CITY OF SAN JOSE
CAPITAL OF SILICON VALLEY

Request for Proposal – Solicitation 15-16-01
Innovative LED Streetlight Replacement

Presented to:

Teri Killgore, Assistant to the City Manager
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March 30, 2016

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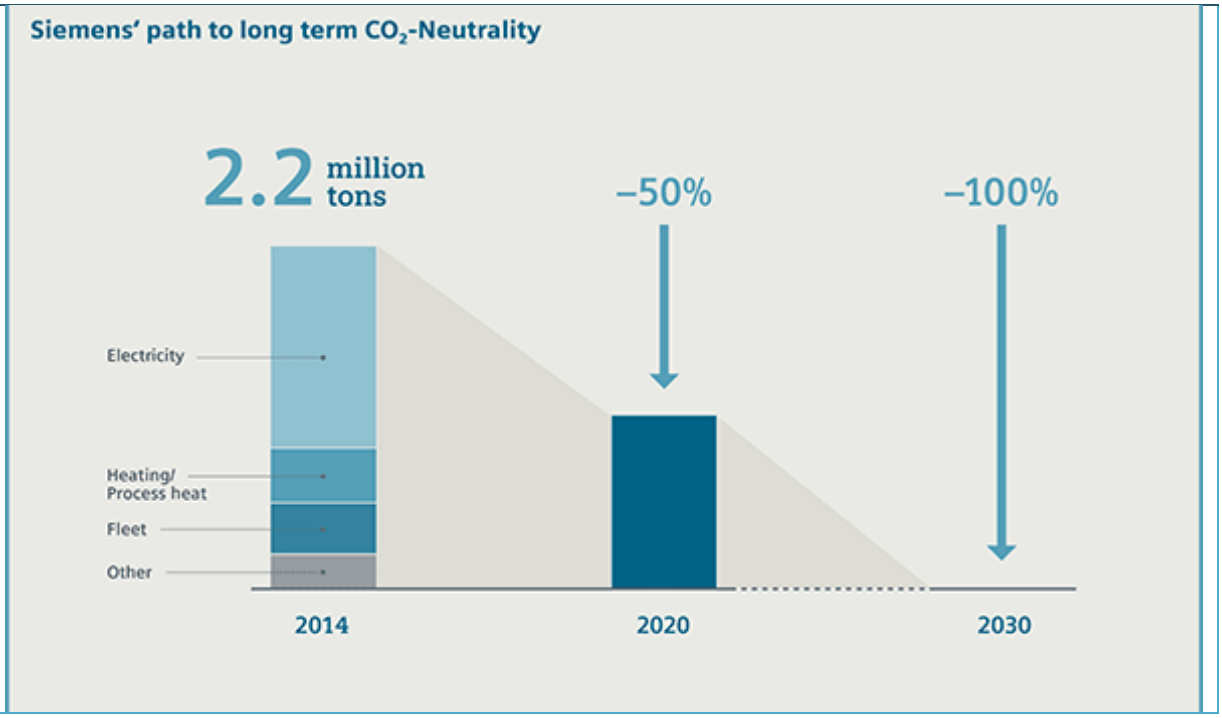
We plan to strengthen energy efficiency and carbon reduction as a business case not only for our customers but also in our own operations.

We have set this goal because we believe deploying energy efficient, low-carbon technologies is not only the right thing to do but also has a clear business case. With this aspiration, we are building upon our proven track record of energy efficient and low-carbon products and solutions in the field of energy, industry and infrastructure and demonstrating leadership in our sector.



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1. Cover Letter

Ms. Teri Killgore
Assistant to the City Manager
City of San José
200 E. Sana Clara St., 17th Floor
San José, CA 95113

March 30, 2016

Dear Ms. Killgore:

Thank you to your team and the City of San José for your consideration of this proposal for "RFP 15-16-01, Innovative LED Streetlight Replacement."

As the Capital of Silicon Valley, San José is in the unique position to lead other cities toward the technological possibilities of the future. This proposal delivers the City of San José its goal of converting all 39,285 lights to LED **with** wireless lighting controls/management with no up-front public funds required.

Additionally, this proposal provides $26,124,525 of next generation nodes to the City of San José **at no-charge**. The future capabilities of these devices maximizes the public benefits of the city's vertical real-estate and does so in a manner that reduces visual blight and generates revenue for the City of San José.

Siemens will complete a turn-key installation of all 39,285 LED lights before December 31, 2018. Siemens has been responsible for the installation of more than 600,000 streetlights and our Project Implementation plan provides the City of San José confidence that accepting this Proposal leads to a successful delivery of your primary goal. While upgrading the City's lights to LED, Siemens will install an anyCOMM node on every new streetlight. This advanced-technology node provides robust wireless control of the City's streetlights. anyCOMM Holdings Corporation "anyCOMM" (a San José-based company) is providing the node to the City of San José at no-charge (a value of $26,124,525).

Once installation and commissioning is complete, each streetlight will possess the following potential networking capabilities:

A next generation streetlight controls solution and power metering system.

The intelligent infrastructure for future functionalities can provide Public Safety and Networking services with the capabilities already included in each anyCOMM node. Services available to the City of San José through a separate agreement directly with anyCOMM:

- Omni-directional, HD cameras and high-fidelity audio sensors to enhance Public Safety.
- 2-way, public address capabilities for mass notification and public entertainment. (Optional equipment required.)
- Multiple VLAN networks that allow the City of San José to transfer data across dedicated, private networks, eliminating redundant communication contracts.

- 12, full color RGB LEDs, three on each side (can be used, for example, for traffic control)

Separately, anyCOMM will negotiate with third party providers for additional services, including:

- High-Speed, Wi-Fi hotspot, on each streetlight.
- LTE Small Cell on each streetlight, improving the City's cellular signal coverage and enhancing the experience of residents and visitors.
- Wireless backhaul, for use as a city-wide intranet with data transfer of up to 1.7Mbps.
- IoT (Internet of Things) gateway providing the ability to easily integrate additional devices.

All communications are cyber-secure with 2048-bit encryption.

A review of the City of San José's FY15/16 Operating and CIP Budgets shows that the benefits of this Proposal advance the priority themes set by San José's City Council, namely:

- ✓ **Improving Safety Through Investments in Police and Fire Operations** (investments that ensure our public safety services are safe, effective and efficient)
- ✓ **A Safer, Smarter San José** (investments that address broader public safety needs)
- ✓ **Broadening Opportunity and Prosperity / Boosting Vitality** (…expand opportunities and enhance experiences…)
- ✓ **Engaging the Community** (investment that support innovation and strategic partnerships as well as increase transparency and community input)
- ✓ **Our Future** (investments that better position the City moving forward)

Throughout the Budgets, we've identified hundreds of references to initiatives and/or specific projects where the Proposed Solution will accelerate or advance the City's Goals.

For example:

Public Safety

- Effective and timely response to high-priority calls
- Data and analytics to increase the efficiency and effectiveness of police and fire staff
- Crime prevention

Strategic Investments

- Illegal Dumping Rapid Response Program – "installation of deterrent infrastructure"

Guiding Principles for Restoring City Service Levels

- Focus investments in technology that have the greater return on investment in terms of services to the public and employee productivity

Initiatives

- Traffic Control for Outdoor Events
- Bridging the Digital Divide
- Engage and assist companies that can create jobs and expand the City's tax base
- Reducing graffiti and litter

Siemens will be your turn-key partner for the installation and commissioning of the system and will design a Community Outreach Engagement that will include a "Sustainability in STEM (Science, Technology, Education and Math) Education Program" designed to engage the youth community of the City of San José to advance the capabilities of the anyCOMM device.

In summary, Siemens proposes to accomplish the City of San José's goal to upgrade your remaining street lighting and lighting controls infrastructure, while simultaneously advancing the entire community with our Intelligent Infrastructure offer. We believe that this proposal will be unmatched when measured by Overall Value, Practicality and Community Benefit.

We look forward to working with the City of San José, the Capital of Silicon Valley, to deliver this proposed solution!

Best regards,

Mark Evans
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2. Executive Summary

2.1 Approach

This Proposal maximizes the value and public benefits for the City of San José, while minimizing clutter in the public right-of-way while delivering a very practical solution. The solution has a combination of experienced partners: Siemens (with its global strength and innovative infrastructure solutions), together with the multi-faceted, state-of-the-art device from San José-based anyCOMM Holdings Corporation.

This very unique proposal includes:

- A professionally-executed, LED retrofit for all 39,285 of the City of San José's streetlights, delivered by Siemens, a company dedicated to Intelligent Infrastructure with experience installing over 600,000 streetlights.
- A next generation streetlight controls solution and power metering system provided at no-charge via San José-based anyCOMM Holdings Company (a value of $26,124,525).
- The intelligent infrastructure for future functionalities that can provide Public Safety and Networking services with the capabilities already included in each anyCOMM node. Services available to the City of San José through a separate agreement directly with anyCOMM Holdings Corporation include:
  - Omni-directional, HD cameras and high-fidelity audio sensors to enhance Public Safety.
  - 2-way, public address capabilities for mass notification and public entertainment. (Optional equipment required.)
  - Multiple VLAN networks that allow the City of San José to transfer data across dedicated, private networks, eliminating redundant communication contracts.
  - 12 full color RGB LEDs, three on each side (can be used, for example, for traffic control)
- Separately, anyCOMM will negotiate with third party providers for additional services, including:
  - High-Speed, Wi-fi hotspot, on each streetlight.
  - LTE Small Cell on each streetlight, improving the City's cellular signal coverage and enhancing the experience of residents and visitors.
  - Wireless backhaul, for use as a city-wide intranet with data transfer of up to 1.7Mbps.
  - IoT (Internet of Things) gateway providing the ability to easily integrate additional devices.

All communications are cyber-secure with 2048-bit encryption.

The funding to support this proposal comes through both the energy and operational savings associated with the LED streetlight retrofit, but **ALSO** the revenue generated from both the Usage Fee (paid to the City of San José by anyCOMM) AND future revenue streams that will be collected in compliance with the City's TelCo tax.

2.2 Organization of Team

Several members of our Project team live in the City of San José and/or Santa Clara County. Siemens Northern California office is just 27.5 miles from the City of San José's City Hall and anyCOMM is a San José-based company, so we're in this together with you.

The Siemens Team combines the best-practices learned from Siemens experience having delivered over 600,000 streetlight upgrades together with the next generation lighting controls and networking solution from anyCOMM. This is all wrapped in an offer that we believe will be unmatched when measured by Overall Value, Practicality and Community Benefit.

David Hopping, President of Siemens U.S. Building Technologies will act as the Senior Executive Sponsor while a team of local, experienced professionals will manage the vast array of details to ensure a safe, expedient and quality Project.

2.3 Ensure Responsiveness to City of San José Project Requirements

Siemens will self-perform the installation, providing a professionally managed, turn-key solution thereby improving the speed and quality of interaction with City Staff and ensuring the responsiveness to the City's Project Requirements.

Siemens will dedicate local personnel to this Project including Key Members who have extensive experience designing and delivering streetlight projects. Even though Siemens Building Technologies Northern California office is only 27.5 miles away from San José's City Hall, we will establish a Project Headquarters office within the City of San José so that our Team can frequently, quickly and efficiently work with the Staff of the City of San José to organize and plan your Project. This Project Headquarters office will deliver real-time progress data that will allow the Siemens and anyCOMM team to communicate, cooperate, deliver, predict, respond and exceed your expectations for this Project.

This Proposal is unique due to the future vision that it delivers to San José's residents and businesses. In addition to the LED conversion with advanced lighting controls, this proposal lays the foundation for a new, high-speed, mesh-network capable of increasing Public Safety and exponentially enhancing the access and speed of data distribution.

The team of Siemens and anyCOMM looks forward to delivering intelligent, next generation infrastructure to the Capital of Silicon Valley.

3. Attachment A: Proposal Checklist

All of the Required Items are included in this RFP Response.

Required Items for All Proposals Unless Noted
☐ Attachment A, Proposal Checklist
☐ Cover Letter (See Section 11.1)
☐ Executive Summary (Section 11.2), maximum of two pages
Project Team (Section 11.4) ☐ Management Plan – 11.4.1 ☐ High Level Project Plan with timeline – 11.4.2 ☐ Key Personnel Assignments/Responsibilities - 11.4.3 ○ Organizational Chart with reporting structure – 11.4.3.1 ○ Key personnel with job titles and project manager – 11.4.3.2 ☐ One Page Resume for each Key Personnel – 11.4.4 ☐ Contractor or Installation Partner documents (if applicable) – 11.4.6 ○ Contractor/Installation Partner's Key Personnel Assignments/Responsibilities ○ Contractor/Installation Partner's Organizational Chart with reporting structure ○ Contractor/Installation Partner's Key Personnel with job titles and project manager ○ One Page Resume for each of Contractor/Installation Partner's Key Personnel ☐ Streetlight Design and Engineering documents (if applicable) – 11.4.5 ○ Streetlight Design/Engineering Key Personnel Assignments/Responsibilities ○ One Page Resume for Streetlight Design/Engineering Key Personnel
☐ Attachment B, Proposal Specifics Worksheet
☐ Attachment C, Proposal Valuation and Cost Form with Designated Responsible Parties
☐ Attachment D, Proposal Certification Form
☐ Attachment E, Project Team and Financial Background Information Worksheet
Attachment F, Previous Customer Reference Form ☐ Reference 1 Form ☐ Reference 2 Form ☐ Reference 3 Form Contractor/Installation Partner Customer References (if applicable, use Attachment F) ☐ Contractor/Installation Partner Reference 1 Form ☐ Contractor/Installation Partner Reference 2 Form ☐ Contractor/Installation Partner Reference 3 Form
☐ Attachment G, Environmentally Preferred Procurement Program (EP3) Information Sheet
☐ Response to Section 21, Exemplar Agreements (if applicable)

	Required for Telecomm and Other Proposals Requiring Backhaul, Power, etc.
☐	Attachment H, Backhaul Specifications (if applicable)
☐	Attachment I, Power Specifications (if applicable)
☐	Attachment J, Telecommunications Specifications (if applicable)
	Required for Streetlight Installation Proposals
☐	Attachment K, Streetlight Control & Management System Specification Response Form
☐	Attachment L, LED Luminaire Specifications
☐	Product Sample Submissions per Appendix 3, Scope of Services for Streetlight Installation Proposals, Section 4, Product Sample Submission
	Optional Attachments
☐	Attachment M, Local and Small Business Preference

4. Project Team (Section 11.4)

4.1 Management Plan (11.4.1)

In keeping with our commitment to excellence and customer satisfaction, Siemens approaches project management with the utmost professionalism and efficiency. Our vast experience enables us to foresee and address potential project challenges before they occur. The end result is a seamless project that will meet or exceed your expectations.

