



PROPOSAL IN RESPONSE TO THE CITY OF GARDEN GROVE'S REQUEST FOR PROPOSALS FOR THE CONVERSION OF CITY-OWNED STREETLIGHTS AND CITY-OWNED SAFETY LIGHTS FROM HPS TO LED



Submitted by:

Jason Tanko Chief Executive Officer Tanko Streetlighting, Inc. 220 Bayshore Boulevard San Francisco, CA 94124

Submitted to:

City of Garden Grove Attention: Ana V. Neal Public Works – Engineering 11222 Acacia Parkway Garden Grove, CA 92842

February 22, 2019

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COVER LETTER

February 22, 2019

City of Garden Grove Attention: Ana V. Neal Public Works – Engineering 11222 Acacia Parkway Garden Grove, CA 92842

Dear Ms. Neal,

Tanko Streetlighting, Inc. ("Tanko Lighting") appreciates the opportunity to submit this proposal in response to the City of Garden Grove's Request for the Conversion of City-Owned Streetlights and City-Owned Safety Lights from HPS to LED. We are in receipt of all RFP documents, including Addendum No. 1 (please see Appendix A for our Acknowledgment for Addendum No. 1).

Tanko Lighting is a national firm focused solely on providing professional services for turn-key municipal energy efficiency streetlight conversion projects. Our company has previously been or is currently involved with the energy efficiency conversion of more than 425,000 streetlights throughout the nation – and is actively developing projects for an additional 550,000 streetlight fixtures. Our work has spanned more than twenty-three states, and fifty-five utilities. Further, we are well-entrenched in Southern California, providing turn-key streetlight acquisition and LED conversion services for several municipalities in the region. This experience equips our team with the knowledge of how to coordinate municipal streetlight conversion projects in Southern California Edison's (SCE) territory and the best context to ensure that the City's project will be efficient and successful.

Given our extensive involvement with municipal streetlight LED design and conversion projects nationwide – and specifically in Southern California Edison's (SCE) territory – where our projects represent more than 105,000 streetlight fixtures, we can leverage our expertise to provide the necessary context and value to assist the City with all the support, recommendations and coordination necessary to ensure the success of this project.

The enclosed proposal is a firm offer for a period of ninety (90) days following the submission of the proposal and shall become part of the contract agreement.

Please let us know should you have any questions. We look forward to your feedback.

Regards,

Jason Tanko Chief Executive Officer

Enclosures



COMPANY PROFILE

Ownership Information

• Company ownership description, including all sub consultants.

For more than fifteen years – since 2003 – Tanko Lighting has been assisting municipalities with their streetlighting needs and has evolved into a national firm focused solely on providing professional services for turn-key municipal energy efficiency streetlight conversion projects.

Tanko Lighting is a privately-held S corporation and a financially stable company that has successively operated profitably for more than a decade. As a privately-held company with just two shareholders, our firm is tightly controlled, enabling sound financial and business decisions. Since 2010, our company has experienced rapid growth and expanded its core business model – all while maintaining zero long-term debt. With a clear understanding of its



Tanko Lighting's office – where streetlighting is integrated into the fabric of everything we do.

core competencies, significant knowledge of the municipal streetlighting market, and sound leadership, our firm continues to experience sustainable growth while reinforcing its triple bottom line values: People, Planet, and Profit.

Tanko Lighting holds electrical contractor licenses in the States of California (C-10 License Number 992782) and Arizona. Additionally, our firm is a Certified Contractor by the Commonwealth of Massachusetts' Division of Capital Management and Maintenance (DCAMM), a Qualified Vendor with the Connecticut Conference of Municipalities, a registered Energy Services Company (ESCO) with the United States Department of Energy, and a registered Small Business Entity with the Small Business Administration.

For this project, Tanko Lighting is partnering with a seasoned installation subcontractor, Sierra Pacific Electrical Contracting ("Sierra Pacific") for all field installation and maintenance services. Sierra Pacific's main office is located at: 2542 Avalon Street, Jurupa Valley, CA 92509. Sierra Pacific's California Class A/C-10 Contractor's License Number is: 53665 and its DIR Number is: 1000004626. Sierra Pacific's role will include one hundred percent (100%) of all field installation and maintenance services, including implementing the safety and traffic control plans for the project, converting the HPS fixtures to LED fixtures, and providing proper environmental disposal. Sierra Pacific's efforts will be directed by a Project Manager, who will be responsible for all logistics and field installation, including safety and traffic control, quality assurance, and all management of field staff. Sierra Pacific has ample local storage facilities from which to safely store all equipment and materials needed for this project. Further, Sierra Pacific has the necessary equipment, such as bucket trucks, traffic control signage, etc. necessary for a quality and safe installation. Since 1969, Sierra Pacific has been installing and maintaining streetlights and traffic signals. Sierra Pacific is signed with the Electrical and Laborers Union and their electricians and crane operators are State Certified. Sierra Pacific has worked extensively on public works projects, including projects for the Cities of Santa Ana, San Bernardino, and Ontario, CA. Sierra Pacific is also currently partnered on municipal LED streetlight projects with Tanko Lighting – including projects for the Cities of Chino Hills, CA and La Verne, CA. Sierra Pacific's extensive knowledge of the existing streetlight infrastructure will assist in significantly streamlining the installation requirements for the City.

Experience & References

• Relevant firm experience, including references with current information.

Experience

A streetlight conversion project is a significant investment – of taxpayer dollars, Council attention and staff effort. A city must live with the decisions it makes regarding a conversion project – who it selects, the data that it collects, and the design and products it approves – for a little more than two decades (the rated life of the fixtures themselves). Given these factors, selecting a team to assist with the conversion process should not be taken lightly – and only a proven municipal streetlighting expert should be entrusted with the task.

Tanko Lighting is focused exclusively on municipal energy efficiency streetlighting conversion projects. With decades of experience serving this market, we are the municipal streetlight experts. Because of our technical experience and national context, we are intimately familiar with industry standards and trends, as well as municipalities' challenges with aging infrastructure.



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Tanko Lighting has extensive experience nationally, but also specifically in Southern California – particularly with cities in Southern California Edison's (SCE) territory – including the Cities of Santa Ana, West Hollywood, Orange, Signal Hill, Stanton, Claremont, Simi Valley, Tustin, Rancho Cucamonga, La Verne, and Santa Clarita (see below for a full listing of our Southern California projects) – where our projects represent more than 105,000 streetlight fixtures to date. We are proud of our work with these cities. Assisting with the transition to LED fixtures is a primary mission for our company.

Given our extensive project experience, we are uniquely positioned to assist with this project for the following reasons:

 <u>Streetlighting Specialist</u>: Within the industry, we are the only company solely dedicated to public agency streetlighting projects – and the only company with an entire staff solely dedicated to such projects. As such, Tanko Lighting has the largest portfolio of active municipal streetlight conversion projects than any other firm, has



Tanko Lighting's project in La Verne, CA

previously been or is currently involved with the energy efficiency conversion of more than 425,000 streetlights throughout the nation, and is actively developing projects for an additional 550,000+ streetlight fixtures. Additionally, our work has spanned more than twenty-three states, and fifty-five utilities. Further, our firm has conducted more pilot and design projects than any of the competition – most have led to subsequent conversion contracts, which shows the level of our expertise. Finally, our expertise has been forged by diverse project types – including various sized projects (ranging from as large as 38,000+ fixtures to as few as 49 fixtures), as well as incredibly complex projects, derived from such factors as square mileage/area, complicated data, inconsistent existing design, and complex scopes of work.

