation work shall be performed by IBEW Licensed Electricians with IMSA Roadway Lighting Level I certification (or other certifications as required), and all installation work shall be paid at prevailing wage rates.

All LED installation work shall be performed in accordance with NEC, NESC and OSHA provisions, and exclusively by individuals certified by OHSA as a "Qualified Electrical Worker" or any other requirement imposed by the electric utility. Siemens staff will perform work in the right-of-way establishing traffic control measures per the MUTCD guidelines.

Installation progress will be tracked daily by the project's Field Supervisor and Project Manager, and a brief status report that includes project status and any current issues will be provided to the City on a weekly basis, Project team meetings will be held on a regular basis as determined by the City and Siemens. These meetings will include the Siemens' project management staff, Siemens' field supervisor, and City staff. In addition to progress reports, these meetings will ensure that the project is on schedule, any issues are being addressed, the work is being done safely and to the satisfaction of all stakeholders.

Quality control will be a top priority during the implementation phase of the project. The Siemens project manager and field supervisor will routinely visit the field to perform quality control and identify opportunities for improvement. Siemens staff will routinely perform internal project audits and reviews to ensure the project is being executed correctly and efficiently. In addition, Siemens project management and supervisory staff will communicate on a regular basis with City staff and City existing street light maintenance contractor in relation to any issues found in the field that require attention.

Throughout the implementation phase, status data will be recorded, in real time, through the use of mobile devices. This will allow for access to real-time project data for both Siemens and Garden Grove. Below is a sample from a recent project of the web-based dashboard that the City can use to monitor project status:



Following the completion of the conversion, Siemens will self-audit the project, and then work with the City on final project inspection and acceptance, at which time any punch list items will be addressed, and the warranty period will begin.

Removal and Disposal

All materials removed that can be recycled will be recycled appropriately. Resulting hazardous waste and general refuse will be handled in accordance with all applicable regulations and best practices.

Siemens will be responsible for the removal and disposal of existing luminaire heads and any other discarded materials as part of the California Recycle and Disposal Laws. Any hazardous materials including universal waste will be discarded according to the provisions set forth in California law.

SCE Billing Adjustments

Siemens will complete the necessary documentation to process the billing adjustment. Siemens will submit this information to SCE to enable them to update the LS-2b HPS tariff to the appropriate LED rate. This step is completed once the LED fixtures have been installed. It typically takes SCE 30-90 days to update the bills, back dated to the date of LED installation.

Project Completion

Once the billing is verified then a final project closeout report will be generated. This will consist of a complete inventory database of the installed system with GIS locations and attributes of the LED street light system.

Record Documents

Siemens will provide a comprehensive summary report of the project that includes (but is not limited to) the following:

- Final Installation Data
- Summary of inventory, including fixture quantities, wattages, and installation dates
- A summary of any scope changes that occurred

Warranty

Siemens' provides a 12-month workmanship warranty on all labor and materials, post-substantial completion, as standard practice. After the one-year workmanship warranty expires, Siemens will pass through to the City all manufacturers' warranties if there is no long-term maintenance contract in place.

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REFERENCES

Customer/Project Name	Huntington Beach, CA Street Light Conversion
Description	Investment Grade Assessment System-wide Field Audit SCE acquisition support Street light conversion of 11,045 fixtures System-wide maintenance of streetlights
Contract Amount	$3,600,000
Period of Performance	2013-2022
Customer Contact	Bob Stachelski 714-536-5523 bstachelski@surf-city-hb.org 2000 Main Street P.O. Box 190 Huntington Beach, CA 92648
Key Personnel	Alex Valenti, Kylon Waterbury, Gary Kochetkov, Shenoa Townsend, Michael Hutchens

Customer/Project Name	Rialto, CA Street Light Acquisition Consulting & Conversion
Description	System-wide Field Audit Design, build, operate, and maintain 3,800 cobrahead and decorative fixtures Streetlight maintenance support
Contract Amount	$1,500,000
Period of Performance	11/2014 to 3/2017
Customer Contact	Amy Crow 909-421-7221 acrow@rialtoca.gov 150 S. Palm Ave Rialto, CA 92376
Key Personnel	Alex Valenti, Kylon Waterbury, Gary Kochetkov, Shenoa Townsend, Michael Hutchens

Customer/Project Name	Santa Ana, CA Street Light Conversion
Description	LED material design and selection Street light conversion of 3,000 fixtures System-wide maintenance of streetlights
Contract Amount	$2,100,000
Period of Performance	10/2018 to 3/2019
Customer Contact	Tyrone Chesanek 714-647-5045 TChesanek@santa-ana.org 20 Civic Center Plaza, Santa Ana, CA 92701
Key Personnel	Alex Valenti, Kylon Waterbury, Gary Kochetkov, Michael Hutchens

Customer/Project Name	Highland, CA Street Light Conversion
Description	System-wide Field Audit SCE acquisition support Street light conversion of 3,000 fixtures System-wide maintenance of streetlights
Contract Amount	$1,000,000.00
Period of Performance	10/2018 to On-going

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Customer Contact	Jim Richardson jrichardson@cityofhighland.org 27215 Baseline St Highland, CA 92346
Key Personnel	Alex Valenti, Kylon Waterbury, Gary Kochetkov, Shenoa Townsend, Michael Hutchens

Project Schedule