For this Project, Siemens will staff a Project Headquarters office within the City of San José. Your needs will be promptly attended to by dedicated team, which have the necessary:

- Engineering capabilities
- Project Management resources
- Implementation / Installation personnel and resources
- Monitoring and Training services

This local capability greatly enhances responsiveness to the City of San José. Experienced, local personnel (as described below) will meet your performance expectations because they are backed by a dedicated team comprised of industry leaders

Our success in this market is dependent upon ratings from our local customers, so we will do our utmost to earn a superior performance rating from the City of San José. We are convinced that our work on this project will foster a long-term relationship that strengthens both the City of San José and Siemens.

4.1.1 Project Management Approach

Planning is the core of project management because it establishes a system for monitoring and controlling project elements and situations through a proactive management approach.

Siemens excels in project management. We anticipate and mitigate potential problems, saving everyone on the project team from having to react to unforeseen incidents. We avoid wasting our time and your time “putting out fires”; instead, effective project management enables us to focus on essential tasks. We are driven by the fact that your satisfaction rests on our competencies.

We take pride in our ability to complete projects on schedule, within budget and at the quality you and your stakeholders deserve. We encourage you to confirm our commitment to excellence by contacting our partners in the performance contracting market.

4.1.2 PM@Siemens Process

A significant factor in our success is PM@Siemens, which is a disciplined project management process that encompasses the entire project workflow timeline from project pre-acquisition to contract closure. PM@Siemens establishes specific requirements and milestones for project execution that are fully aligned with our organization, including practices recommended by the Project Management Institute. The PM@Siemens guidelines influence our processes as a roadmap for the successful execution of projects and drive overall customer satisfaction.

PM@Siemens guides us to meet project objectives by planning, monitoring, controlling and by taking corrective actions when necessary. Highlights of our methodology include application of industry best practices; a 12-module program that is uniformly taught and applied; a vast history in lessons-learned; uniform project categorization; and an international Project Manager database, which ensures that the best-suited Project Manager is assigned to each project.

4.1.3 Project Management Methodology - PM@Siemens

Siemens has adopted PM@Siemens from the Project Management Institute's (PMI) publication, "Project Management Body of Knowledge" (PMBOK). PMI is a worldwide association of 20,000+ Project Managers. The PMBOK includes proven, traditional practices that are widely applied in addition to innovative and advanced practices. The PMBOK was written by project management professionals and it outlines five process groups deemed essential for effective project management and risk minimization:

- **Initiate:** Recognize that a project or phase should begin
- **Plan:** Devise and maintain a workable scheme to accomplish business needs that the project was undertaken to address
- **Execute:** Coordinate people and resources to carry out plan
- **Control:** Ensure project objectives are met by monitoring and measuring progress, and taking corrective action when necessary
- **Close:** Formalize acceptance of the project or phase, and bring it to an orderly end

The Project Manager's direct responsibilities start with planning and estimating in the project development phase, and they continue with monitoring and controlling through the implementation and customer acceptance phases.

Siemens is a global corporation with thousands of Project Managers employed all over the world. Siemens requires our Project Managers to pass the PMI certification exam to obtain a Certified Associate in Project Management (CAPM) or Project Management Professional (PMP) certification. Obtaining these certificates requires mastery of the Project Management Book of Knowledge, coupled with relevant project experience.

4.1.4 Project Narrative

For this Project, Stephen ("Steve") Reese will be assigned as the Lead / Senior Project Manager. Steve is a resident of the City of San José and lives in the South Zone of this Project. Therefore, in addition to being an employee of Siemens, he has a unique, personally-vested interest in the quality of the implementation of San José's streetlight project.

Steve will be responsible for all aspects of Budget, Schedule, Performance and Communication. As the primary point of contact, the Senior Project Manager will provide all internal and external communications and will provide progress reports to the City of San José on a weekly basis and as needed. The progress report will include, but will not be limited to:

- A detail of the number of street light asset audits completed
- Number of fixtures installed each week
- Itemized list of issues that need to be addressed
  - Responsibility and timeline for correction as to be determined during the project planning and within the communication plan

In preparation for this Proposal, Siemens held a 2-day, internal PACT (Project Acceleration through Coaching and Teamwork) meeting. In this meeting, Siemens reviewed best-practices, unique benefits that Siemens can provide to the City of San José, personnel available, timing, predictions of field concerns, safety planning and lessons learned from previous projects.

We recognize that this Project will have a tremendous impact on the residents and businesses of the City of San José and our goal is to minimize inconvenience while eliminating any safety issues.

Some of the notes Siemens and anyCOMM made during a 2-day PACT meeting to prepare the Siemens team for your successful Project.

4.1.5 Project Plan

The project activities will begin with an in-depth, initial planning and coordination meeting with key Staff members from the City of San José. This will include a review of the detailed schedule of delivery and acceptance, resources, inventory management, and progress reporting.

A high level Project Schedule with major delivery dates is provided and will be utilized to create a more detailed schedule upon project award.

Physical activities will start with “Auditing” the light poles (see Auditing Process). The city is divided into four geographical zones; Central, North-East, South and West. Each zone has different quantities of lights for Auditing and Installation. A crew of 8 Auditors will individually collect relevant information from each light pole using a handheld device. This information will then be correlated and analyzed by the Energy Engineer.

At the conclusion of the zone audit, a second crew with higher skill sets will remove the old fixtures and install the new fixtures and the anyCOMM node that will perform the lighting controls.

Siemens will be self-performing the installation, allowing us to utilize Local Labor.

Siemens will be self-performing the Audit and Installation providing the City of San José with a much more direct engagement with the Project Management Team than an alternative Proposer that utilizes a sub-contractor. This will provide the City of San José with better clarity to the team, more direct engagement with the people executing the work and faster response times to identified issues.

The installation crew will consist of six (6) Journeymen and two (2) Laborers. The installation crew will operate individually and each will utilize Siemens trucks and tools.

With a pre-planned map, the installation crew will remove and replace the fixtures and install the anyCOMM smart-node one zone at a time.

The schedule will be reviewed during the planning phase with the City of San José and then a corrected baseline schedule will be finalized and agreed upon. The schedule will include weekly progress check points where the number of completed installations will be examined against the number of planned installations.

Our planned approach is to install all of the streetlights and all of the anyCOMM nodes in one zone at a time.

This approach is intended to maximize the opportunities for success, minimize the safety risks and establish a work pace that can be maintained successfully by both the City of San José and Siemens. We also recognize that this project will create minor inconvenience for residents and businesses and we believe that it's best to, initially, minimize the number of trucks operating on city streets. However, once a collective work pace is established, and if safety and work quality can be maintained, Siemens and the City can revisit this approach and consider performing installations in multiple zones at one time in an effort to accelerate the benefits that the City will realize from completing the retrofit more quickly.

At Siemens we "Think Safety"

Siemens will request a letter of Partial Acceptance upon the completion of installation of the lights and the anyCOMM nodes and commissioning the lighting controls system for each Zone.

A punch list will be provided at the completion of each zone and will be reviewed and approved by the City of San José. During this time, the 30-day, live continuous operation of the lighting control system will be performed and completed in accordance with the City's RFP Appendix 3, Part 2.8.

Upon completion of the punch list items and the lighting controls performance review period, Siemens will request a letter of Final Acceptance for each zone. This Final Acceptance will be the start-date of the warranty period for each Zone.

4.1.6 Construction Administration

The Siemens Project Managers and Field Foreman will perform spot checks; the GIS application used for the installation phase allows full documentation of the work, to allow the team to proactively identify all quality issues. The GIS application can be shared with the City, and in combination with in-person meetings, be used to keep all parties up-to-date. Siemens Industry Inc. welcomes contact with our references to confirm that recent streetlight retrofits have been completed to the satisfaction of our Partner / Customers.

4.1.7 Detailed Description of Specific Tasks

Audit

Having an accurate count of assets and their conditional attributes that can be displayed in both a Geospatial format and an excel database, will assist in multiple phases of the project, including: an accurate LED bill of materials, the identification of any existing issues with the system (i.e. bent arms, vegetation overgrowth, proximity to high voltage power lines, etc.), construction logistics including crew locations and pole details, planning, progress reports, and asset reconciliation for billing adjustments and rebate applications.

In fact, Siemens was invited to the 2015 IES (Illumination Engineering Society) Street and Area Lighting Conference (SALC) to speak about roadway lighting audits, and the versatility of the data collected.

The audit portion of the project will have three primary objectives:

1. To confirm the existing systems quantities, styles, and wattages
2. To identify locations where incidental badge replacement will be required during the installation phase.
3. Identify missing or undocumented assets and determine appropriate action prior to installation beginning.

Equipment

Starting with the asset inventory provided by the customer, a map will be created within the Esri ArcGIS environment, in preparation of the data collection stage. Once the maps have been created and issues with the existing data is identified, individuals with mobile devices – typically iPads with 4G connectivity and a GPS beacon- will be deployed to start the data collection process.

Data Collection

Using Esri ArcGIS software, data collectors will locate and identify each assets location and predefined attributes. Esri is a household name in the GIS community, and compatible with nearly any other GIS software, making it the most versatile GIS tool on the market and ideal for collecting street light data, which might then be used by the city or any other agency the city allows access to that uses another compatible GIS product for asset tracking, maintenance and replacement analysis.

Attributes of a Base Audit:

ATTRIBUTE	DESCRIPTION
OBJECT ID	Unique numerical value assigned to each data point assigned by the collector app
NORTHING/EASTING (STATE PLANE SYSTEM)	State plane system
STREET NAME	Street Name as shown on Ledger
POLE NUMBER (AS STATED ON LEDGER)	As shown on ledger
UTILITY DESCRIPTION OF ASSET	Asset type for billing purposes and/or billing code
STYLE	Ex. Cobra head, Acorn, Pendant, Shoebox, Floodlight, etc.
LAMP TYPE	HPS, LPS, MH, PSMH, etc.
WATTAGE	Nominal wattage as shown on NEMA label
LEDGER STATUS	Matched, Unmatched, Not found, etc.
ISSUE	Notable conditions if present during any of the audit stages
IMAGERY	Images attached to some points, for review by Siemens and/or Customer

This handful of attributes is what is necessary for a roadway lighting conversion project, however should the City of San José want more than a conversion, the scalability of the software is essentially limitless: Siemens can add/remove attributes that are deemed important/unnecessary for the project objective(s), at any time during the project. Some additional attributes may require significantly more effort to input, however Siemens will communicate these challenges with the City and determine how it could impact the scope and price of the project as a whole depending on how many of the details the city desires to be collected.

Reconciliation

After the data collection stage, the team will reconcile the collected data with the utility inventory and thereafter a design process will ensue. The City's Key Personnel will be highly involved in the finalization of the details. Starting with points that have been marked with "issues" during the audit, Siemens will review the data with the City's Staff to resolve issues or prepare plans to resolve them during the conversion stage. This will finalize the proposed system profile, and allow Siemens to provide an Investment Grade Audit (IGA) report, which will define the final Scope of the project.

Design

The majority of the project will be a one-for-one fixture replacement under the assumption that the customer is generally satisfied with existing light levels. However, the audit data provides a unique solution since it allows for a visual inspection of the existing locations to identify "odd ball" locations that can help explain the existing environment. Locations where a single asset has a higher/lower wattage than surrounding assets lighting similar types of roadway conditions are red flags that an improvement may be made. These improvements can result in additional energy savings and/or improved light levels. These locations will be reviewed with the City's Staff before any adjustments will be made.

Badging

Incidental Badging of street light assets may be required, per City guidance. The presence of a badge will be documented during the audit phase. The assets that do not have adequate badging will then be corrected in accordance with the City of San José's badging standards, during the LED installation phase.

Construction

Moving past the design stage, the audit data is then used to provide updates to the customer on the progress of the conversion. In past projects, this has been done as both internal data and in a visual manner by working with customers' internal IT departments to display a web map on the City/Town website for the local community to observe the changes in nearly real time (typical delay of approx. 2 minutes; depending on bandwidth). This qualitative approach has shown to be a great way of promoting a transparent approach, enabling people within the community to plan their day and stay connected with activities going on within their community.

New LED Fixture Installation

Siemens will perform all Tasks in compliance with the City of San José's RFP, Appendix 3 "Scope of Services for Streetlight Installation Proposals".

1. Provide all necessary traffic control plans and traffic control labor and equipment for Work on required roadways in accordance with the current version of the City of San José (on-line) Traffic Control manual as well as the State of California, Business, Transportation and Housing, Department of Transportation Traffic Manual; Traffic Controls for Construction and Maintenance Work Zones.
2. Siemens will establish a dedicated field office and warehouse within the city limits of the City of San José. From this field office, Siemens will host Staff from the City of San José in order to provide status update meetings and to show progress to other City stakeholders. The field office will be Siemens headquarters where we will manage receipt, storage, assembly and deployment of all project material and equipment prior to and during installation.

Proper traffic controls are part of Siemens "Think Safety" approach

From this facility, we will also facilitate the sorting, recycling and disposal of removed fixture equipment. Fixtures shall be staged for installation in a manner that ensures secured storage of materials and equipment satisfactory to the City of San José. Siemens shall be solely responsible for any damage, theft, or loss incurred to inventory prior to installation.

Siemens' Field Office will provide a place where City Staff and Key Officials can meet to track progress, discuss key issues and observe our real-time approach to managing critical details.

3. Inspect all Siemens provided LED fixtures for consistent quality. Prepare any defective fixtures for return to manufacturers' distributor (repack and palletize).
4. Ensure all fixture labels have been installed in a manner to be exposed allowing viewing from the ground.
5. Provide Disposal Plan, including a description of methodology for disposal of the fixtures and/or components:
    - Waste Disposal: Collection, storage, disposal and/or recycling of Universal Waste generated by this project in full accordance with California Code of Regulations, Title 22, Division 4.5, Chapter 23. Waste disposal plan to be approved by the City in order to ensure compliance with California Code of Regulations, Title 22, Division 4.5, Chapter 23.
6. Install new LED fixtures in accordance with manufacturers' instructions and local and national electrical codes.
7. Install anyCOMM node in photocell receptacle socket in accordance with manufacturers' instructions and local and national electrical codes.