- <u>Technical Knowledge</u>: Tanko Lighting has significant technical expertise centered on public agency streetlighting infrastructure. Led by an electrical engineer and licensed electrical contractor, Jason Tanko (Chief Executive Officer), we understand the field conditions and system constraints that are often involved with streetlighting projects. This enables our team to accurately design projects to prevent anticipated challenges, as well as quickly respond with streamlined solutions in the event of technical difficulties during a project.
- <u>Regional Context</u>: We have extensive experience particularly in the Southern California region. Most of the streetlight system projects in this region involve the acquisition of the system from Southern California Edison (SCE), as well as the subsequent LED conversion of the acquired fixtures (see below for more specifics on our projects in Southern California).
- Data Management: Tanko Lighting believes that utilizing data collection and analysis throughout all stages of a project results in superior project management. We built our own in-house data team with the right blend of both streetlighting technical expertise and data analysis skills to collect and reconcile accurate project data. While others often subcontract data collection and management, we retain these activities in-house to better inform the design and project management processes. Field staff are provided devices that track the Global Position System (GPS) coordinates and other characteristics of the existing fixtures for the audit phase, as well as additional data collection for the installation phase (installers track information in real-time during the LED installation), which, when compared with City data, streamlines the accuracy of the ordering and installation processes. Additionally, we utilize the most state-of-the-art technology with the highest degree of spatial accuracy, and utilizes the industry standard software ESRI's ArcGIS to process data and provide shape files that are fully compatible with clients' GIS records. Our field auditors have accurately collected data on thousands of streetlight fixtures ensuring that the City's audit will be conducted by highly qualified professionals with tremendous field experience. As a result, our projects are well-designed, streamlined, accurate, efficient and cost effective. Our focus on data results in significant transparency throughout all phases of the project.

<u>Data Reconciliation</u>: Reconciling the audit data with existing City records is critical to providing an accurate final existing inventory. In Tanko Lighting's experience, most initial utility inventory records are highly inaccurate, which can lead to overstating or understating the quantity of existing assets. In countless projects, we have demonstrated our ability to reconcile audit data, as well as provide substantiated evidence to utility companies when field conditions vary from initial utility-provided inventory records.

<u>Selective Subcontracting</u>: Tanko Lighting is highly aware of its core competencies. We thus retain the essential project activities (such as design, engineering, data collection/reconciliation, product procurement and project management) in-house to ensure that the project is run cost-effectively, efficiently and successfully. We practice selective subcontracting, in that we source out limited key project activities (such as installation) to qualified (e.g. a stellar reputation and stable bonding capacity), licensed streetlight experts local to the project to obtain competitive pricing and prevent the project from accruing unnecessary costs and change orders. Further, selective subcontracting allows



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us the flexibility to obtain additional installation resources as needed, and allows the City to invest in the local economy and leverage local expertise by including local subcontractors in the project. For this project, we will work with Sierra Pacific – a qualified installation contractor that can meet the City's requirements, and is also a member of the National Electrical Contractors Association (NECA) and is an IBEW workforce.

- LED Conversion Design: Any consultant can select streetlight fixtures from a catalog, but only an expert can walk the City through its specific nuances and existing field conditions that warrant a customized approach to design. As a streetlight design expert, Tanko Lighting has developed designs for both turn-key LED streetlight conversion projects, as well as design-only streetlight projects, and is equipped to provide a comprehensive approach to the design process. Because we are involved with turn-key LED streetlight conversion projects nationwide, we have tremendous context from which to base our LED design recommendations. Tanko Lighting is product neutral and has worked with all the major LED streetlight manufacturers, including cobra head, as well as decorative products. Yet, we do not merely rely on manufacturers for information related to design, but have the knowledge and skills to interpret how manufacturer data impacts a client's needs.
- <u>Accessibility</u>: As a mid-sized firm, Tanko Lighting provides our municipal clients with all the necessary resources to successfully accomplish complex streetlighting projects without the challenges of a large, bureaucratic firm. This enables every client to receive personal attention, with a primary Tanko Lighting point of contact (the Project Manager) providing superior customer service through responsiveness, accessibility, and the agility to create expedited decisions and solutions leading to effective results. Further, our firm's size enables all clients to have direct access to the company's Chief Executive Officer, Jason Tanko, at any point during the project which results in clients having an industry expert available at their fingertips.

Tanko Lighting's success lies in its unique passion for streetlighting, which translates into a drive to ensure that projects are successfully completed. We are tremendously aware of how critical client satisfaction is to our success. Thus, we strive to make every client an enthusiastic reference for future work. Clients are receptive to this drive, to the point that they frequently recommend our firm to other municipalities. A few of our major successes with municipalities within SCE's geographic region include:

- <u>City of Santa Clarita, CA</u>: A current project for the City of Santa Clarita, CA, which involves the acquisition of the streetlight system from Southern California Edison (SCE) and the LED conversion of the approximate 16,200 acquired fixtures. Tanko Lighting's efforts resulted in SCE ultimately expediting the City's acquisition. We are currently completing the LED installation phase of the project.
- <u>City of Chino Hills, CA</u>: Tanko Lighting is assisting the City of Chino Hills in negotiating a fair and streamlined acquisition from SCE for the purchase of the City's streetlight system. Our team successfully convinced SCE to minimize delays with the acquisition process and expedite the transfer of assets. We are currently finalizing that process and are managing the City's LED streetlight conversion of approximately 4,450 fixtures upon final asset transfer.

City of Fullerton, CA: Tanko Lighting provided the City of Fullerton with a turn-key



Tanko Lighting's project in Santa Clarita, CA

LED streetlight conversion for the City's approximate 4,400 streetlight fixtures. Tanko Lighting's involvement included a comprehensive GIS audit, acquisition support, data reconciliation, design, materials procurement, installation coordination, commissioning, rebate/rate change submissions, project management support, and ongoing maintenance services support.

- <u>City of Santa Fe Springs, CA</u>: Tanko Lighting is currently providing the City of Santa Fe Springs with an evaluation of the feasibility of converting the City's 6,500 street and parking lot fixtures to LED fixtures. This work includes a pilot installation project of several LED fixtures for the City to review, as well as photometric measurements, lifecycle energy costs, identification of financial incentives, and a technical and financial analysis.
- <u>City of Tustin, CA</u>: Tanko Lighting provided the City of Tustin with a turn-key LED streetlight conversion for the City's approximate 3,500 streetlight fixtures. Tanko Lighting provided audit, data reconciliation, feasibility analysis, acquisition support, procurement, design, installation coordination and project management for the City's LED streetlight conversion project.



- <u>City of La Puente, CA</u>: Tanko Lighting assisted the City of La Puente with its acquisition of streetlight assets from SCE and also assisted with the LED conversion by providing audit, data reconciliation, acquisition support, design, procurement, installation coordination, rebate/rate change and reporting services for the LED conversion of the City's approximate 2,100 fixtures.
- <u>City of Rancho Cucamonga, CA</u>: This involved the LED conversion of the City's 16,000 fixtures, recently acquired from SCE. Tanko Lighting expedited the installation process such that as soon as SCE released each batch of purchased fixtures, the City was converted to LED streetlights well ahead of the next batch – which maximized the City's energy savings. Our team completed the project in early 2018 and continues to provide ongoing maintenance services for the system.



Tanko Lighting's project in Signal Hill, CA

- <u>City of Simi Valley, CA</u>: A current project for the City of Simi Valley, CA, which involves the acquisition of the streetlight system from Southern California Edison (SCE) and the LED conversion of the approximate 8,000 acquired fixtures. We are currently completing the LED installation phase of the project.
- <u>City of Goleta, CA</u>: Tanko Lighting is providing turn-key support for the LED conversion of the City of Goleta's 1,575 fixture streetlight system, including GIS audit, design, data reconciliation, acquisition support, procurement, installation and commissioning.
- <u>City of Bell, CA</u>: Tanko Lighting is providing the City of Bell with a turn-key LED streetlight conversion for the City's approximate 1,600 streetlight fixtures. Tanko Lighting's involvement includes a comprehensive GIS audit, data reconciliation, design, materials procurement, installation coordination, commissioning, rebate/rate change submissions, project management support, and ongoing maintenance services support.
- <u>City of Claremont, CA</u>: Tanko Lighting is providing the City of Claremont with a turn-key LED streetlight conversion for the City's approximate 1,300 streetlight fixtures. Tanko Lighting's involvement includes a comprehensive GIS audit, data reconciliation, design, acquisition support, materials procurement, installation coordination, commissioning, rebate/rate change submissions, project management support, and ongoing maintenance services support.
- <u>City of Signal Hill, CA</u>: Tanko Lighting provided the City of Signal Hill with a comprehensive GIS audit, as well as a feasibility analysis and acquisition assistance to acquire its approximate 1,300 streetlight fixture assets from its utility and convert to LED fixtures.
- <u>City of Santa Ana, CA</u>: Tanko Lighting provided acquisition and LED conversion support services to the City of Santa Ana for its 11,500 fixture streetlight system. Tanko Lighting completed a comprehensive GIS audit for the City and accompanied the utility on a sampling phase of the City's infrastructure. Tanko Lighting is coordinated on behalf of the City with the utility to negotiate a fair purchase price for the City.
- <u>City of Corona, CA</u>: Tanko Lighting provided material procurement, installation (both fixtures and controls), and rebate/rate change services in support of the City of Corona's LED conversion of 8,700 streetlight fixtures.
- <u>City of La Verne, CA</u>: Tanko Lighting is providing the City of La Verne with a comprehensive GIS audit and acquisition assistance for the City's approximate 2,500 streetlight fixtures.
- <u>City of Thousand Oaks, CA</u>: Tanko Lighting is providing the City of Thousand Oaks with acquisition assistance to transition ownership of the streetlights from SCE.



References

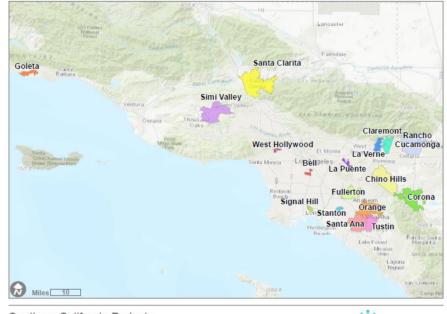
City of Tustin, CA

Stacey Cueva, Public Works Manager 714-573-3037 SCuevas@tustinca.org 300 Centennial Way, Tustin CA 92780 Description of Services: Tanko Lighting provided audit, data reconciliation, feasibility analysis, acquisition support, procurement, installation, and rebate/rate changes for the City's LED streetlight

City of La Puente, CA

conversion project.

John DiMario, Director of Development Services 626-855-1500 jdimario@lapuente.org 15900 East Main Street, La Puente, CA 91744 Description of Services: Tanko Lighting assisted the City of La Puente with its acquisition of streetlight assets from SCE and the LED conversion by providing audit, data reconciliation, acquisition support, design, procurement, installation coordination, rebate/rate change and reporting services.



Southern California Projects October 2018

TankoLighting

City of Rancho Cucamonga, CA

Fred Lyn, Utilities Division Manager (909)-477-2740 ext. 4035 Fred.Lyn@CityofRC.us 10500 Civic Center Drive, Rancho Cucamonga, CA 91730

Description of Services: Tanko Lighting provided acquisition support, procurement, installation coordination, rebate/rate change, and ongoing maintenance services for the City of Rancho Cucamonga's streetlight acquisition and LED conversion project. We continue to provide ongoing maintenance services.

Office Information

Description of office and field work where different items will be performed.

We currently have a staff of thirty-five working at our main headquarters, located at 220 Bayshore Boulevard in San Francisco. Our field auditors will be assigned to the City during the audit phase of the project. For the procurement and installation phases, Sierra Pacific's main office will be utilized, which is located at: 2542 Avalon Street, Jurupa Valley, CA 92509.

Firm Organization

Include name and location of the designated project manager and a general organization chart showing the names of the key personnel to be assigned to the project for each phase/task.

Project organization and staffing with resumes and relevant experience, including field crew.

Tanko Lighting is comprised of thirty-five professionals with significant experience in streetlight conversion projects, as well as energy efficiency, project management, data, auditing, installation and logistics management experience. Please see the table below for key staff's qualifications and experience. Resumes can be found in Appendix B.



Jason Tanko, Chief Executive Officer - Principal

Nicole Kelner,

Operations

Tori Evins,

Project Manager

Nicholas Fiore.

Project Associate

Vice President of

Role: Mr. Tanko will serve as the principalin-charge, engineer and technical support lead. Relevant Experience: As Tanko Lighting's leader, Mr. Tanko has been involved in every project since the company's inception. Most of these projects have focused on municipal streetlighting. A small sample of successful projects involving Mr. Tanko include LED streetlight conversion projects for the following municipalities: Sharon, MA; Winchester, MA; New London, CT; Somerville, MA; Lowell, MA; Berkeley, CA; Santa Ana, CA; West Hollywood, CA; Vacaville, CA; Rancho Cordova, CA; Rancho Cucamonga, CA; Mountain View, CA; Pleasanton, CA; Napa, CA; Hayward, CA; Corona, CA; Orange, CA; Tustin, CA; Vallejo, CA; and Morgan Hill, CA.



Tanko Lighting's project in Rancho Cucamonga, CA

<u>Applicable Training/Education</u>: Mr. Tanko has decades of experience with streetlighting, electrical engineering and project management. Mr. Tanko holds a California C-10 Electrical Contractor's License, an Arizona A-17 Electrical Contractor's License, has a Bachelor of Science degree in Electrical Engineering and a Master of Business Administration degree from Seattle University, is well-versed in electrical principles and has remarkable acumen for business.

<u>Role</u>: Ms. Kelner will serve as the project director, responsible for compliance and deliverables. <u>Relevant Experience</u>: Ms. Kelner is responsible for all current company projects, including projects for the Cities of Rancho Cucamonga, CA, Fullerton, CA, Corona, CA, Orange, CA, Tustin, CA, Claremont, CA, West Hollywood, CA, Lowell, MA, Geneva, NY, Rockwood, TN, and Paris, TN. <u>Applicable Training/Education</u>: Ms. Kelner is a seasoned business and project developer with more than eighteen years of experience in project management, operations and development. Her expertise is centered on compliance, energy, law, planning, cleantech, wireless and sustainability. Ms. Kelner directs all company projects and is responsible for performance and client satisfaction. Ms. Kelner holds a Bachelor in Business and Marketing from George Washington University, a Juris Doctor from the Delaware Law School Widener, and is currently a candidate for a Master of Business Administration in Sustainability from the San Francisco Institute of Architecture.

<u>Role</u>: Ms. Evins will serve as the primary point of contact and the project manager for this project, responsible for coordinating schedules, design, and coordination of deliverables. She will be located in our San Francisco office and available throughout the duration of the project.

<u>Relevant Experience</u>: Ms. Evins has extensive experience with research, energy efficiency engineering, and project management. She currently leads the management, implementation and coordination of projects. Ms. Evins has served on a variety of Tanko Lighting projects during her tenure with the company. Recent projects include the LED streetlight acquisition and/or conversion projects for the Cities of Leominster, MA, Kearney, NE, Andover, MA, Wayland, MA, Sunnyvale, CA, Lowell, MA, and Tustin, CA.

<u>Applicable Training/Education</u>: Ms. Evins holds a Bachelor of Science degree in Civil Engineering from the University of the Pacific and has a LEED Green Associate Accreditation.

<u>Role</u>: Mr. Fiore will support the project management needs of the project, assisting with design, logistics, documentation and reporting.

<u>Relevant Experience</u>: Nick Fiore has extensive experience with GIS data analysis, project management, and logistics management. He currently assists with the management, implementation and coordination of projects. He currently leads the management, implementation and coordination of projects. Mr. Fiore has served on a variety of Tanko Lighting projects during his tenure with the company. Recent projects include the LED streetlight conversion projects for the Cities of Sterling, CT, Dracut, CT, Ayer, CT, West Hartford, CT, Medford, CT, Farmington, CT, Norwich, CT, Groton, CT, Burlington, MA, Bell, CA, Sunnyvale, CA, and Santa Ana, CA.