8. Test fixtures functionality, documenting deficiencies.
9. Coordinate fixture counts / final reconciliation with the City's GIS Database and Utility template for use in procuring rebates.
10. Notify the City of any potential wiring and system issues that might be discovered during the field installation.
11. Commission the anyCOMM lighting controls and complete integration (via bridging interface, if selected by the City of San José) with the Owlett Nightshift System (by Zone).
12. Resolve any Punch List items.
13. Resolve all installation warranty issues with Manufactures during construction and for the first year following each Zone's Final Acceptance.
14. Call backs for defective fixtures; during the installation phase of the project, and for a period of two weeks after acceptance of the project shall be completed within 10 days of notification

15. Provide replacement labor, at no additional cost to the city, to install fixtures and/or anyCOMM nodes, parts and retrofit kits within 10 days of receipt of notice of a failed luminaire for a period of 1 year after date of project acceptance.

    Beyond 1-year the City will be responsible for coordination with the fixture manufacturer to procure receipt of replacement luminaire and for labor associated with for the replacement warranty of failed luminaire.
16. Siemens Senior Project Manager shall schedule and manage regular weekly project meetings with the City's Staff to inspect installation, work safety, public safety, and traffic control plans, schedule updates, provide material waste handling documentation, compliance, etc.
17. Project Safety: Follow all applicable Safety protocols (Siemens = "Think Safety").
18. Provide a specified training to appropriate City staff, or authorized representatives, on all aspects of routine operations, maintenance and safety needs for the proper operation of the new LED fixtures and anyCOMM control system in accordance with Appendix 3 7.3.
19. Complete prepared "punch-list" for completion of project implementation.
20. Provide all necessary documentation including Universal Waste disposal logs, prevailing wage documents, lien releases etc.

21. Siemens shall use Proprietary tracking software to track all data collection and installation progress. Siemens shall gather the following information while installing fixtures.
    - Installation date
    - Pole badge number
    - Pole type
    - Fixture type
    - Luminaire type
    - New Luminaire wattage
    - Pole finish
    - Luminaire finish
    - Damage
    - Date of installation
    - Wattage of existing lamp
    - Notes of any discrepancies between actual existing fixture and the database for the same fixture
    - Voltage of the existing fixture
    - Manufacturer/model of installed fixture
    - Pole badge number
    - GIS coordinate of fixture
    - Other data as required.

This data shall be collected in real time and used for tracking, reporting and issue tracking throughout the project.

Cobra Heads:

- Remove existing cobra head fixtures.
- Install new fixtures.
- Install new lighting controller (anyCOMM node) in 7-PIN NEMA Photocell Receptacle.
- Verifying operation of fixture and controller.
- Dispose of the existing cobra head fixtures in accordance with applicable regulations, including Haz Mat documentation.

New Decorative Post-Top Fixtures:

- Remove existing fixtures.
- Install post-top lighting control adapter with integral controller.
- Install new fixtures.
- Install anyCOMM node for lighting controls.
- Verify operation of fixture and controller.
- Dispose of the existing fixtures in accordance with applicable regulations, including HazMat documentation

New Soffit Mounted Fixtures:

- Remove existing fixtures.
- Install new fixtures.
- Verify operation of fixture.
- Install for lighting controls.
- Dispose of the existing fixtures in accordance with applicable regulations, including
- HazMat documentation

Deliverables

In accordance with the RFP, Tasks 1, 2 and 3 will be completed.

- **Task 1:** During the construction phase, Siemens will be able to update the City's inventory data via a real-time connection to the ESRI ArcGIS server
- **Task 2:** At the conclusion of the construction phase for each zone, the anyCOMM lighting controls system is commissioned. Siemens can develop and deliver a report to PG&E for utility data consumption, in accordance with Appendix 6 of the City's RFP
- **Task 3:** Manuals and Training will be provided upon commencement of installation and will be performed in accordance with the requirements of the City's RFP, Appendix 3, Section 7.3

Administration of Rebates

- Identify utility rates and applicable utility incentive programs, reconciling data with installation records prior to submission.
- Ensure analysis tool(s) used are in compliance with utility incentive reporting requirements.

- Fill out all appropriate applications and provide all required documentation for all rebates and incentives available for this project. Documentation will support removal of nonexistent and duplicate poles.
- Prepare and submit to the City and the utility all documentation necessary to receive all eligible rebates and incentives available from PG&E.
- Prepare and submit to the City and the utility required billing rate change documents for all applicable new fixtures and retrofits, including changes to wattages.
- Provide electronic files with specified pre- and post- installation data including, but not limited to fixture type, wattage, location/address and any other attributes required by the City and deemed necessary for the future management of street light operations and maintenance.

Assumptions and Additional Terms

Any poles not working after installation will require that the City has confirmed that power is available at the pole prior to requesting Siemens to correct an issue.

Siemens is providing a one (1) year construction warranty.

Siemens assumes that any pole without current power will still be installed with a new fixture. Siemens will notify the city of the issue.

The completion of this project by the December 31, 2018 deadline described by the City is contingent upon receiving a Notice to Proceed by no later than January 1, 2017. Any delays will cause the delivery date to extend.

Data Collection Assumptions

- All data collected will be as visible from grade.
- Siemens audit will be confirming City provided data and will not include the auditing of new or unrecorded assets, PG&E, Caltrans or private poles.
- In the instance that a NEMA wattage label is not visible from grade, the assumed wattage will be determined by the utility ledger.
- If pole badge is not present, but description of location is similar, the asset will be labeled as “ASSUMED MATCH” and included in scope.
- Distribution patterns or other application specific characteristics of assets will not be collected; it is presumed that all distribution patterns are specified by the city during the fixture selection stage.
- It is assumed that all poles have an existing pole or badge number assigned and that 99% or more have badges attached to the pole. Siemens has included costs for incidental badge replacement only.

Installation Assumptions

- Siemens assumes the city has and can provide instruction / direction for all master photocell locations.
- Siemens assumes the city will allow the installation of a shorting cap or other means to bypass master lighting control equipment
- All lighting to be 120, 277 volt AC power.

- Siemens assumes no more than five-percent (5%) of the City's existing light poles will need badging. Badging in excess of 5% will be considered out of Scope and can be performed as an additional service for an additional fee to be negotiated during the Final Design phase.

4.2 Narrative

Based on the City of San Jose Q & A q. 108, 15-16-01, we have built this Schedule with a Contract Execution date of December 19, 2016.

At your request, Siemens and anyCOMM are ready to meet with the City of San José to discuss this proposal, answer any questions you may have and immediately begin working toward an Agreement in order to deliver the Value and Benefits of this Proposal as soon as possible.

Due to the expiration limits of our material suppliers, pricing detailed in this Proposal is good through August, 25, 2016.

In line with our Approach, Siemens intends to work with the City of San José to finalize the Design and then embark on an Audit. At the completion of the Zone 1 Audit, auditing crews will continue to Zone 2, while the installation begins in Zone 1. The Audit for all four (4) zones will complete on July 10, 2017.

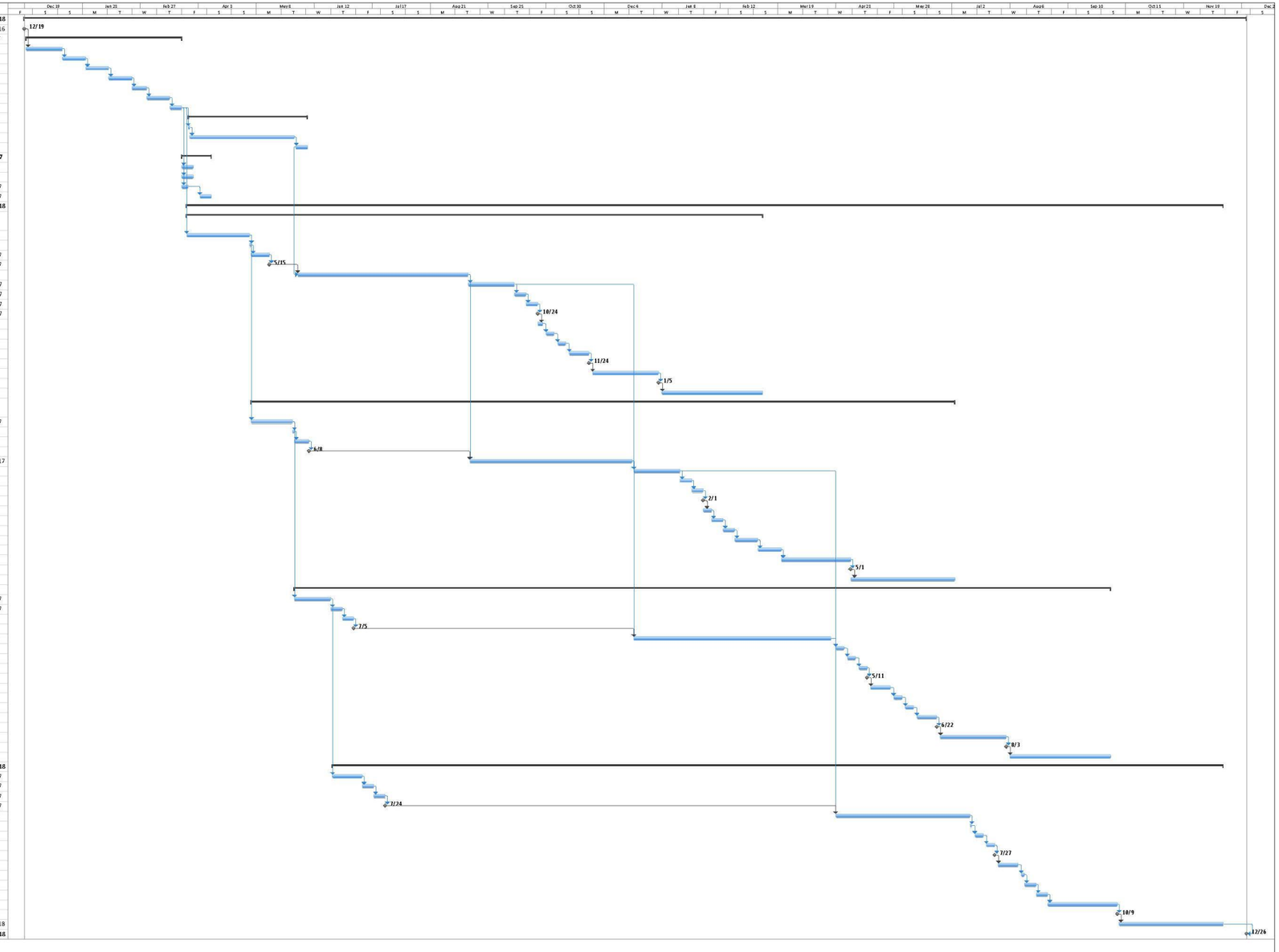
Meanwhile, installation and commissioning of the lights and lighting controls in Zone 1 will continue until they are complete. Once installations are complete in Zone 1, crews will move to Zone 2.

Our intention in this Approach is to maximize the opportunities for success, minimize the safety risks and establish a work pace that can be maintained successfully by both the City of San José and Siemens. We also recognize that this project will create minor inconvenience for residents and businesses and we believe that it's best to, initially, minimize the number of trucks operating on city streets.

However, once a collective work pace is established, and if safety and work quality can be maintained, Siemens and the City can revisit this approach and consider performing installations in multiple zones at one time in an effort to accelerate the benefits that the City will realize from completing the retrofit more quickly.