Applicable Training/Education: Mr. Fiore holds a Bachelor of Science degree in Environmental Earth



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Rebecca Rodriguez, Data Program Manager	 <u>Role</u>: Ms. Rodriguez will lead data collection and mapping efforts for the project. <u>Relevant Experience</u>: Ms. Rodriguez has been at the helm of Tanko Lighting's Data Analyst Team for several years. Her leadership skills, technical knowledge, and analytical skills are paramount to her role. She has managed data quality for the LED conversion projects for the Metropolitan Area Planning Council, as well as the Cities of Cities of Berkeley, CA; Rancho Cucamonga, CA; Tustin, CA; Fullerton, CA; Corona, CA; Oakland, CA; Santa Ana, CA; West Hollywood, CA; Lowell, MA; Malden, MA; Meriden, CT; Warren, MA; Miami Lakes, FL; Simi Valley, CA; Geneva, NY; Santa Clarita, CA; Stanton, CA; La Verne, CA; and Londonderry, CT. <u>Applicable Training/Education</u>: Ms. Rodriguez holds a Bachelor of Science degree in Earth and Ocean Sciences from Duke University and a Master of Science in Geosciences from Virginia Tech. 				
Sarge Roehm, Superintendent (Sierra Pacific)	Role: Quality control, contract oversight, safety oversight Qualifications: Mr. Roehm schedules crews, manages projects, provides technical assistance, and coordinates with clients. Mr. Roehm is a State Certified Electrician and a member of the IBEW for over fifteen years.				
Brian DuRoche, Electrician Forman (Sierra Pacific)	<u>Role</u> : Lead on installation, traffic control, safety plan, and all field services <u>Qualifications</u> : Mr. DuRoche manages crews and projects, ensuring that work is completed in a safe and timely fashion. Mr. DuRoche is a State Certified Electrician, a member of the IBEW for over fifteen years, and is Crane Certified. He has been with Sierra Pacific since 1990.				

Sciences from the California Polytechnic State University. San Luis Obispo.

PROJECT APPROACH

Project Understanding

• Consultant's understanding of the project and approach to work.

Tanko Lighting understands that the City's goal is to partner with a qualified firm to assist with the turnkey LED conversion of its City-owned (LS-2) streetlight system, as well as all City-owned safety fixtures. Given our understanding of the scope of work, our objectives for the project include:

- To provide accurate data on the City's existing LS-2 and safety streetlight infrastructure
- To provide premium-quality, reliable products that meet or improve existing light levels
- To provide technical and logistical support for the retrofit project
- To coordinate the application process for any rate changes for which the City is eligible
- To provide thorough commissioning and reporting to finalize the LED conversion phase
- To provide turn-key services throughout each phase of the project to reduce burden on City staff
- To realize immediate, long-term savings for the City and its residents

Tanko Lighting's Project Process



Tanko Lighting's proven approach to municipal streetlight acquisition and LED conversion projects is comprehensive and data-driven, which results in accurate and efficient project implementation. Our overall approach to this project includes managing the following activities (see graphic, above).



Tanko Lighting is passionate about streetlighting. This results in a tireless interest in ensuring that streetlighting projects are done well. As a result, Tanko Lighting has an entirely "hands on" approach to managing streetlighting conversions and is intimately involved in all aspects of a project's execution. Tanko Lighting integrates an array of high-value services into its project approach, including the following elements:

- <u>Project Planning</u>: Tanko Lighting subscribes to the "measure twice, cut once" philosophy when it comes to project management, in that it
 is difficult to overstate the importance of proper planning before executing a project. Leveraging its extensive experience with streetlighting
 conversion projects, Tanko Lighting will ensure that project planning is thorough, accurate, and timely. Drawing on its experience with
 conducting comprehensive GIS audits and reconciling the data with City and utility data sets, Tanko Lighting will fail safe the accuracy of
 the replacement fixtures' quantities, wattages, and savings, thereby mitigating the need for costly change orders and delays due to poor
 data.
- <u>City Coordination</u>: Tanko Lighting prides itself on its effective communication and coordination with City staff. In the early stages of the project, our team will develop a strong relationship with City personnel, quickly demonstrating its value as a trusted partner to streamline the project execution for City staff. This close coordination with the City will ensure that the City's interests and needs are captured and integrated into the fabric of the project's implementation. Concerns will be addressed immediately, and any problems will be resolved quickly.
- <u>Project Implementation</u>: Once the planning stage is complete, our team will be intimately involved in ensuring the project implementation phase is seamless. By providing proper weekly oversight of the installer, Tanko Lighting will maintain project schedules and each project's progression.
- <u>Project Close-Out</u>: Upon installation completion, Tanko Lighting will provide strong follow through to properly close out the project. This includes proper commissioning techniques to independently verify the quality and accuracy of the installation, as well as ongoing administrative duties to execute tariff changes and provide final project documentation.

The foundation of our project management approach is data. From Global Positioning System (GPS) location coordinates to fixture wattages, accurate data collection and data management is the backbone from which our methodology stems. Our Geographic Information System (GIS) and data expertise lead to accurate existing inventory characteristics and quantities, as well as precise material procurement, organized installation maps, and efficient installations. Having in-house experts in GIS streetlighting enables our team to provide superior service and unparalleled quality control on all projects. Ultimately, this results in minimized project delays (which translates into more expedient energy savings) and stabilized job costing by virtually eliminating change orders for our clients.

Our team recognizes the comprehensive nature of the City's LED streetlight conversion project and offers an approach that will streamline tasks and provide seamless deliverables. Utilizing superior products and tremendous technical expertise, our team's involvement will result in the successful implementation of this project. Please find below our proposed Scope of Work for this project.

Scope of Work

Scope of Work listing tasks, descriptions, methods, techniques and exceptions.

Task 1: Comprehensive GIS Audit of Existing Streetlights

In our experience, a proper GIS audit is essential to equipping the client with a comprehensive and acc urate understanding of its existing infrastructure. The GIS audit is pivotal, as the data collected enables appropriate design and product procurement. The GIS audit also results in streamlined installation, as it identifies potential obstructions and other on-site challenges, as well as enables our team to effectively manage the installation by knowing which replacement fixtures need to be installed at every location – ahead of time. Having this data prior to the installation phase is crucial when coordinating multiple installation crews simultaneously. Further, by not subcontracting this critical service, Tanko Lighting minimizes costs.

Our data-driven approach to project implementation has defined our success. From GPS location coordinates to fixture wattages, accurate data collection and data management is the backbone from which our methodology stems. It is essential to proper design – which is why our auditors collect more than thirty



Tanko Lighting's GIS audit is the backbone of the project– as the precise data enables accuracy throughout all phases.



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fields of data per streetlight fixture. This ensures that we have comprehensive characteristics for each existing fixture from which to design the proper replacement LED fixture.

Tanko Lighting's approach to the audit is an in-field strategy that poses the following advantages:

- Our initial audit has a 98% accuracy rate after the initial visit. Since we identify and rectify any missing data or errors, our final error rate is significantly less than 1% - which is further rectified during the installation and final commissioning phases of a project.
- Using trained auditors in the field at the onset of the project enables our team to obtain the most definitive, up-to-date data set possible. While we supplement our field data with digital data sources (e.g. aerial imagery, streetlevel imagery, and City/utility inventories), the integrity of its audit is never dependent on the age or accuracy of available digital data sources.
- Our in-field approach provides the greatest accuracy and access to the pole and fixture. In person, we can identify potential safety issues, such as leaning poles, exposed wiring, or structural damage, to the pole/arm/fixture. We can also verify pole numbers/labels and confirm any locations where numbers/labels are damaged or missing.
- Comprehensive access to the pole and fixture allows for a more conscientious design. Because our team collects so much information that can only be gathered in person (e.g. fixture wattage, various height/distance measurements of the light and street, and factors that inform lighting levels and distribution patterns), we can create a highly-customized design tailored to a city's specific lighting needs – and identify any concerns from the project start.
- Collecting data in person gives our team the highest possible certainty of what is in the field. This precision means that we do not waste money on extra fixtures and does not waste time ordering more at the end of the project to make up for any shortfalls due to inaccurate data. This precision also minimizes sloppy design (and inherent lower energy savings) – which are more likely from a subcontracted audit.

The preparation phase for the audit will involve the following activities that are critical to the accuracy of the data collection:

- Tanko Lighting working with City staff to clearly define audit scope, including priority areas and/or City borders or other areas containing non-City-owned fixtures.
- Our team developing and providing to City staff for approval a list of the characteristics (the "Audit Attributes") of the data that will be collected during the audit.
- City staff providing our team with all available City and utility records for existing inventory.
- Our team reviewing these data records to determine which should be utilized for the data reconciliation phase.
- Our team initiating rate change processes with the utility.
- Our team developing audit maps, scheduling and dispatching auditors to the field.

Once the preparation phase is complete, the audit will commence. We will collect data on the existing City-owned streetlight and safety light inventory and identify attributes on-site, including:

- The Global Positioning System (GPS) coordinates (latitude, longitude) of each fixture location and date of capture
- Fixture type
- Pole mounting configuration
- Fixture wattage
- Pole height, mounting type, and mast arm length
- Pole type, ID number, approximate age
- Physical attributes and/or issues such as electrical hazards, pole leaning/damage, tree obstructions, etc.



Auditor Data Collection Screens



Fixture Type *	
Take pic if not Cobrahea	d
Cobra Head	 Decorative
O Shoe Box	O Flood
Wall Pack	🔘 Soffit
O Bollard	O Spot Light
O NEMA / barn light	O High Bay
O Security Light	Bulb
O Stadium	Other (text picture)
Mounted on Pole	
O Yes	
() No	
Fixture Mounting 1	lype *
O Surface Mount	O Slipfitter/Tenor Mount
	Standard Pole





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Our auditors collect and transmit data points daily. We will compile data weekly to provide the City with a Weekly Audit Report (a sample can be provided upon request). The Weekly Audit Report will enable the City to identify and address any immediate safety concerns, as well as other issues – such as tree trimming – that may need attention prior to project installation.

Unlike other potential providers, Tanko Lighting is an industry expert focused solely on streetlighting. We have built our own in-house data team with the right blend of both streetlighting technical expertise and data analysis skills to collect and reconcile accurate project data (note that we never subcontract out the audit services). Further, our field auditors have accurately collected data on tens of thousands of streetlight fixtures nationwide – ensuring that the City's audit will be conducted by highly qualified professionals with tremendous experience. This renders Tanko Lighting as the most qualified to perform the GIS audit, as our staff is significantly experienced in the nuances and characteristic s of all streetlight installations.

We understand from the City's Addendum No. 1 that the City would like the audit limited to just the City-owned (LS-2) fixtures and the safety lights and that SCE recently completed an inventory of the LS-1 fixtures in the City. Our pricing thus includes an audit for just the LS-2 fixtures and safety lights. However, the City may want to consider an expanded audit through this project that includes wood

"At Graybar, we have worked with ESCOs around the country and there is no organization that is as professional, meticulous, and efficient as Tanko Lighting. We have serviced over 300,000 streetlights with Tanko Lighting and have had ZERO returns. Their audit is far more comprehensive than any other audits we have seen in the marketplace and allows for municipalities to have a true grasp on their lighting system. Utilizing Tanko Lighting ensures that the job will be completed on schedule and all parties involved will be well informed. There is no organization that can implement a streetlighting solution the way that Tanko Lighting can."

> Kristian Reyes, Manager Lighting and PowerSmart Solutions

pole-mounted distribution fixtures, as SCE has recently announced its willingness to consider a rate decrease if municipalities conduct a third-party audit of these fixtures. If the City is interested in an expanded audit through this project, we can provide an additional scope of work and pricing, upon request.

Deliverables:

<u>Weekly Audit Reports</u>: An overview map listing the locations completed during the data collection phase (showing both weekly and comprehensive progress), along with a description of any issues that the City would need to devote immediate attention to – including electrical hazards, tree trimming needs, etc.

Task 2: Data Reconciliation

Using precise GPS technology and expert streetlighting GIS Analysts, our team reconciles every asset it locates in the field with each record in the utility's invoice/inventory to ensure that it has identified and converted all eligible assets. We share this information with customers during the preconversion phases of the project so that the municipality knows exactly what it owns, and exactly which fixtures will be converted.

Simultaneously with the GIS audit, our team will conduct a thorough and detailed investigation of the City's existing records, including utility billing records and maps. Tanko Lighting will reconcile these City records with the data from the GIS audit to confirm ownership, eligibility for rebates, and billing record accuracy. In our team's experience, cross referencing these various data sources results in extremely precise and clean data because most projects typically have a utility billing discrepancy of approximately 5 – 10 percent of the inventory quantity. This results in cities being over-billed by their utility. We will identify discrepancies through the data reconciliation process, include this information in the subsequent negotiations with the utility, and will assist with remedying the bills on behalf of the City.

The data reconciliation report will include the following items:

- Analysis of locations confirmed during the audit
- Analysis of locations appearing in the utility records but not in the confirmed audit records
- Analysis of locations confirmed in the audit records but not in the utility records

Deliverables:

<u>Reconciliation Report</u>: A concise report detailing any discrepancies found between records during the data.

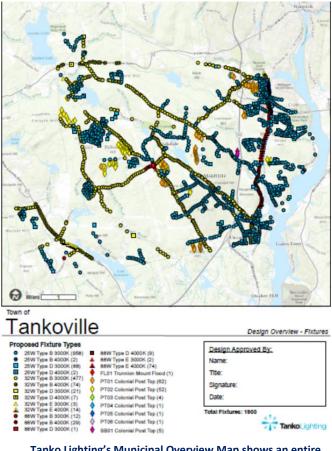


Task 3: Design

Although not explicitly included in the City's scope of work requirements of the RFP for this project, we believe that design is an important element of this project. In Tanko Lighting's experience, an LED streetlight conversion project is the ideal opportunity for a municipality to reassess its streetlighting design and ensure that field conditions are optimized for all applications in the design. To achieve this, we routinely conduct design processes for each of our turnkey streetlighting projects. Recent projects in which design processes were implemented include Simi Valley, CA, La Verne, CA, Santa Clarita, CA, Chino Hills, CA, Vernon, CT, and Malden, MA, Bristol, CT, and Norwich, CT. This experience has led to our team's streamlined approach to design.

Once our team has canvassed the City through the audit and established a "clean" data set of the existing fixture conditions (via the data reconciliation process), it can then develop and apply a replacement design. Our team utilizes Illuminating Engineering Society (IES) RP8 guidelines for roadways and right of ways. Additionally, we utilize Trade Manual 12-12 for direction on light level equivalencies between HPS and LED and maintain a working knowledge of all the latest publications and updates in the market. However, there are many instances when municipal customers need to alter these standards to best meet their specific needs. Thus, our team uses these types of industry accepted standards as guidelines and works closely with the City to develop customized proposed standards of comfort and functionality that match its needs.

Our goal will be to provide the City with an appropriate replacement design that includes the brand of fixture, photocell, replacement wattages, color temperatures, distribution patterns and other appropriate settings and options to optimize the City-owned streetlight and safety light retrofit. The design will ultimately result in a replacement plan for all existing in-scope streetlights that includes lifecycle cost analysis (including the initial capital outlay), net present



Tanko Lighting's Municipal Overview Map shows an entire municipality with recommended replacement fixtures.

value and return on investment, energy savings, as well as maps of the replacement plan (see sample map, above).

Tanko Lighting's approach to comprehensive design for this project will include the following elements:

- Applying standard LED replacement wattage recommendations based on the location of each existing in-scope fixture.
- Selecting appropriate wattages and distribution types for replacement fixtures to meet the City's needs, while maintaining the objective
 of providing a simplified design that standardizes inventory (so that the system has consistency and can be more easily maintained
 over time).
- Applying the City's preferred products, typical models and special considerations to its GIS inventory to produce maps of the type and wattages by location (see sample map to the right), as well as an analysis of the total cost, incentives, savings, and payback for the potential retrofit design.
- Presenting the options and total cost/incentives/savings/payback to the City and obtain its final approval on design.

The overall benefits to Tanko Lighting's design approach include:

- Efficiency The process takes a very thorough approach by examining all relevant field factors and thereby maximizes the available savings by utilizing the most efficient design, while meeting light output needs
- Streamlined Installation The process allows for the development of a detailed scope of work (via a map of all replacements) by fixture for the installers to follow in the field – which enables more efficient materials gathering at the start of the day and results in more streamlined daily installations and simplicity for the awarded contractor

Deliverables:



 <u>Replacement Plan Maps</u>: City-wide maps with recommended LED replacement wattages for the City to review and approve.