4.2 High Level Project Plan with Timeline (11.4.2)

ID	Task Name	Duration	Start	Finish
1	**City of San Jose LED Street Light Project**	**528 days**	**Mon 12/19/16**	**Wed 12/26/18**
2	Contract Executed	0 days	Mon 12/19/16	Mon 12/19/16
3	**Overall Design**	**66 days**	**Tue 12/20/16**	**Thu 3/23/17**
4	30% Design Submittal	16 days	Tue 12/20/16	Tue 1/10/17
5	City Review & Comment	10 days	Wed 1/11/17	Tue 1/24/17
6	60% Design Submittal	10 days	Wed 1/25/17	Tue 2/7/17
7	City Review & Comment	10 days	Wed 2/8/17	Tue 2/21/17
8	100% Design Submittal	7 days	Wed 2/22/17	Thu 3/2/17
9	Revisisions If Necessary	10 days	Fri 3/3/17	Thu 3/16/17
10	Approved Design	5 days	Fri 3/17/17	Thu 3/23/17
11	**Material/Equipment Procurement**	**52 days**	**Tue 3/28/17**	**Wed 6/7/17**
12	Order Materials- Streetlights & Control Devices	1 day	Tue 3/28/17	Tue 3/28/17
13	Lead Time - Lights/Controls	45 days	Wed 3/29/17	Tue 5/30/17
14	Lights/Control Delivery Commencement	5 days	Thu 6/1/17	Wed 6/7/17
15	**Align Resources with Final Design Changes (if any)**	**12 days**	**Fri 3/24/17**	**Mon 4/10/17**
16	Finalize Scope of Work	5 days	Fri 3/24/17	Thu 3/30/17
17	Finalize Lighting/Controls Specs	5 days	Fri 3/24/17	Thu 3/30/17
18	Generate Preliminary Project Schedule	2 days	Fri 3/24/17	Mon 3/27/17
19	Response Time For Contract Package	5 days	Tue 4/4/17	Mon 4/10/17
20	**LEDs Converted/ Controls Installed**	**466 days**	**Mon 3/27/17**	**Wed 12/12/18**
21	**Zone 1 Installation - Central San Jose (11,090 Units)**	**250 days**	**Mon 3/27/17**	**Fri 3/9/18**
22	Audit	28 days	Mon 3/27/17	Wed 5/3/17
23	BRIO Document Requested	1 day	Thu 5/4/17	Thu 5/4/17
24	List Reconciled with City Data	7 days	Fri 5/5/17	Mon 5/15/17
25	Final Install List Approved	0 days	Mon 5/15/17	Mon 5/15/17
26	Cobra Head Installation (8710 Units)	73 days	Fri 6/2/17	Tue 9/12/17
27	Specialty/ Decorative (2380 Units)	20 days	Wed 9/13/17	Tue 10/10/17
28	BRIO Submitted to PG&E	5 days	Wed 10/11/17	Tue 10/17/17
29	BRIO Comments Received	5 days	Wed 10/18/17	Tue 10/24/17
30	Final BRIO Submitted to PG&E	0 days	Tue 10/24/17	Tue 10/24/17
31	Punchlist Walk-Thru	3 days	Wed 10/25/17	Fri 10/27/17
32	Commissioning Per RFP	5 days	Mon 10/30/17	Fri 11/3/17
33	Technical Services/Training Per RFP	5 days	Mon 11/6/17	Fri 11/10/17
34	Submit As-Built Drawings/O&M Manuals	10 days	Mon 11/13/17	Fri 11/24/17
35	City Issues Substantial Competion Certificate	0 days	Fri 11/24/17	Fri 11/24/17
36	Final Acceptance Testing (30 Day Duration)	30 days	Mon 11/27/17	Fri 1/5/18
37	Zone Complete	0 days	Fri 1/5/18	Fri 1/5/18
38	Rebate Received	45 days	Mon 1/8/18	Fri 3/9/18
39	**Zone 2 Installation - North-East San Jose (10,780 UNits)**	**303 days**	**Fri 5/5/17**	**Tue 7/3/18**
40	Audit	17 days	Fri 5/5/17	Mon 5/29/17
41	BRIO Document Requested	1 day	Tue 5/30/17	Tue 5/30/17
42	List Reconciled with City Data	7 days	Wed 5/31/17	Thu 6/8/17
43	Final Install List Approved	0 days	Thu 6/8/17	Thu 6/8/17
44	Cobrahead Installation (8400 Units)	70 days	Thu 9/14/17	Wed 12/20/17
45	Specialty/ Decorative (2380 Units)	20 days	Fri 12/22/17	Thu 1/18/18
46	BRIO submitted to PG&E	5 days	Fri 1/19/18	Thu 1/25/18
47	BRIO Comments Received	5 days	Fri 1/26/18	Thu 2/1/18
48	Final BRIO submitted to PG&E	0 days	Thu 2/1/18	Thu 2/1/18
49	Punchlist Walk-Thru	3 days	Fri 2/2/18	Tue 2/6/18
50	Commissioning Per RFP	5 days	Wed 2/7/18	Tue 2/13/18
51	Technical Services/Training Per RFP	5 days	Wed 2/14/18	Tue 2/20/18
52	Submit As-Built Drwgs./O&M Manuals	10 days	Wed 2/21/18	Tue 3/6/18
53	City Issues Substantial Competion Certificate	10 days	Wed 3/7/18	Tue 3/20/18
54	Final Acceptance Testing (30 Day Duration)	30 days	Wed 3/21/18	Tue 5/1/18
55	Zone Complete	0 days	Tue 5/1/18	Tue 5/1/18
56	Rebate Received	45 days	Wed 5/2/18	Tue 7/3/18
57	**Zone 3 Installation - South San Jose (10,280 Units)**	**353 days**	**Wed 5/31/17**	**Fri 10/5/18**
58	Audit	16 days	Wed 5/31/17	Wed 6/21/17
59	BRIO Document Requested	5 days	Thu 6/22/17	Wed 6/28/17
60	List Reconciled with City Data	5 days	Thu 6/29/17	Wed 7/5/17
61	Final Install List Approved	0 days	Wed 7/5/17	Wed 7/5/17
62	Cobrahead Installation (10,125 Units)	85 days	Fri 12/22/17	Thu 4/19/18
63	Specialty/ Decorative (155 Units)	5 days	Mon 4/23/18	Fri 4/27/18
64	BRIO Submitted to PG&E	5 days	Mon 4/30/18	Fri 5/4/18
65	BRIO Comments Received	5 days	Mon 5/7/18	Fri 5/11/18
66	Final BRIO Submitted to PG&E	0 days	Fri 5/11/18	Fri 5/11/18
67	Punchlist Walk-Thru	10 days	Mon 5/14/18	Fri 5/25/18
68	Commissioning Per RFP	5 days	Mon 5/28/18	Fri 6/1/18
69	Technical Services/Training Per RFP	5 days	Mon 6/4/18	Fri 6/8/18
70	Submit As-Built Drwgs./O&M Manuals	10 days	Mon 6/11/18	Fri 6/22/18
71	City Issues Substantial Competion Certificate	0 days	Fri 6/22/18	Fri 6/22/18
72	Final Acceptance Testing (30 Day Duration)	30 days	Mon 6/25/18	Fri 8/3/18
73	Zone Complete	0 days	Fri 8/3/18	Fri 8/3/18
74	Rebate Received	45 days	Mon 8/6/18	Fri 10/5/18
75	**Zone 4 Installation - West San Jose (7,135 Units)**	**384 days**	**Fri 6/23/17**	**Wed 12/12/18**
76	Audit	12 days	Fri 6/23/17	Mon 7/10/17
77	BRIO document Requested	5 days	Tue 7/11/17	Mon 7/17/17
78	List Reconciled with City Data	5 days	Tue 7/18/17	Mon 7/24/17
79	Final Install List Approved	0 days	Mon 7/24/17	Mon 7/24/17
80	Cobrahead Installation (7065 units)	59 days	Mon 4/23/18	Thu 7/12/18
81	Specialty/ Decorative (79 Units)	1 day	Fri 7/13/18	Fri 7/13/18
82	BRIO Submitted to PG&E	5 days	Mon 7/16/18	Fri 7/20/18
83	BRIO Comments Received	5 days	Mon 7/23/18	Fri 7/27/18
84	Final BRIO Submitted to PG&E	0 days	Fri 7/27/18	Fri 7/27/18
85	Punchlist Walk-Thru	10 days	Mon 7/30/18	Fri 8/10/18
86	Commissioning Per RFP	2 days	Mon 8/13/18	Tue 8/14/18
87	Technical Services/Training Per RFP	5 days	Wed 8/15/18	Tue 8/21/18
88	City Issues Substantial Competion Certificate	5 days	Wed 8/22/18	Tue 8/28/18
89	Final Acceptance Testing (30 Day Duration)	30 days	Wed 8/29/18	Tue 10/9/18
90	Zone Compete	0 days	Tue 10/9/18	Tue 10/9/18
91	Rebate Received	45 days	Thu 10/11/18	Wed 12/12/18
92	**Final Completion of Project**	**0 days**	**Wed 12/25/18**	**Wed 12/25/18**



Project: City of San Jose LED Street Light Project - PRELIM SCHEDULE
Date: Mon 3/28/16

Page 1

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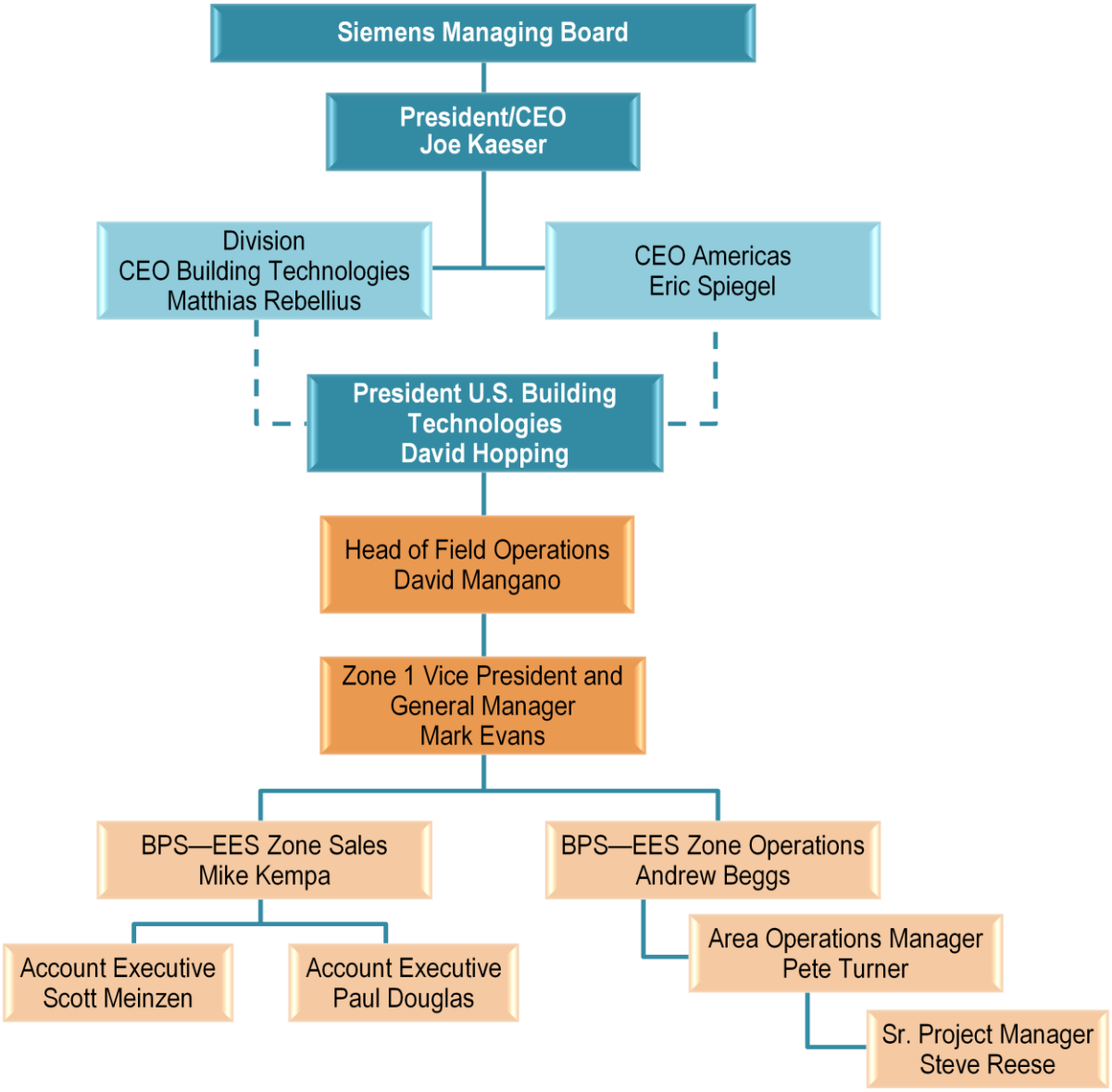
4.3 Key Personnel Assignments/Responsibilities (11.4.3)

4.3.1 Provide an Organizational Chart for your company showing reporting structure (11.4.3.1)

Siemens is a multi-national Company producing $115B in revenue with ~365,000 world-wide employees.

A simplified Organizational Chart that shows the relevant Siemens Divisions related to this project is as follows:



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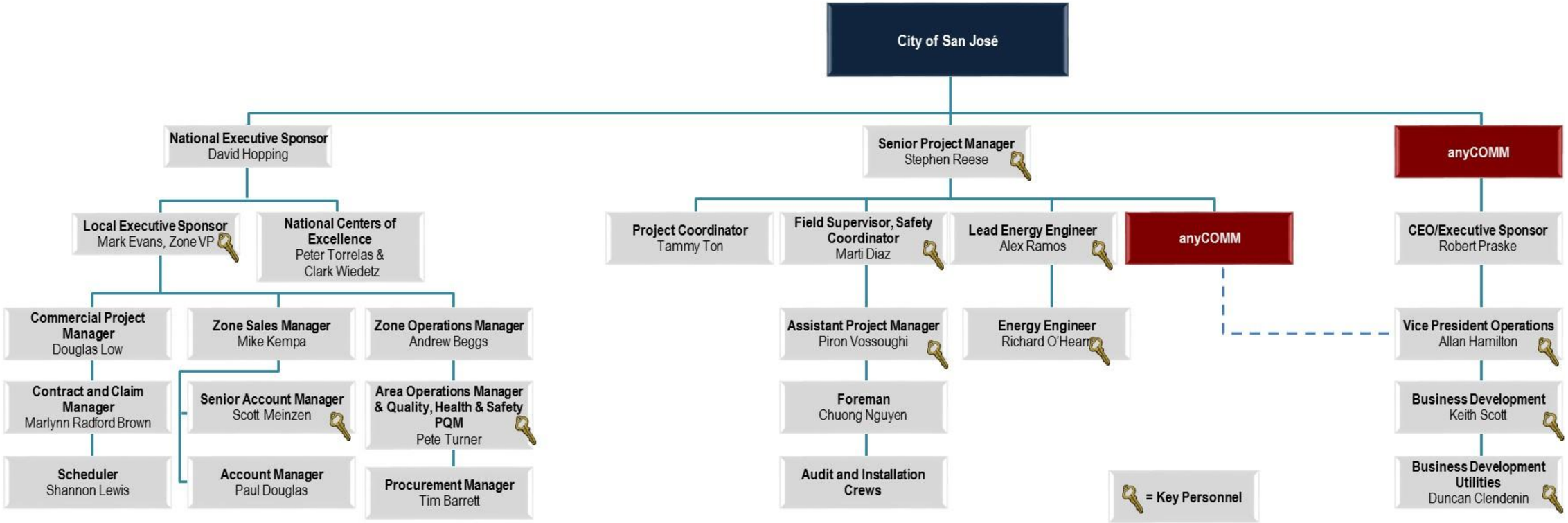
City of San José
National Executive Sponsor
David Hopping
Local Executive Sponsor
Mark Evans, Zone VP
National Centers of Excellence
Peter Torrelas & Clark Wiedetz
Commercial Project Manager
Douglas Low
Zone Sales Manager
Mike Kempa
Zone Operations Manager
Andrew Beggs
Contract and Claim Manager
Marlynn Radford Brown
Senior Account Manager
Scott Meinzen
Area Operations Manager & Quality, Health & Safety PQM
Pete Turner
Scheduler
Shannon Lewis
Account Manager
Paul Douglas
Procurement Manager
Tim Barrett
Senior Project Manager
Stephen Reese
Project Coordinator
Tammy Ton
Field Supervisor, Safety Coordinator
Marti Diaz
Lead Energy Engineer
Alex Ramos
anyCOMM
Assistant Project Manager
Piron Vossoughi
Energy Engineer
Richard O'Hearn
Foreman
Chuong Nguyen
Audit and Installation Crews
= Key Personnel
anyCOMM
CEO/Executive Sponsor
Robert Praske
Vice President Operations
Allan Hamilton
Business Development
Keith Scott
Business Development Utilities
Duncan Clendenin

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4.3.2 Key Personnel with Job Titles and Project Manager (11.4.3.2)

This is a very important, high-profile project with a City that represents worldwide leadership in innovation. Therefore, Siemens Industry, Inc. is naming:

David Hopping: U.S. President of Siemens Building Technologies, as Senior Executive Sponsor.