Task 4: Development of City Pole Tag Identification System

Tanko Lighting will develop a City pole identification system and specify tag characteristics, material and location on the pole for approval by the City (note that, per the City's RFP, safety lights will not be included in the pole ID Tag installation). We have included in our pricing an adder for this option and used budgetary costs related to our standard tag recommendation that consists of five to seven digits. This is the same specification as the tags used in other cities in the region, such as the City of Simi Valley and the City of Santa Clarita. Our team will determine the most sensible numbering sequence and installation strategy in its recommendations to the City.

Deliverables:

<u>Pole Labeling Recommendation</u>: Specific tag characteristics, pole location, and numbering sequence delivered to the City for approval.

Task 5: Materials Procurement

Tanko Lighting will purchase the City's preferred fixtures and will stage the receipt of fixture shipments for installation in a manner that ensures the secured storage of materials at the designated storage location for the project. Tanko Lighting will also furnish a total of twenty-five (25) glare shields to the City and coordinate the installation of them, as required, during the retrofit/installation phase.

Deliverables:

 <u>Product Submittals</u>: Upon approval of final project design, Tanko Lighting will provide the City with final product submittal sheets for final approval. Once submittal sheets have been approved, our team will order the materials.

Task 6: Community Outreach and Notification

Tanko Lighting believes that proper coordination of information and outreach to stakeholders is an essential part of ensuring a successful streetlight conversion project. To that end, our team will coordinate with the City to help develop a community outreach and notification plan prior to the commencement of any project activities. The plan will ensure project awareness and minimize public disturbance. Specifically, our team will develop the message and provide the schedule to the City's media staff for distribution through the City's existing media outlets (press releases, website, etc.).

Deliverables:

<u>Project Messaging and Schedule</u>: Specific language, draft press release, and timelines related to project activities to assist with notifying community members of the project.

Task 7: Logistics Management

Tanko Lighting will ensure that all logistics are carefully coordinated for the project. We will work with the City's main point of contact to develop an installation plan that minimizes inconvenience to the City and includes ordering schedules, traffic control implementation (that complies with the California Manual on Uniform Traffic Control Devices (CA MUTCD)), waste disposal procedures (that comply with all applicable State and Federal laws), and installation and commissioning schedules as required to the City.

We will maintain proper communication and coordination with installers to ensure installation quality, work and public safety, compliance with project schedule and proper handling of waste. We will facilitate a pre-construction Kick-Off meeting with City staff and installers to review the traffic control plans, work safety, public safety and waste material handling procedures and requirements prior to the start of installation. We will also coordinate and participate in bi-weekly progress meetings with City staff.

Deliverables:

• <u>Logistics Management Details</u>: Ordering, traffic control plans, disposal strategy, pre-construction meeting, ongoing meetings, installation and commissioning schedules.





Tanko Lighting's project in Fullerton, CA

Task 8: Installation

Tanko Lighting routinely partners with subcontractors for installation for its turn-key municipal streetlighting projects. Our team believes that this is an ideal way to utilize local knowledge and leverage taxpayer dollars back to the local economy. As such, we are very familiar with how to properly solicit, vet and manage qualified local subcontractors. For the City's project, we will utilize our subcontractor, Sierra Pacific, to perform installation of the LED fixtures for this project. Sierra Pacific will meet the City's requirements, and is a member of the National Electrical Contractors Association (NECA) and an IBEW workforce.

Sierra Pacific will provide installation, traffic control support, and environmental disposal services for this project. Sierra Pacific's efforts will be directed by a project manager, who will be responsible for all logistics and field installation, including safety and traffic control, quality assurance, and all management of field staff. Sierra Pacific has ample local storage facilities from which to safely store all equipment and materials needed for this project. Further, Sierra Pacific has the necessary equipment, such as bucket trucks, traffic control signage, etc. necessary for a quality and safe installation. Finally, Sierra Pacific has experience

Tanko Lighting's Project in Orange, CA

with municipal lighting projects, and qualified staff highly-trained in the nuances of electrical installation work and safety to ensure the success of this project.

It is expected that each installation crew will install an average of sixty fixtures per day. Completion of the project commissioning (see Commissioning section below) will coincide at the end of the installation phase to quickly address any errors, punch list items, or troubleshooting needs.

Tanko Lighting will also coordinate the installation of any required glare shields during the retrofit/installation phase.

Utilizing the data from the audit and design process, Tanko Lighting will develop installation maps and provide to installers and relevant City staff for accurate project tracking.

Please note that our team will be retrofitting the fixtures within an "as-is" system; however, we will not be responsible for remedying any "as-is" system needs/issues outside of the scope of this project (which is merely to retrofit the fixtures, and install photocells). We will identify any "as-is" system needs/issues, including but not limited to no power, faulty fuses, 480V fixtures, series fixture wiring, poles in violation of any trespass/clear zones because of high voltage, poles in disrepair, etc. during the course of the LED conversion phase and report to the City. However, while we will work with the City to recommend solutions, the City will be responsible for the costs associated with implementing any such remedies and will provide the City with a scope of work and hourly rates for time and materials payment for any additional work required that is currently outside the project's scope.

An additional feature of our approach is that our data collection activities are not limited to the auditing phase – but are integrated throughout project implementation – as a routine practice. We can stay intimately involved with the daily installation phase via our data collection protocols that are required of all installers. We will ensure that installers are equipped with handheld devices and train them in collecting relevant data on both the HPS fixtures being removed, as well as the LED fixtures being installed. Installers will be required to collect data at every location and transmit it daily to our team. Our in-house data analysts will review the data, reconcile it against the audit data, as well as City and SCE records, which will result in a precise understanding of the project's progression. We can track each crew's daily progress via time-stamped data on every fixture location. This not only enables our team to know every location where each crew has been, it also allows it to track the routes that each crew has used and any inefficiencies in the process. Our team reviews this information daily, which allows it to provide immediate instruction to crews on any course corrections necessary. Our proven experience with managing installation crews through data collection activities routinely integrated into the installation phase ensures the accuracy and accountability of project partners.

Our team will use the installation data to provide Weekly Installation Reports to the City (a sample report can be provided upon request).

Our team will be responsible for warranty work related only to materials and installation for a period of one year from the date the project is 100% operational (please note that this warranty period can be extended at the City's request for an additional cost). The installation warranty will cover fixture or photocell failure and issues related to the installation, such as incorrect mounting or wiring of fixture. The installation warranty will not cover issues unrelated to the installation, such as fuse failure, knockdowns, wire shorting, disconnection of the pole or arm from power source, weather related damage, vandalism, Acts of God, or unrelated capital work impacting the pole or fixture. We will provide a detailed claim process for the ten-year material warranty for the fixtures and photocells.

Upon installation, the City or its standard maintenance contractor will be responsible to serve as first-responder to all outages, shall identify locations where warranty-related work is necessary, and will notify Tanko Lighting of the warranty-related locations so that a remedy can be implemented.



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Deliverables:

- <u>Installation Maps</u>: Maps with locations and fixture information used to dispatch installation crews and allow City staff to track installation routes.
- <u>Weekly Installation Report</u>: A detailed listing of the locations completed during the installation phase, along with maps corresponding to locations.
- <u>Warranty Claim Process</u>: Detailed information related to how the City can process any material claims related to the ten-year fixture and photocell warranties.

"Tanko Lighting did an excellent job for the City of Modesto. They were excellent to work with and the results were also excellent."

> Jeff Barnes Traffic Engineer City of Modesto, CA

Task 9: Pole ID Tag Installation

Based on the City-approved Pole Identification System, Tanko Lighting will procure and obtain the replacement tags and determine the most sensible numbering sequence for the City-owned streetlight fixtures (note that, per the City's RFP, safety lights will not be included in the pole ID Tag installation). We will ensure that our installation subcontractor installs the pole labels using band ties on each pole at the time of installation. Please note that we will not instruct crews to remove any existing SCE labels, as our understanding is that SCE does not allow this.

Deliverables:

<u>Updated Database</u>: At the conclusion of the project, Tanko Lighting will provide an updated database that includes the pole label numbers for each location.

Task 10: Waste Disposal

Tanko Lighting will ensure that the installation subcontractor manages all project waste disposal in compliance with all applicable local, State and Federal laws. Documentation of waste disposal will be provided as part of the final project reporting documents.

Task 11: Commissioning

Given Tanko Lighting's significant focus on thorough data collection during both the audit and installation phases, approximately ninety-five percent of the commissioning efforts take place during the time of installation. This is because our team can quickly validate the installation data against the confirmed audit data (which is validated against municipal records during the Data Reconciliation phase) and accurately identify any locations where both data sets do not match. This ensures tremendous precision that establishes a finite subset of the installation locations that require additional review.

Upon completion of the installation, Tanko Lighting will ensure that the installers perform final inspection on all fixtures, correct any "punch list" items, test lights to ensure that they work, and identify locations where repair needs City assistance. Our team will provide the City with a complete commissioning report outlining any errors and actions taken to correct errors.

Deliverables:

 <u>Commissioning Report</u>: Detailed analysis of final installation verification, including an outline of any errors and actions taken to correct errors.

Task 12: Tariff Change Coordination

We will also coordinate with SCE on changing tariffs to the newly-installed LED fixture rates. We will prepare the necessary documentation, submit to SCE, confirm the materials have been received and obtain the timing for the modification to be processed. If known, we will provide the contact information for the appropriate party addressing any rate changes for the City. Based on the timeframe provided by SCE, the City staff will need to confirm that the modification appears in the City utility bills. If there are any inquiries from SCE to the City regarding the submitted applications, we will assist the City with responding to any questions.

Deliverables:

• <u>Tariff Change Documentation</u>: A compilation of copies of paperwork submitted and processed with SCE regarding tariff changes.



Task 13: Final Reporting

Tanko Lighting will provide all necessary documentation to fulfill the requirements of the City's compliance and reporting for this project. This includes: • Required SCE documentation

- Pre-and post-construction records of newly installed LED streetlights in the form of electronic GIS shape file format (ArcMAP) records, including date of installation, new fixture installed, and updates on asset condition, as well as new ID tag identification number and confirmation of the City's pre-conversion data (lamp type, wattage, pole type, etc.)
- Environmental waste disposal documentation

Deliverables:

 <u>Final Reporting Documentation</u>: Final requirements necessary to process the tariff changes with the City, as well as post-construction electronic GIS records for all newly-installed streetlights in the City, including all wattages, badge numbers, locations, and other associate attributes, and environmental disposal documentation.

• Materials and equipment lists to be utilized in this project.

We will utilize the LED streetlight fixtures, photocells, Pole ID tags, and glare shields approved by the City for this project. In additional, our selected installation subcontractor, Sierra Pacific, will utilize the necessary equipment, such as bucket trucks, traffic control signage, etc. necessary for a quality and safe installation.

Project Schedule

Proposal shall include a detailed schedule which lists milestones and estimated completion dates for each of the tasks identified:
 Sequentially outline the activities that would be undertaken in completing the tasks and specify who would perform them.

• Furnish a project schedule for completing the tasks in terms of elapsed weeks from the project commencement date.

Please find our proposed project schedule below.

Proposed Project Schedule:			Month					
Task	Lead	Estimated Completion Date	1	2	3	4	5	6
GIS Audit	Tori Evins, Nick Fiore, Rebecca Rodriguez, Field Auditors	NTP + 3 weeks (includes time to gather existing City records)						
Data Reconciliation	Rebecca Rodriguez	3 -6 weeks after Audit completion						
Design	Jason Tanko, Tori Evins, Nick Fiore, Rebecca Rodriguez	Initial Design Submission = 4-6 weeks after Data Reconciliation completion;						
Development of City Pole ID Tag System	Tori Evins, Nick Fiore, Rebecca Rodriguez	2 weeks after completion of Data Reconciliation						
Materials Procurement		<u>Submittals to City</u> = 1 week after City approval of Design;						
	Nicole Kelner, Tori Evins, Nick Fiore	Ordering = 1 week after City submittal approval;				-		
		<u>Shipment</u> of <u>Fixtures</u> = 4 – 6 weeks from order placement, depending on type of fixture & manufacturer.						
Community Outreach	Tori Evins, Nick Fiore	2 – 4 weeks prior to Installation						
Logistics Management	Jason Tanko, Nicole Kelner, Tori Evins, Nick Fiore, Sierra Pacific	2 weeks prior to Installation						
Installation	Tori Evins, Nick Fiore, Rebecca Rodriguez, Sierra Pacific	<u>Commencement</u> = 1 week from material receipt; Substantial Completion = 3 weeks from commencement						
Commissioning & Final Punch List	Tori Evins, Nick Fiore, Rebecca Rodriguez, Sierra Pacific							
Tariff Change & Final Reporting	Tori Evins, Nick Fiore, Rebecca Rodriguez	4 weeks following Substantial Completion						

Fee Schedule/Cost Proposal

Fee schedule & firm's hourly rate submitted under separate sealed envelope (to be included with Cost Proposal).

Please find our completed Cost Proposal sheet in the enclosed, separately sealed envelope.

Please note that we are providing pricing for both LED streetlight fixture brands outlined in the City's Cost Proposal sheet. However, we do recognize that the City would be well-served with a consistent lighting profile via the GE product, given the City's recent LED conversion through SCE, which utilized the GE product.



APPENDICES

- Appendix A Acknowledgment of Addendum No. 1
- Appendix B Resumes



APPENDIX A

Addendum No. 1 to RFP for Conversion of City-owned Streetlights and City-owned Safety Lights from HPS to LED Page 2 of 2

ACKNOWLEDGMENT FOR ADDENDUM NO. 1

ADDENDUM No. 1 TO THE REQUEST FOR PROPOSALS FOR THE CONVERSION OF CITY-OWNED STREETLIGHTS AND CITY-OWNED SAFETY LIGHTS FROM HIGH PRESSURE SODIUM (HPS) TO LIGHT EMITTING DIODE (LED)

STATEMENT:

I have received Addendum No. 1 to the REQUEST FOR PROPOSALS FOR THE CONVERSION OF CITY-OWNED STREETLIGHTS AND CITY-OWNED SAFETY LIGHTS FROM HIGH PRESSURE SODIUM (HPS) TO LIGHT EMITTING DIODE (LED), in the City of Garden Grove.

Tanko Streetlighting, Inc. ("Tanko Lighting")

Company Name

Bv

Chief Executive Officer

Title

Corporate Seal

APPENDIX B



Bringing passion to light.

Jason Tanko

Chief Executive Officer and Founder, Tanko Lighting

A life-long street light enthusiast, Jason Tanko created Tanko Streetlighting, Inc. (DBA: "Tanko Lighting") more than a decade ago with a focus on manufacturing, engineering and technical support for municipal street light projects. Given the need for street lighting-specific expertise, this quickly expanded into project management services. Today, Tanko Lighting functions as a full-service street lighting company, providing tailored, turnkey solutions for any street lighting project. Mr. Tanko continues to lead the company, serving as Chief Executive Officer, and provides oversight on engineering, product development, business development, and project management.

Mr. Tanko's success with Tanko Lighting is a result of his extensive educational and professional background. Prior to founding Tanko Lighting, Mr. Tanko enjoyed a long career in energy efficiency and electrical engineering. As a Project Manager for Newcomb Anderson Associates, Mr. Tanko implemented the highly-successful Power Savers program – an energy efficiency program for small businesses in San Francisco. During his tenure as an Electrical Engineer for the Massachusetts Institute of Technology Lincoln Laboratory, Mr. Tanko designed energy efficient low and medium voltage power and lighting systems. As an Electrical Engineer/Project Manager with Wilson Construction Engineering Services, Mr. Tanko served as a District Engineer for Puget Sound Energy, in which he coordinated outage management, operations, budget and maintenance activities and supervised line crews for East King County, WA. As a Senior Engineer with Boeing Commercial Airplane Group, Mr. Tanko designed and drafted electrical systems for airplane equipment. During his tenure as an Electrical Engineer/Designer with Team Engineering, Inc., Mr. Tanko designed and drafted power distribution, lighting, and building control systems for commercial and public buildings.