Mark Evans: Zone VP, is the Local Executive Sponsor

Robert Praske: CEO and Founder of anyCOMM Corporation, is the Executive Sponsor from anyCOMM.

Brief Executive Profiles are available in Appendix 1.2.

Under their leadership, the City of San José can trust that the Team of experienced professionals with whom you'll have day-to-day interaction will deliver superior results:

Stephen "Steve" Reese	Senior Project Manager
Martha "Marti" Diaz	Field Supervisor, Safety Coordinator
Piron Vossoughi	Assistant Project Manager
Alex Ramos & Richard O'Hearn	Energy Engineer(s)
Allan Hamilton	Vice President, Operations, anyCOMM
Pete Turner	Area Operations Manager, Quality, Health and Safety PQM
Scott Meinzen & Paul Douglas	Account Managers
Keith Scott	VP Strategy and Business Development, anyCOMM
Duncan Clendenin	Business Development Manager- Utilities, anyCOMM

An Organizational Chart is presented at the beginning of Appendix 1 and resumes for the Key Personnel are presented in Appendices 1.2 – 1.4

4.4 One Page Resume for each Key Personnel (Section 11.4.4)

Provide personal background information for each key member of the project team, including experience, education, membership in organizations/associations, etc. Do not include home addresses, telephone numbers, email addresses, etc. (11.4.4.1)
Resumes of the Key Personnel are presented in Appendices 1.2 and 1.3.

4.5 Streetlight Design and Engineering (Installation Proposals) (Section 11.4.5)

11.4.5.1 Proposers shall provide Key Personnel Assignments/Responsibilities (see Section 11.4.3) and a One Page Resume for each Key Personnel (see Section 11.4.4) for the streetlight design and engineering functions.
Under the Senior Project Management of Stephen ("Steve") Reese, Design and Engineering will be led by Alex Ramos and Richard O'Hearn.

Resumes for these experienced professionals are available in Appendix 1.4

4.6 Contractor or Installation Partner (Installation Proposals) (Section 11.4.6)

11.4.6.1 Proposers using a contractor or outside partner to install streetlights with wireless control and management, shall also provide Key Personnel Assignments/Responsibilities (see Section 11.4.3) and One Page Resume for each Key Personnel (see Section 11.4.4) for the contractor or installation partner.

Siemens will be staffing this Project without the use of sub-contractors. This direct-engagement allows the City of San José with a single source for responsibility of this Project. You can trust that Siemens will, from beginning-to-end, be your Partner in success.

11.4.7 Attachment E, Project Team and Financial Background Information Worksheet is required for all proposals.

Please See Attachment E

11.4.8 Attachment F, Previous Customer Reference Form is required for all proposals. Three references are required. Include a worksheet for each of at least 3 clients that would substantiate the proposer's experience. Contacts should be individuals who can verify performance on projects of a similar scope and budget as this project.

Please See Attachment F

11.4.8.1 Proposals using a contractor or installation partner must provide 3 Customer References (with completed Customer Reference Worksheet) for contractor/installation partner as well.

Siemens will be staffing this Project without the use of sub-contractors. This direct-engagement allows the City of San José with a single source for responsibility of this Project. You can trust that Siemens will, from beginning-to-end, be your Partner in success.

5. Attachment B: Proposal Specifics Worksheet

1. Please describe how you intend to achieve the outcomes and goals outlined in this RFP, particularly those specified in Sections 1 (Introduction) and 2 (Goals and Objectives)

Siemens Industry, Inc. will deliver the City of San José an expertly managed, comprehensive, LED streetlight retrofit, converting all of the 39,285 lights, completing the work before December 31, 2018.

While performing the turn-key retrofit of the City's lights, Siemens will install an anyCOMM node that will perform the functions of lighting control required in the City's RFP.

This work will be delivered to the City at a cost of $33,775,150.

Funding for this conversion, installation and system commissioning can be provided via a Tax-Exempt Municipal Lease, and three (3) Letters of Interest (LOIs) from financial institutions that may be able to provide this funding are provided in Appendix 3.

This funding method requires no additional public funds as lease payments will be supported by the energy savings **and** additional revenue generated via the Usage Fee (see below).

anyCOMM Holdings Corporation, a San-José based company will, at no charge, provide the City of San José with their next generation, advanced node that will perform the functions of lighting control required in the City's RFP.

These functions include:

- Dimming (0-10 volts)
- Ambient Light Detection (on/off)
- Electrical Performance (condition of the streetlight)
- Copper Theft Detection
- anyCOMM's next generation lighting control interface:
  - Manual control
  - Monitoring
  - Scheduling

The anyCOMM node can also perform:

- Power metering of the streetlights (PG&E-grade data metering)
- Power metering of the node (PG&E-grade data metering)

The anyCOMM node, together with access to the anyCOMM next generation lighting control, is provided to the City of San José at no charge.

This is a value of $26,124,525 provided at no charge.

In addition to performing the lighting functions, the anyCOMM node is a next generation networking device that provides the future capabilities for a robust set of Public Safety and Networking Communication benefits.

In exchange for providing the anyCOMM smart-nodes at no cost to the City, anyCOMM intends to monetize the networking capabilities of the node and create a unique revenue opportunity for the City of San José via payment of the City's Usage Tax (details described in "Concept" section below) and future revenues collected under the City's TelCo tax.

2. Describe the Community Benefit of your proposal, including aesthetics, reduction of clutter in the right-of-way, etc.

As we work with cities across the US, we see more and more city-owned, vertical real estate being used to perform multiple functions. The result is streetlight poles with cameras, communication dishes, sensors and other add-on devices. We call these "Frankenpoles". Not only are "Frankenpoles" ugly, they place the city at risk due to relying on multiple, low-bid suppliers and result in disjointed communication platforms.

Frankenpoles

The City of San José, The Capital of Silicon Valley, deserves better.

The proposed solution is an all-in-one advancement of the City's streetlights; namely a conversion of the light fixture to an LED solution together with a multi-function node that can provide the City with next generation lighting controls, sub-metering and revenue generation.

In addition to performing the lighting control functions, the anyCOMM node is a next generation networking device that provides the future capabilities for a robust set of Public Safety and Networking Communication benefits.

Each streetlight retrofit will include the installation of an anyCOMM node that possesses the following potential networking capabilities, available via a separate agreement between the City of San José and anyCOMM:

- Multiple VLAN networks for use by various City Departments
- Sub-metering of other, separate devices (if the City chooses to install any separate devices) in the future that would draw power from the streetlight
- 12, full color RGB LEDs, three on each side (can be used, for example, for traffic control)

Separately, anyCOMM will negotiate with third party providers for additional services, including:

- Ultra-fast Wi-Fi hotspot (creates a new, wireless network with coverage throughout the areas where the streetlight retrofit has been performed)
- LTE small cellular on each streetlight (improves cellular carrier service/coverage quality)
- Wireless Backhaul (for city-wide intranet with data transfer speeds of up to 1.7 Gbps)
- Fiber Optic Interconnection (allows node to bridge data transfer to a pre-existing, accessible fiber-optic connection)
- IoT (Internet-of-Things) Gateway (other devices can connect without the need for individual cellular modems)"

All communications are cyber-secure with 2048-bit encryption

Much like smart-phones provide the hardware and networking capability to allow for the creation of Applications ("Apps"), the anyCOMM node allows the potential for Apps to be created to utilize the device to perform additional, yet-to-be-discovered Services.

Siemens Community Outreach will include the co-development of a "Sustainability in STEM (Science, Technology, Education and Math) Education Program" designed to engage the youth community of the City of San José to advance the capabilities of the anyCOMM device.

One idea is a Siemens sponsored / hosted contest for students to develop applications that will use the data gathered by the node to improve City Services. Examples of the Concepts are traffic flow pattern (time, volume, direction, speed) data analytics, parking space availability, integration with wearable devices to track health contest participation, micro-climate mapping / weather reporting. We're as excited as you are to see what Community Benefits can be created by the youth of the Capital of Silicon Valley!

Siemens will be self-performing the installation. This direct-engagement provides the City of San José with a single source for responsibility of this Project. As a result, we can streamline the process for management of data related to utility inventory management and rebate processing. This will expedite the City's energy and financial savings. In addition, we can utilize local labor resources to create jobs in your / our community.

3. Describe the City assets that will be required to implement your proposal

The use of the 7-PIN Photocell Receptacle, or a hardwired solution connecting to the base of a post-top fixture.

Siemens will need to have access to the existing streetlights in order to retrofit the existing lights with LED luminaries.

The anyCOMM node will need to be connected to the 7-PIN Photocell Receptacle on the top of the cobra-head/mast arm fixtures. A different model of the anyCOMM node will be mounted at the base of the globe of the decorative fixtures (see Appendix 2.3).

anyCOMM will enter into a site-lease agreement with the City of San José for the right to occupy this space. Payment of this lease will be aligned with the proposed rates of the Usage Fee detailed in Attachment C and the requested modifications to the Exemplar Agreement in Section 11 "EXCEPTIONS FROM anyCOMM HOLDINGS COMPANY, 3 – Usage Fee".

4. Has your proposal been implemented elsewhere?

Siemens has performed the conversion / retrofit of over 600,000 streetlights.

There are currently over 300 anyCOMM nodes installed in multiple pilot locations across North America.

The City of San José has had a demonstration of the anyCOMM node since August 2015.

5. Have you (or your installation partner) completed installations of LED streetlights in other locations?

Yes.

Siemens has installed over 600,000 streetlights across the US.

6. Will you be in any way attaching or placing equipment or otherwise utilizing City right-of-way, facilities, or property?

Yes.

The anyCOMM node will be connected to the 7-PIN Photocell Receptacle on the top of the cobra-head/mast arm fixtures. A different model of the anyCOMM node will be mounted at the base of the globe of the decorative fixtures (see Appendix 2.3).

anyCOMM will enter into a site-lease agreement with the City of San José for the right to occupy this space. Payment of this lease will be aligned with the proposed rate of the Usage Fee detailed in Attachment C and the requested modifications to the Exemplar Agreement in Section 11 “EXCEPTIONS FROM anyCOMM HOLDINGS COMPANY, 3 – Usage Fee”.

7. Will you be placing telecommunications or other equipment on City light poles?

Yes.

The anyCOMM node will be connected to the 7-PIN Photocell Receptacle on the top of the cobra-head/mast arm fixtures. A different model of the anyCOMM node will be mounted at the base of the globe of the decorative fixtures (see Appendix 2.3)

anyCOMM will enter into a site-lease agreement with the City of San José for the right to occupy this space. Payment of this lease will be aligned with the proposed rate of the Usage Fee detailed in Attachment C and the requested modifications to the Exemplar Agreement in Section 11 "EXCEPTIONS FROM anyCOMM HOLDINGS COMPANY, 3 – Usage Fee".

8. Will your project limit or prevent access to City light poles or facilities by other providers or vendors due to technological or space factors or for other reasons?

Yes.

Under this proposal, the 7-PIN photocell receptacle will not be available for any purpose other than accommodating the anyCOMM node.

9. Does your proposal require a power source for any use other than powering the individual streetlights?

Yes.

The anyCOMM node plugs into the streetlight's 7-PIN Photocell Receptacle.

The anyCOMM node requires minimal power to perform the lighting control function (to be included in streetlight power budget).

See Attachment I.

The anyCOMM node can meter the electricity consumed by the streetlight only, plus it can also meter the power consumed by the node.

Additional power that is required to power the node beyond power requirements for the streetlight control and the lighting control network will be metered separately and reported in the format required by PG&E.

10. For proposers answering "yes" to question 9:

a. Do you have an understanding that PG&E has limitations on the size and types of uses that may use streetlight circuits for power?

Yes. See Attachment I.

b. Are you willing to provide a sample piece of equipment for PG&E testing, as well as any and all technical information they require?

Yes. See Attachment I.

11. Does your proposal require backhaul?

No.

Backhaul for the anyCOMM node to perform the lighting controls function will be provided via a private network at no charge to the City.

12. Does your proposal require the placement of utility cabinets, vaults, or other equipment in the City right-of-way?

No.

13. Does your proposal reduce the number of utility cabinets, vaults, etc. in the City right-of-way?

No.

6. Attachment C: Proposal Valuation and Cost Form with Designated Responsible Parties

Name of Proposer:
Siemens Industry, Inc. teamed together with anyCOMM Holdings Corporation

Total Stated Value of Proposal:

Siemens will provide a turn-key, comprehensive, self-performed LED streetlight retrofit including installation of the anyCOMM node and commissioning of the anyCOMM lighting control system.	**Value:**	**$33,775,150**
	Cost to the City of San José:	**$33,775,150**
anyCOMM will provide 39,285 anyCOMM nodes along with access to anyCOMM's next generation lighting controls.	**Value:**	**$26,124,525**
	Cost to the City of San José:	**$0**
	TOTALS	
	Total Value:	**$59,899,675**
	Total Cost to the City of San José:	**$33,775,150**

Additional, Proposed Revenue

anyCOMM Year 1 Usage Fee	$417,420
anyCOMM's Total Usage Fees Years 1-15	$8,767,900
anyCOMM's Total Usage Fees Years 1-25	$17,187,626

Additional, To Be Determined, Revenue
anyCOMM will pay the City of San José Usage Fees and collect and forward to the City fees paid in accordance with the City's TelCo Tax. anyCOMM is working with cellular providers / carriers (including AT&T, a communication partner for this Proposal), Wi-Fi and other content providers to develop service contracts.

Proposal Type:
_____ In Lieu Payment (Minimum value must be more than $2 million)

_X__ LED Streetlight/Controller Unit Installation
(Minimum proposal must be for an entire zone)

Term of Proposal (up to 25 years):
Street lighting retrofit + installation of the anyCOMM node is proposed to be funded through a Tax-Exempt Municipal Lease Purchase Agreement. The term of this lease can be determined by the City of San José. TEMLP financing can be sourced via a RFP. Letters of Intent from three (3) candidates (Siemens Public, Inc. / Siemens Financial Services, Bank of America and PNC Bank) are provided in Appendix 3.

The anyCOMM device operates by accessing the photocell receptacle on the new, LED lighting fixture(s). Access to that photocell socket is requested by anyCOMM under the **Exemplar Agreement for Telecommunications Projects Master Agreement** for a term of 15 years, with two (2), five-year extension options (see **Section 11 – Response to Section 21, EXCEPTIONS FROM anyCOMM HOLDINGS COMPANY Exemplar Agreements for Telecommunications Projects Master Agreement 1 and 2).**

Proposal Description:
Siemens Industry, Inc. will deliver the City of San José an expertly managed, comprehensive, LED streetlight retrofit, converting all of the 39,285 lights in the four (4) zones. While performing the turn-key retrofit of the City's lights, Siemens will install an anyCOMM node that will perform the functions of lighting control required in the City's RFP. Siemens will commission the lighting controls function and provide a 1-year material and workmanship warranty as described in Section 3. This work will be delivered to the City at a cost of $33,775,150.

Funding for this conversion, installation and system commissioning can be provided via a Tax-Exempt Municipal Lease, and three (3) Letters of Interest (LOIs) are provided in Appendix 3 from financial institutions that may be able to provide this funding.

anyCOMM Holdings Corporation will provide the City of San José with their next generation, advanced node that will perform the functions of lighting control required in the City's RFP.

These functions include:
- Dimming (0-10 volts)
- Ambient Light Detection (on/off)
- Electrical Performance (condition of the streetlight)
- Copper Theft Detection
- anyCOMM's next generation lighting control that also includes:
  - Manual control
  - Monitoring
  - Scheduling

The anyCOMM node can also perform:
- Power metering of the streetlights (PG&E-grade data metering)
- Power metering of the node (PG&E-grade data metering)

The anyCOMM node, together with access to the anyCOMM next generation lighting control, is provided to the City of San José at no-charge.
This is a value of $26,124,525 provided at no-charge.

In addition to performing the lighting functions, the anyCOMM node is a next generation networking device that, via a separate Agreement between the City of San José and anyCOMM, provides the future capabilities for a robust set of Public Safety and Networking Communication benefits.

In exchange for providing the anyCOMM smart-nodes at no cost to the City, anyCOMM intends to monetize the networking capabilities of the node and create a unique revenue opportunity for the City of San José via payment of the City's Usage Tax (details described in "Concept" section below).

Please describe your concept.
Through this RFP process, the City of San José has stated that its goals are to:

Maximize the Public Benefits through the Highest Value, adopt a solution that is implemented with a high level of practicality, and work with an experienced Partner/s, all while minimizing clutter in the Public-Right-of-Way and generating revenue.

At Siemens, we deliver "Ingenuity for Life."™

(Ingenuity = clever, original, inventive).

Highest Value = While we don't know what other Proposals the City will receive, we present here a Proposal that delivers over $26 million of state-of-the-art equipment at no-charge to the City in addition to a comprehensive, professionally managed, single source of accountability streetlight retrofit delivered by a Global Leader in intelligent infrastructure.

This proposed solution also has no software license cost and no on-going software maintenance fees providing the City of San José with a very compelling Total Cost of Ownership value over the proposed term.

The proposed solution provides the City of San José with an additional source of revenue from the Usage Fee that will be paid by anyCOMM and future, to be determined revenue potential via the payment of the TelCo tax generated by cellular/wireless carriers that utilize the anyCOMM devices.

With other cities, we have been able to identify millions of dollars worth of pre-existing data service agreements that can be avoided once the anyCOMM solution is put into place. Also, cities often find that the Siemens + anyCOMM solution could address many planned Capital Expenses (traffic cameras, license plate readers, parking space detectors, etc.), thereby savings cities the out-of-pocket expense for redundant systems and service contracts.

Maximizing Public Benefits = A comprehensive conversion to LED with one, very experienced Partner that is responsible for all aspects of the conversion provides the City the best chance for an efficient, safe, high-quality conversion to LED within the time-frame that the City desires (before the end of 2018).

The anyCOMM node provides robust lighting controls and energy metering together with a path to a vast set of future Public Safety and Networking functionality achieved via a contract directly with anyCOMM.

High Level of Practicality / Experienced Partners = Siemens brings the experience of having been responsible for the installation of over 600,000 streetlights.

The anyCOMM solution has had installations in the real-world for over two (2) years and currently has pilot installations functioning in the City of San José, having already cleared many Legal / Policy hurdles.

The City of San Jose, anyCOMM and PG&E have worked together for the demonstration project currently underway to develop a model for collaborative partnership.

Minimizing Clutter in the Public Right-of-Way = the (5"x5"x2") anyCOMM node sits on top of the cobra-head luminaire or at the base of the decorative fixture all while providing superior lighting controls functionality together with immense Pubic Safety and Networking capabilities.

The implementation of this Proposed Solution is simple, clever, original and inventive matching the City's goals together with Siemens' goal of "Ingenuity for Life".

What City assets do you want to use?

During installation of the LED fixtures, an anyCOMM node will be installed on the Photocell Receptacle of each Roadway/Cobra-head fixture and at the base of each Special/Ornamental/Decorative fixture (see Appendix 2.3 for images of the top-of-fixture node and the ornamental/decorative fixture node).

This node will perform the lighting controls function utilizing its own, built-in, private backhaul network.

This is a very practical solution / implementation which minimizes clutter in public right-of-ways while providing robust lighting controls and a pathway to an immense feature set of Public Safety and Networking benefits.

What benefit will your proposal provide in return?

The City of San José will benefit in many ways:

- This Proposal provides a comprehensive, turn-key, LED retrofit of all of the City's 39,285 streetlights, delivered with Siemens high-quality, professional management together with anyCOMM's next generation lighting control.
- The City will receive $26,124,525 of equipment (39,285 anyCOMM nodes) at no-charge.
- The anyCOMM node provides a pathway toward the future capabilities for a robust set of Public Safety and Networking Communication benefits that can be accessed through a separate agreement between the City of San José and anyCOMM.

Each streetlight retrofit will include the installation of an anyCOMM node that possesses the following potential networking capabilities, available via a separate agreement between the City of San José and anyCOMM:

- Multiple VLAN networks for use by various City Departments
- Sub-metering of other, separate devices (if the City chooses to install any separate devices) in the future that would draw power from the streetlight
- 12, full color RGB LEDs, three on each side (can be used, for example, for traffic control)

Separately, anyCOMM will negotiate with third party providers for additional services, including:

- Ultra-fast Wi-Fi hotspot (creates a new, wireless network with coverage throughout the areas where the streetlight retrofit has been performed)
- LTE small cellular on each streetlight (improves cellular carrier service/coverage quality)
- Wireless Backhaul (for city-wide intranet with data transfer speeds of up to 1.7 Gbps)
- Fiber Optic Interconnection (allows node to bridge data transfer to a pre-existing, accessible fiber-optic connection)
- IoT (Internet-of-Things) Gateway (other devices can connect without the need for individual cellular modems)"

All communications are cyber-secure with 2048-bit encryption

Additionally, each anyCOMM node contains a suite of sensors that can enhance Public Safety.

- Omni-directional video via four (4), high-definition cameras.
  - Visual data is stored for up to 30-days on a DVR that is located on-board the node. Content can also available for live, Public Safety streaming.
  - In addition to using this feature to support Public Safety efforts, many cities see this as a tool to deter or pursue illegal dumping offenders.
- Four (4) high-definition audio sensors to detect gunshots, car crashes or graffiti in action.
- Two-way Public Address (for police, emergency or public entertainment) – Optional equipment required.

What revenues will the City receive?

anyCOMM is working with cellular providers / carriers, Wi-Fi and other content providers to develop service contracts that will significantly improve the quality of life in San José. The City is seeking to generate $300,000 - $900,000 additional revenue through any telecommunication proposal associated with this RFP. In addition to the (yet to be determined) Telecommunication Taxes, anyCOMM is proposing a modification of the Usage Tax that will account for the city-wide coverage of 39,285 nodes with revenues paid to the City of San José as detailed in various places in this RFP response, and in the following table.

Project Value					
Projected Revenues: Please detail any revenues the City is projected to receive over the course of the proposal timeline, the source of said revenues, how they will be calculated, and any other relevant information					
#	**Source**	**Qty**	**Unit of Measure**	**Unit Revenue**	**Projected Revenue**
1	Proposed Usage Fee (**anyCOMM pays City of San José**)	39,285	Per node / per year	$12.00	$ 471,420 / yr.
anyCOMM proposes an annual escalator of 3%. 15-year total revenue: $ 8,767,900 25-year total revenue: $17,187,626					
	Total Projected Revenues				$417,420 / yr. 1
	Total Projected Revenues				$8,767,900 / yr. 1-15
	Total Projected Revenues				$17,187,626 / yr. 1-25
Value of other items: Please delineate any quantifiable benefits to the City that are not direct revenues.					
#	**Source**	**Qty**	**Unit of Measure**	**Unit Value**	**Total Value**
1	anyCOMM smart-node	39,285	Per node	$ 665	$26,124,525
	Total Additional Value (provided at no-charge to City of San José)				**$26,124,525**

LED Streetlight/Controller Unit Installation Proposals

The matrix below delineates steps and items required to provision LED streetlights and controller units. Using the matrix, delineate which items will be Proposer Responsibilities and which will be City Responsibilities, and the cash value.

Which zones will you be selecting for installation of LED streetlights and wireless controllers?

- ☒ Central San José 11,090 lights
- ☒ South San José 10,280 lights
- ☒ North-East San José 10,780 lights
- ☒ West San José 7,135 lights

#	Description	Qty	Unit of Measure	Unit Cost	Extended Cost	Responsible Party
Luminaires and Equipment						
1	Lightheads / luminaires (Roadway / Cobra-Head)	34,300	$	$ 295	$ 10,118,500	Siemens
1a	Lightheads / luminaires (Ornamental / Decorative / Special)	4,985	$	$ 1,184	$ 5,902,240	Siemens
2	Luminaire controller (Schreder/OWLET)			N/A		
2a	Luminaire controller (alternate system)	39,285	$	$ 0	$ 0	anyCOMM
3	Wireless Luminaire Device (if separate from luminaire controller)			N/A		
4	Wireless Gateway (quantity = # of gateways)			N/A		
5	Temporary Communication from Gateway to Central Software (quantity = # of gateways multiplied by 6 months)			N/A		
6	Software License (one-time purchase)	1	License	No Charge	No Charge	anyCOMM
7	Annual Software Maintenance Fee (Three Year Minimum)	3	Annual Fee	No Charge	No Charge	anyCOMM
8	Annual Software Maintenance Fee (Contract Extension)	1	Annual Fee	No Charge	No Charge	anyCOMM
9	Power (if required for any use other than the luminaire itself)			N/A		
10	Backhaul (if applicable)			N/A		
Professional Services						
12	Engineering				$ 113,700	Siemens
13	Permitting	39,285	$	$ 80	$ 3,142,800	Siemens
14	CEQA Clearance	Assumed to be Exempt per RFP Q/A 140.15-16-01				
15	Project Management				$ 3,935,210	Siemens
16	Lighting Controls System Set-up				$ 916,000	Siemens
17	Auditing City's Inventory	39,285	$	$ 16.75	$ 658,025	Siemens
Construction						
18	Installation (Roadway / Cobra-Head + Luminaire Controller)	34,300	$	$ 220	$ 7,546,000	Siemens
19	Installation (Ornamental / Decorative / Special + Luminaire Controller)	4,985	$	$ 250	$ 1,246,250	Siemens
20	Disposal / recycling of old lightheads	39,285	$	$ 5	$ 196,425	Siemens

Proposed pricing is good through August 25, 2016

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7. Attachment D: Proposal Certification Form

Proposing Firm Name:	Siemens Industry, Inc.
Address	**N. American HQ**: 1000 Deerfield Parkway Buffalo Grove, IL 60089
	Local Branch: 25821 Industrial Blvd. Hayward, CA 94545
Telephone:	**Local Branch**: 1 (510) 783-6000
Facsimile:	**Local Branch:** 1 (510) 293-2100
E-Mail:	**Main Contact:** scott.meinzen@siemens.com
Contact Person Name and Title	Scott Meinzen 1 (510) 305-0967
	Senior Business Development Manager

Proposer Representations

1. Proposer did not, in any way, collude, conspire or agree, directly or indirectly, with any person, firm, corporation or other Proposer in regard to the amount, terms, or conditions of this proposal.

2. Proposer additionally certifies that neither Proposer nor its principals are presently disbarred, suspended, proposed for disbarment, declared ineligible or voluntarily excluded from participation in this transaction by any federal department or agency, any California State agency, or any local governmental agency.

3. Proposer acknowledges that all requests for deviations, exceptions, and approved equals are enclosed herein and that only those deviations, exceptions, and approved equals included in the RFP document or permitted by formal addenda are accepted by the City.

4. Proposer did not receive unauthorized information from any City staff member or City Consultant during the Proposal period except as provided for in the Request for Proposals package, formal addenda issued by the City, or the pre-proposal conference.

5. Proposer certifies that this submission includes full consideration of the information and/or requirements identified in on the City's BidSync page for Bid #15-16-01 - Innovative LED Streetlight Replacement with addenda numbered up to and through #13

6. Proposer hereby certifies that the information contained in the proposal and all accompanying documents is true and correct.

7. Please check the appropriate box below:

☐ If the proposal is submitted by an individual, it shall be signed by him or her, and if he or she is doing business under a fictitious name, the proposal shall so state.

☐ If the proposal is submitted by a partnership, the full names and addresses of all members and the address of the partnership, the full names and addresses of all members and the addresses of the partnership, the full names and addresses of all members and the address of the partnership shall be stated and the proposal shall be signed for all members by one or more members thereof

☒ If the proposal is submitted by a corporation, it shall be signed in the corporate name by an authorized officer or officers.

☐ If the proposal is submitted by a limited liability company, it shall be signed in the corporate name by an authorized officer or officers.

☐ If the proposal is submitted by a joint venture, the full names and addresses of all members of the joint venture shall be stated and it shall be signed by each individual.

By signing below, the submission of a proposal with all accompanying documents shall be deemed a representation and certification by the Proposer that they have investigated all aspects of the RFP, that they are aware of the applicable facts pertaining to the RFP process, its procedures and requirements, and that they have read and understand the RFP.