With a Bachelor of Science in Electrical Engineering (Seattle University), a Master of Business Administration (Seattle University), a C-10 Electrical Contractor's License in the State of California, and an A-17 Contractor's License in the State of Arizona, Mr. Tanko is well-versed in electrical principles and has remarkable acumen for business.

Mr. Tanko has served on every Tanko Lighting project since the company's inception in 2003. The majority of these projects have focused on municipal street lighting. A small sample of successful projects involving Mr. Tanko include LED street light conversion projects for the following municipalities: Sharon, MA; Winchester, MA; New London, CT; Somerville, MA; Lowell, MA; Berkeley, CA; Santa Ana, CA; West Hollywood, CA; Vacaville, CA; Rancho Cordova, CA; Rancho Cucamonga, CA; Mountain View, CA; Pleasanton, CA; Napa, CA; Hayward, CA; Corona, CA; Orange, CA; Tustin, CA; Vallejo, CA; and Morgan Hill, CA.

Bringing passion to light.



Nicole Kelner

Vice President of Operations, Tanko Lighting

Ms. Kelner is a seasoned business and project developer, with more than eighteen years of experience in project management, operations and development. Her expertise is centered on compliance, energy, law, planning, cleantech, wireless and sustainability. Ms. Kelner directs all company projects, and is responsible for all operations, performance and client satisfaction.

Prior to joining Tanko Lighting, Ms. Kelner served and a Project Manager and Market Lead with Sure Site Consulting, where she led and trained staff, was responsible for profit and loss, budgets, invoices, and managed multiple clients, vendors and consultants. As an Environmental Management Supervisor with Pacific Gas & Electric, Ms. Kelner managed a multi-disciplinary team of thirteen environmental professionals, implemented permitting for gas and electric projects, and strategically facilitated a portfolio of over 3,400 assigned projects with multiple consulting firms. As Director of Compliance with Solar Trust of America, Ms. Kelner managed all regulatory compliance for the development and construction of 2,000 MW of solar power, acquired timely agency approvals for the world's largest solar power project (budgeted at over \$3 billion), and developed highly-detailed compliance trackers for over 800 complicated conditions in 21 fields. Ms. Kelner also held additional positions with Earth Zone Consultants (Principal), Sustainable Spaces (General Manager), WFI Consulting (Senior Planning Project Manager), Young & Associates (Senior Project Manager), and Vetrano & Bravacos (Attorney).

Ms. Kelner holds a Bachelor in Business Marketing from George Washington University, a Juris Doctor from the Delaware Law School Widener, and is currently a candidate for a Master of Business Administration in Sustainability from the San Francisco Institute of Architecture. She also holds a Certificate in Environmental Management & Renewable Technology from Merritt College, and is a Leader in Energy & Environmental Design (LEED) Certified Green Building Professional.

Ms. Kelner is responsible for all current company projects, including projects for the Cities of Rancho Cucamonga, CA, Fullerton, CA, Corona, CA, Orange, CA, Tustin, CA, Claremont, CA, West Hollywood, CA, Lowell, MA, Geneva, NY, Rockwood, TN, and Paris, TN.



Bringing passion to light.

Tori Evins

Project Manager, Tanko Lighting

Tori Evins has extensive experience with research, energy efficiency engineering, and project management. She currently leads the management, implementation and coordination of projects.

Prior to joining Tanko Lighting, Ms. Evins served on a variety energy efficiency projects. As an Associate Engineer for Cadmus, Ms. Evins performed evaluation, measurement and verification, as well as energy modeling, auditing, commissioning and project management for both public and commercial facilities. As an Associate Research Engineer for ConCol, Ms. Evins performed energy analyses, research, and cost analyses for energy efficient buildings – both public and commercial.

Ms. Evins holds a Bachelor of Science degree in Civil Engineering from the University of the Pacific and has a LEED Green Associate Accreditation.

Ms. Evins has served on a variety of Tanko Lighting projects during her tenure with the company. Recent projects include the LED streetlight acquisition and/or conversion projects for the Cities of Leominster, MA, Kearney, NE, Andover, MA, Wayland, MA, Sunnyvale, CA, Lowell, MA, and Tustin, CA.



Bringing passion to light.

Nick Fiore

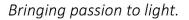
Project Associate, Tanko Lighting

Nick Fiore has extensive experience with GIS data analysis, project management, and logistics management. He currently assists with the management, implementation and coordination of projects.

Prior to joining his current role with Tanko Lighting, Mr. Fiore served a GIS Data Analyst, focused on reconciling streetlight data for municipalities. Prior to his tenure with Tanko Lighting, Mr. Fiore conducted ArcMAP GIS analyses demonstrating snowpack changes in the Sierra Mountains of California and conducted geologic field mapping of Rainbow Basin, CA and El Paso Basin, CA for the California Polytechnic State University, San Luis Obispo. As a Sales Associate with Gilman's Kitchens and Baths, Mr. Fiore conducted sales, customer service, and project management for construction projects.

Mr. Fiore holds a Bachelor of Science degree in Environmental Earth Sciences from the California Polytechnic State University, San Luis Obispo.

Mr. Fiore has served on a variety of Tanko Lighting projects during his tenure with the company. Recent projects include the LED streetlight conversion projects for the Cities of Sterling, CT, Dracut, CT, Ayer, CT, West Hartford, CT, Medford, CT, Farmington, CT, Norwich, CT, Groton, CT, Burlington, MA, Bell, CA, Sunnyvale, CA, and Santa Ana, CA.





Rebecca Rodriguez

Data Program Manager, Tanko Lighting

Rebecca Rodriguez has extensive experience with Geographic Information Systems (GIS) focused on urban street infrastructure. She currently serves as Tanko Lighting's Data Program Manager, responsible for overseeing the company's data management services.

Prior to joining Tanko Lighting, Ms. Rodriguez served as a Research Fellow for the US Department of Energy's National Energy Technology Laboratory, where she performed lead mapping for a water quality monitoring project, analyzed environmental impacts of shale oil/gas development and hydraulic fracturing, and examined water management practices of the oil and gas industry. As a Teaching Assistant with the Virginia Tech Geoscience Field Observations, Ms. Rodriguez explained topographic and geologic map creation, and provided guidance to students with safety, as well as outcrop sketches, data collection and feature identification. As a Research Assistant with Duke University Geochemistry Laboratory, Ms. Rodriguez established the first-ever recycling program for plastic sample vials and bottles, managed laboratory data, samples, analytical equipment and supplies, supported climate reconstruction research via isotopic analysis of marine microfossils, and analyzed major and trace chemical components of water, soil, and rock samples.

Ms. Rodriguez holds a Bachelor of Science degree in Earth and Ocean Sciences from Duke University and a Master of Science in Geosciences from Virginia Tech.

Ms. Rodriguez has been involved in numerous projects during her tenure with Tanko Lighting, including the Cities of Berkeley, CA; Rancho Cucamonga, CA; Tustin, CA; Fullerton, CA; Corona, CA; Oakland, CA; Santa Ana, CA; West Hollywood, CA; Lowell, MA; Malden, MA; Meriden, CT; Warren, MA; Miami Lakes, FL; Simi Valley, CA; Geneva, NY; and Londonderry, CT.

Brian DuRocher

Phone: 951-830-1673

Education

- State Certified Electrician
- Member of the IBEW for over 15 years
- Crane Certified

Experience

Electrician Foreman (1990 –Present)

Sierra Pacific Electrical Contracting

Manage current project assigned. Ensure work is completed in a timely fashion. Complete jobsite paperwork. Install street lights, traffic signals, etc. complete per plans of given project.

Christopher "Sarge" Roehm

Phone: 951-830-1681 E-mail: sarge@spe-ca.com

Education

- State Certified Electrician
- Member of the IBEW for over 15 years

Experience

Superintendent (2011 –Present)

Sierra Pacific Electrical Contracting

Manage ongoing projects. Schedule work crews daily. Solve issues that arise from projects. Attend project meetings. Coordinate with project owner, general contractor, utility companies, cities and/or counties.

Electrician Foreman (1992 –2011)

Sierra Pacific Electrical Contracting

Manage current project assigned. Ensure work is completed in a timely fashion. Complete jobsite paperwork. Install street lights, traffic signals, etc. complete per plans of given project.