☒ If the proposal is submitted by a corporation, it shall be signed in the corporate name by an authorized officer or officers.

☐ If the proposal is submitted by a limited liability company, it shall be signed in the corporate name by an authorized officer or officers.

☐ If the proposal is submitted by a joint venture, the full names and addresses of all members of the joint venture shall be stated and it shall be signed by each individual.

By signing below, the submission of a proposal with all accompanying documents shall be deemed a representation and certification by the Proposer that they have investigated all aspects of the RFP, that they are aware of the applicable facts pertaining to the RFP process, its procedures and requirements, and that they have read and understand the RFP.

Authorized Representative Name (sign name):	
Authorized Representative Signature (print name):	MARK EVANS
Authorized Representative Title (print title):+	ZONE VICE-PRESIDENT & GM
Complete additional signatures below as required per # 7 above	
Authorized Representative Name (sign name):	
Authorized Representative Signature (print name):	
Authorized Representative Title (print title):+	
Authorized Representative Name (sign name):	
Authorized Representative Signature (print name):	
Authorized Representative Title (print title):+	

8. Attachment E: Project Team and Financial Background Information Worksheet

All information requested in the Worksheet shall be furnished by the Proposer, and shall be submitted with the Proposal. Statements shall be complete and accurate and in the form requested. Omission, inaccuracy, or misstatement may be cause for the rejection of a proposal.

_X_ Proposer confirms that they meet the requirements stated above.

Part 1 – Corporate Information Background Questions (Required)

1. If a corporation, answer the following:

A. When incorporated?	11/28/1972
B. In what state?	Delaware
C. Authorized to do business in California?	Yes
If so, what date?	October 8, 1998

Seimens Industry, Inc.'s Parent Company is Siemens AG.

Siemens archived audited financial statements can be found at the following web-site:
http://www.siemens.com/investor/en/financials.php

Siemens multi-year over-view can be found at the following web-site:
http://www.siemens.com/investor/en/financials/multi_year_overview.htm

Please search for Siemens public publications by using the following web-site:
http://www.siemens.com/investor/en/financials/publicationfinder.php
Here you will find:

- Quarterly and Annual Reports
- Earnings Releases
- Annual Documents
- SEC Filings
- Annual Shareholder Meetings
- Corporate Governance
- Legal Proceedings

2. If NOT a corporation, answer the following:

N/A

3. Have you ever had a bond or surety denied, canceled, or forfeited?

NO

If yes, state name of bonding company, date, amount of bond and reason for such cancellation or forfeiture in an attached statement.

4. Have you ever declared bankruptcy or been declared bankrupt?

NO

If yes, state date, court jurisdiction, docket number, amount of liabilities and amount of assets.

5*. Has your company ever had any agreements cancelled?*
YES
If yes, give details.
Siemens Industry, Inc. is involved in wide ranging construction projects; as such we perform in excess of 45,000 projects in the U.S. annually in which a contract may have been cancelled for various reasons such as convenience, renewal options or by mutual agreement, etc. None of which are of a material nature, individually or collectively, as to adversely impact its ability to completely and satisfactorily perform any of its projects.

6. Has your company ever been sued by any organization for issues pertaining to fee payment, performance, or other related issues?
YES
If yes, give details.
Siemens Industry, Inc. ("SII"), a subsidiary member of Siemens Corporation, is a multi-billion dollar company involved in wide ranging construction projects. As such Siemens Industry, Inc. has been involved in miscellaneous litigation (e.g., collection of fees, workers' compensation, auto liability, general liability, etc.) arising out of its business, none of which are of a material nature, individually or collectively, as to adversely impact its ability to completely and satisfactorily perform any of its projects.

7. Are you currently engaged in merger or acquisition negotiations, or do you anticipate entering into merger or acquisition negotiations within the time period of this Request for Proposal?
NO
To the best of our knowledge and belief, the Building Technologies Division of Siemens Industry, Inc. is not engaged in any merger or acquisition that would affect our ability to perform the work of this contract.
If yes, give details. Attach copy of such agreement(s).

8. Are you now engaged in any litigation which does now or could in the future affect your ability to pay fees or perform under this Agreement?
NO
If yes, give details.

9. Has your company or subcontractors for this project ever been disbarred, suspended, declared ineligible or voluntarily excluded from participation in this transaction by any federal department or agency, any California State agency, or any local governmental agency?
NO
SII has not been disbarred, suspended, declared ineligible or voluntarily excluded from participation.
If yes, give details.
The undersigned hereby declares under penalty of perjury that all statements, answers and representations made in this questionnaire are true and accurate, including all supplementary statements hereto attached. In the case of a corporate Proposer, the signature of one duly authorized representative is sufficient.

March 30, 2016

Signature **Date**

Mark Evans

(Please Print or Type Name)

Zone Vice President and General Manager

Title

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9. Attachment F: Previous Customer Reference Form

Proposer must submit three references using this form. References must be current (within the last 3 years) customer references where the proposed system has been implemented and accepted and where the Proposer's Contractor services have been successfully demonstrated.

9.1 Reference 1 Form

Name of Customer	City of Sacramento, CA	
Customer Address	915 I St,	
	Sacramento, CA 95814	
Customer Contact Name	Sompol Chatusripitak	
Customer Contact Telephone	(916) 690-6408	
Customer E-mail	SChatusripitak@cityofsacramento.org	
Date of Agreement / Contract	March 2015 – March 2016 (complete)	
Period of Performance	From:	To:
Type of Contract	Firm Fixed Price ___**X**___	Not to Exceed_____
	Time & Material:_____	Cost + Fixed Fee:_____
	Other (Specify):_____	
What is/was the dollar value of the contract?	$4,920,000	
If Contract was terminated or cancelled for convenience, please indicate the circumstances:		Project Successfully Completed and Saving 104% of Forecasted Savings
Is this a reference for work Proposer has performed (Yes or No)		Yes

Provide a detailed description of work that you performed for this customer, including the size of the project, specifications for the project, technology deployed, or other details. If the customer is no longer using the Proposer's technology, provide a brief description explaining the reason(s). (Attach additional sheets if necessary.)

The City of Sacramento contracted with Siemens to deliver guaranteed utility cost savings across the City.

Phase 1 of our work ($4,920,000) consisted of a firm-fixed Contract to:

- Audit, Badge and Reconcile Billing Data for 33,761 lights.
- Final Total = 35,054 lights

- Retrofit 9,226 mast-arm / cobra-head street lights.
- Final Total = 9,006 lights (220 additional fixtures furnished to the City)

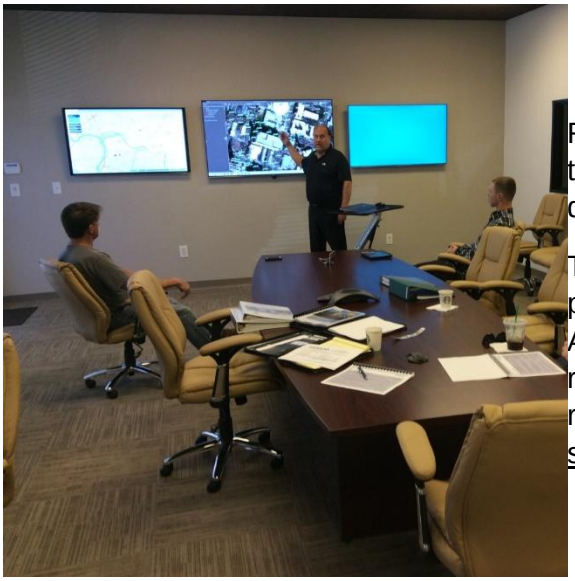
- Real-Time Data Tracking Resulted in >$85,000 in additional energy savings from expedient utility reconciliation

Under Mayor Kevin Johnson, the City of Sacramento made the commitment to advance its Sustainability Goals. Through a competitive RFP Process, the Capital of California selected Siemens to address energy efficiency upgrades in a phased approach.

Siemens has completed the audit of the City's entire streetlight population, auditing and badging over 35,000 streetlights, and has retrofit all of the city's cobra-head lights. In alignment with the City's RFP, the City Council recently approved another phase of work for Siemens, and we will now be addressing over 35 City facilities.

Thanks in part to daily Safety meetings, crews performed the streetlight retrofit with zero safety incidents.

A detailed audit of all of the City's streetlights produced an amazing map that hung on the wall in the Conference Room of our Field Office, providing every member of the Crew along with City Staff and City Council members an image of their entire City's streetlight portfolio.

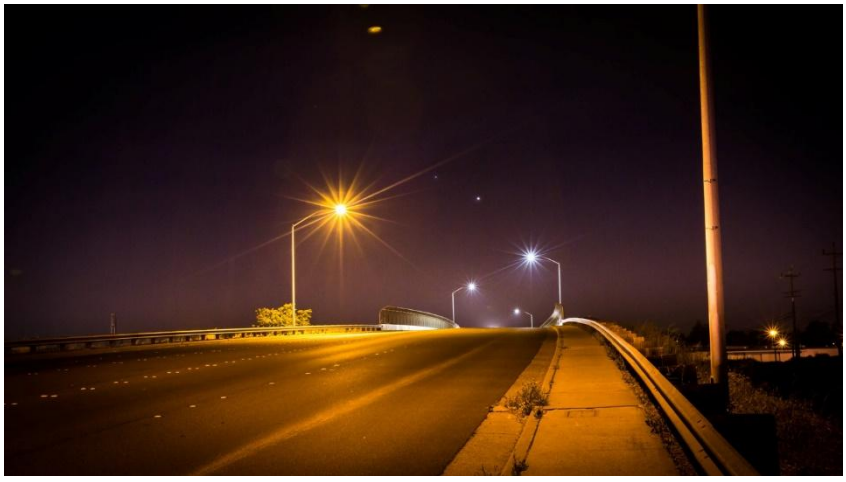


Real-time data tracking gave Project Managers the ability to identify and resolve field issues quickly.

The auditing, badging and retrofit work was performed using real-time data management. After seeing the accuracy and speed of the retrofit reconciliation data, SMUD agreed to advance the rate switch, providing over $85,000 in additional savings to the City of Sacramento.

Arden Fair Mall before retrofit

Arden Fair Mall after retrofit



An image from mid-installation shows the legacy high-pressure sodium lighting in the foreground and the new, clean, white, bright LED light in the background.

9.2 Reference 2 Form

Name of Customer	City of Merced, CA	
Customer Address	678 West 18th Street Merced, CA 95340	
Customer Contact Name	John Bramble (Retired) City Manager	
Customer Contact Telephone	720-862-5831	
Customer E-mail	Bramblejohn074@gmail.com	
Date of Agreement / Contract	August 2012 (start)	
Period of Performance	From: 8/15/2012	To: 7/28/ 2014
Type of Contract	Firm Fixed Price ___**X**___	Not to Exceed_____
	Time & Material:_____	Cost + Fixed Fee:_____
	Other (Specify):_____	
What is/was the dollar value of the contract?	$7,200,000	
If Contract was terminated or cancelled for convenience, please indicate the circumstances:		Project Successfully Completed and Saving 106% of Guarantee
Is this a reference for work Proposer has performed (Yes or No)		Yes. Scope of work included Retrofit of 5,800 lights

Provide a detailed description of work that you performed for this customer, including the size of the project, specifications for the project, technology deployed, or other details. If the customer is no longer using the Proposer's technology, provide a brief description explaining the reason(s). (Attach additional sheets if necessary.)

The City of Merced contracted with Siemens to deliver guaranteed utility cost savings across the City.

This $7,200,000 Contract consisted of:

- Replacement/retrofit of 5,800 streetlights and lighting at City Airport
- Energy & water efficiency improvements at 17 City facilities including interior/exterior lighting
- HVAC improvements, DDC controls, building envelope upgrades, retro-commissioning
- Irrigation controller upgrades
- Fully-controllable, daylight-adjusting, occupancy-sensitive interior LED lighting at City Hall

The City of Merced was hit hard by the “Great Recession”. The City’s infrastructure was in need of an upgrade, but the City’s Capital Budgets were exhausted.

The idea of using energy savings to help fund infrastructure upgrades was very appealing, but the City knew it had to turn to a Partner it could trust to deliver results, plus use local labor in an effort to stimulate the local economy.

The City selected Siemens and we cooperatively designed and built a project that advanced the City’s Environmental Goals, required no capital investment, modernized infrastructure and boosted the local economy by utilizing local labor.

John Bramble (retired) was the City Manager throughout the engagement and he will gladly speak about Siemens dedication to working with the City to deliver on our commitments.

This Project is profiled because it is a local reference, and included the retrofit of over 5,800 streetlights.

John Bramble (retired) City Manager talks about the benefits of selecting Siemens to advance the City’s Environmental Goals

John Bramble (retired) City Manager addresses elementary school children at Project Kick-off, promising a brighter, cleaner tomorrow

Use of Local Labor provided a boost to the economy of the City of Merced

The City of Merced celebrates the installation of their final, new efficient streetlight

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9.3 Reference 3 Form

Name of Customer	Cape Light Compact	
Customer Address	3195 Main St.	
	Barnstable, MA 02630	
Customer Contact Name	Meredith Miller	
Customer Contact Telephone	508-375-6444	
Customer E-mail	mmiller@capelightcompact.org	
Date of Agreement / Contract	10/1/2013	
Period of Performance	From: November 2013	To: January 2014
Type of Contract	Firm Fixed Price _____	Not to Exceed ___X____
	Time & Material:_____	Cost + Fixed Fee:_____
	Other (Specify):_____	
What is/was the dollar value of the contract?	$5,400,000	
If Contract was terminated or cancelled for convenience, please indicate the circumstances:		Project Successfully Completed
Is this a reference for work Proposer has performed (Yes or No)		Yes

Provide a detailed description of work that you performed for this customer, including the size of the project, specifications for the project, technology deployed, or other details. If the customer is no longer using the Proposer's technology, provide a brief description explaining the reason(s). (Attach additional sheets if necessary.)

Siemens completed a LED street and area lighting retrofit of over 16,000 fixtures on Cape Cod and Martha's Vineyard.

Scope of the Project included

- Pre-installation field audit of the entire inventory
- Creation of a mobile GIS tool and on-going street light maintenance.

The project was completed during a tight timeline, to be ready in time for the summer tourist season, while meeting the local needs of 21 communities.

This project reduced annual energy consumption by 70% and annual maintenance cost reduction of nearly 75%.

Financing was completed via a guaranteed energy savings performance contract.

Cape Light Compact

Municipal LED Streetlight Demonstration Project

Rte 28 (front of State Police), Yarmouth Comparison

looking West

BEFORE (high pressure sodium)

AFTER (LED)

Provincetown Aerial Photos

Before

After

9.4 Reference 4 Form

Name of Customer	New Bedford, MA	
Customer Address	133 Williams St. New Bedford, MA 02740	
Customer Contact Name	Scott Durkee, Director of Energy Office	
Customer Contact Telephone	508-961-3014	
Customer E-mail	SDurkee@newbedford-ma.gov	
Date of Agreement / Contract	Contract July 2014	
Period of Performance	From: September 2014	To: May 2015
Type of Contract	Firm Fixed Price _____	Not to Exceed ___X____
	Time & Material:_____	Cost + Fixed Fee:_____
	Other (Specify):_____	
What is/was the dollar value of the contract?	$5,400,000	
If Contract was terminated or cancelled for convenience, please indicate the circumstances:		Project Successfully Completed
Is this a reference for work Proposer has performed (Yes or No)		Yes
Provide a detailed description of work that you performed for this customer, including the size of the project, specifications for the project, technology deployed, or other details. If the customer is no longer using the Proposer's technology, provide a brief description explaining the reason(s). (Attach additional sheets if necessary.)		
Siemens completed a LED street light retrofit of 10,000 fixtures in the Massachusetts city. Scope of the Project included ▪ Pre-installation field audit of the entire inventory ▪ Creation of a mobile GIS tool and on-going street light maintenance. ▪ Retrofit of cobra-head and decorative fixtures and traffic signals ▪ The project was completed while interfacing with both MAPC and Local Community Leaders. This project reduced annual energy consumption by 60-70% Financing was completed via a guaranteed energy savings performance contract.		

New Bedford CFO, Ari Sky, watching our technician install the first LED retrofit during Mayor's Press Conference (September 2014)

Safer streets of New Bedford, thanks to the efficiently performed retrofit.

Intersections are better illuminated

Siemens crews use the “Think Safety” motto to deliver the retrofit of over 10,000 streetlights without a single safety incident.

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9.5 Reference 5 Form

Name of Customer	City of Vacaville, CA	
Customer Address	650 Merchant St. Vacaville, CA 95688	
Customer Contact Name	James Loomis	
Customer Contact Telephone	707-449-5190	
Customer E-mail	jloomis@cityofvacaville.com	
Date of Agreement / Contract		
Period of Performance	From: 12/20/2012	To: 6/9/2015
Type of Contract	Firm Fixed Price ___X___	Not to Exceed___ ____
	Time & Material:_____	Cost + Fixed Fee:_____
	Other (Specify):_____	
What is/was the dollar value of the contract?	$ 13,062,945	
If Contract was terminated or cancelled for convenience, please indicate the circumstances:		Project Successfully Completed
Is this a reference for work Proposer has performed (Yes or No)		Yes

Provide a detailed description of work that you performed for this customer, including the size of the project, specifications for the project, technology deployed, or other details. If the customer is no longer using the Proposer's technology, provide a brief description explaining the reason(s). (Attach additional sheets if necessary.)

Siemens completed a large-scale, Performance Contract for the City of Vacaville. The City chose to deploy LED streets for their major arterials, and induction lighting in their residential areas for a total of ~4,000 streetlights. Additionally, Siemens performed a comprehensive water meter upgrade including AMR and energy efficiency upgrades to 15 City Facilities.

Scope of the Project included

- Pre-installation field audit of the entire streetlight inventory and retrofit of 3,950 lights
- Replacement of 19,000 water meters.
- Energy Efficiency (Interior/Exterior Lighting, HVAC, BAS, Roofing) at 15 Facilities

Excess cash-flow was used to add Air Conditioning to Georgie Duke Sports Center improving Community satisfaction

Financing was completed via a guaranteed energy savings performance contract.

The City of Vacaville wanted a Partner that could handle the many intricate details of a large-scale Project across multiple City Departments. Through a competitive process, Siemens was selected and got to work delivering on our promise of Partnership.

Through the retrofit of nearly 4,000 city-owned streetlights and replacement of 19,000 water meters, Siemens showed it was capable of managing a Project that touched every member of the Vacaville community.

James Loomis
Project Lead – Associate Civil Engineer
City of Vacaville

James Loomis worked closely with Siemens Project Team.

Curtis Hunt
Council Member
City of Vacaville

Curtis is a strong advocate for the Environmental Stewardship of the City of Vacaville.

Curtis speaks highly about the quality of work delivered by Siemens.

Vacaville's Auto Mall now benefits from the clean, white light of LEDs, safely and efficiently installed by Siemens.

Contractor / Installation Partner Customer References

Siemens will be staffing this Project without the use of sub-contractors. This direct-engagement allows the City of San José with a single source for responsibility of this Project.

You can trust that Siemens will, from beginning-to-end, be your Partner in success.

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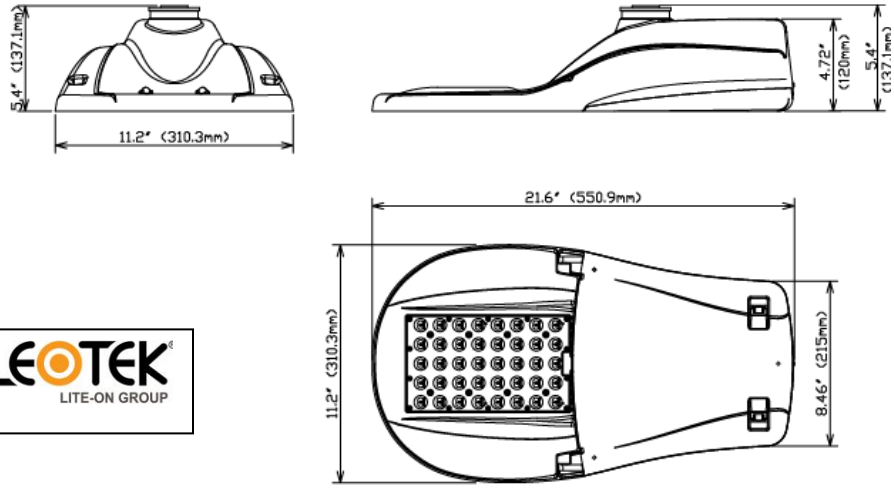
10. Attachment G: Environmentally Preferred Procurement Program (EP3) Information Sheet

Product or Service Environmental Profile:

Proposed Roadway / Cobra-Head Luminaries



LEOTEK LITE-ON GROUP

We understand that the City of San José has used the GreenCobra fixture and has been pleased with the product. For the purposes of responding to this RFP, various styles of the Leoek GreenCobra were used in our proposal.

1. Are the Products offered or utilized in providing this service certified by independent certification programs such as Energy Star, Green Seal, EcoLogo, or EPEAT?

X Yes _____ No

Detailed Product /Service Information:

UL / cUL for wet-locations
LM-80-08 standards
FCC: CFR Part 15
RoHS
DLC Certified
IDA (International Dark-Sky Association)

2. Do the Products offered or utilized in providing this service contain recycled material content?

X Yes _____ No

Detailed Product /Service Information:

Some recycled aluminum is used in construction of the luminaire. The product is packed in cardboard that contains post-consumer recycled content.

3. Do the Products offered or utilized in providing this service reduce energy consumption?

X Yes _____ No

Detailed Product /Service Information:
Up to 70% compared to high-pressure sodium

4. Do the Products offered or utilized in providing this service reduce toxicity, including emissions?

_X_ Yes _____ No

Detailed Product /Service Information:
Reduction of GhG / carbon emissions results from energy efficiency.

5. Do the Products offered or utilized in providing this service reduce water consumption?

____Yes _**X** No

Detailed Product /Service Information:
Not applicable.

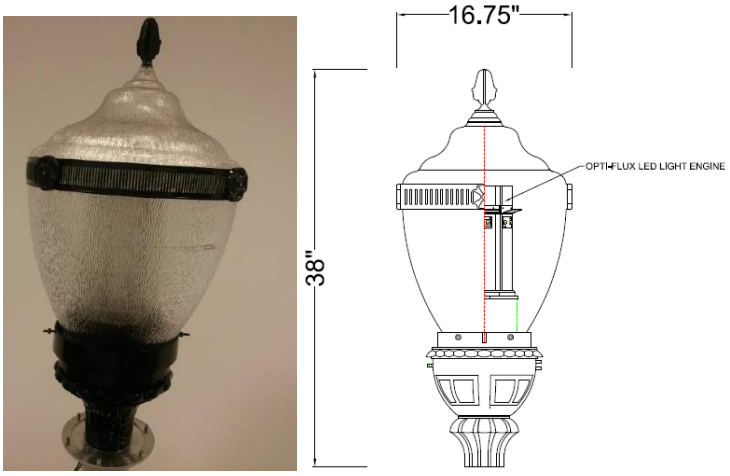
6. Do the Products offered or utilized in providing this service reduce waste?

_X_ Yes _____ No

Detailed Product /Service Information:
Longer Product Lifecycle results in reduced lamp and ballast waste.

Product or Service Environmental Profile:

Proposed Special / Ornamental / Decorative Fixture



We recognize from the City's RFP that 15 different styles of "Decorative" fixtures exist in the City's inventory. As part of our Section 3 "Project Team", we describe our approach to Audit the City's inventory, and then work with the City on the "Design" phase. At that time, final models of Decorative Fixtures can be selected by City Staff in order to finalize a project that meets your approval.

For the purposes of completing the RFP and providing a SAMPLE luminaire, Siemens is submitting the Pemco HUN-PA102-PLC8-DECA2 to represent all "Decorative" fixtures.

1. Are the Products offered or utilized in providing this service certified by independent certification programs such as Energy Star, Green Seal, EcoLogo, or EPEAT?

_X_ Yes _____ No

Detailed Product /Service Information:
The products Pemco offers are tested to UL 1585 for wet locations, LM80 and LM79 for performance and heat of high density emitters for efficacy and photometric performance. The drivers included in the finished product meet UL 879, UL 1012, UL 935 and FCC Title 47 Part 15 Class A. The LED engine meets RoHS directives.

2. Do the Products offered or utilized in providing this service contain recycled material content?

____Yes _**X**_ No

Detailed Product /Service Information:
The proposed decorative fixtures do not contain recycled material; however, they are packaged in cardboard that contains post-consumer recycled material.

3. Do the Products offered or utilized in providing this service reduce energy consumption?

X Yes _____ No

Detailed Product /Service Information:
Up to 40% compared to high-pressure sodium

4. Do the Products offered or utilized in providing this service reduce toxicity, including emissions?

X Yes _____ No

Detailed Product /Service Information:
Reduction of GhG / carbon emissions results from energy efficiency.

5. Do the Products offered or utilized in providing this service reduce water consumption?

____Yes _**X** No

Detailed Product /Service Information:
Not applicable.

6. Do the Products offered or utilized in providing this service reduce waste?

X Yes _____ No

Detailed Product /Service Information:
Longer Product Lifecycle results in reduced lamp and ballast waste.

Product or Service Environmental Profile:

Next Generation Lighting Controls and Multi-Function Node

1. ***Are the Products offered or utilized in providing this service certified by independent certification programs such as Energy Star, Green Seal, EcoLogo, or EPEAT?***

____ Yes ___ **X** ___ **No**

2. ***Do the Products offered or utilized in providing this service contain recycled material content?***

X Yes _____ No

Some recycled plastics used in construction of polycarbonate/glass exterior shell. Recycled metals used in construction of circuitry. The units are packaged in cardboard that contains post-consumer recycled material.

3. ***Do the Products offered or utilized in providing this service reduce energy consumption?***

X Yes _____ No

Lighting controls function provides significant energy reduction capabilities.

4. ***Do the Products offered or utilized in providing this service reduce toxicity, including emissions?***

X Yes _____ No

Reduction of GhG / carbon emissions results from energy efficiency.

5. ***Do the Products offered or utilized in providing this service reduce water consumption?***

____Yes _**X** No Not applicable.

6. ***Do the Products offered or utilized in providing this service reduce waste?***

X Yes _____ No

Reduced energy use of LED lights will further elongate product Lifecycle resulting in significantly reduced lamp replacement costs.

Additionally, next generation lighting control reduces need for Client-owned, redundant computer equipment (i.e. on-site servers).

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11. Response to Section 21, Exemplar Agreements (if applicable)

SIEMENS INDUSTRY, INC.'S EXCEPTIONS TO THE RFP

(1) Section 21.1 requires the proposers to enter into a contract with the City "in substantial conformance with . . . the form of the City's Standard Terms and Conditions." However, with the exception of the insurance provisions in Section 21.6.2 and Appendix 7, the only standard terms and conditions included in the RFP are Appendix 8, (contracts for telecommunications projects), and Appendix 9 (contracts for property use). These two contracts have no application to the scope of work outlined in Siemens' proposal. Upon request of the City, Siemens will provide its standard form of contract for this project

(2) Pursuant to Section 21.6.2 of the RFP, Siemens requests that the City waive the requirement that the selected proposer provide copies of its insurance policies. Siemens is a member of a group of companies doing billions of dollars of business all over the world. Siemens' insurance policies provide coverage for this entire group and contain highly confidential information. Siemens will provide certificates of insurance and other proof of insurance required by the City.

(3) Siemens takes exception to one of the requirements of Appendix 7 of the RFP – the provision stating: ""At the option of City, either the insurer shall reduce or eliminate such deductibles or self-insured retentions as respects the City, its officers, employees . . . or Vendor shall procure a bond guaranteeing payment of losses and related investigations . . . " For the reasons stated above – insurance covering the entire group of companies – our insurer cannot change deductibles and self-insurance retentions in our policies. However, we can provide a bond, if necessary.

Exceptions from anyCOMM Holdings Company

Below anyCOMM lists the exceptions and items for discussion as requested in the San Jose Streetlight RFP for the **"Exemplar Agreement for Telecommunications Projects" and "Exemplar for Property Use Agreement".**

Exemplar Agreement for Telecommunications Projects

1.A – Right to use

- The anyCOMM Node will need an exclusive right to use the photocell socket.

1.C.1 – Relocation and Removal

- Location of anyCOMM Node in the socket of the photocell on the streetlight is required for streetlight operation / control.

1.G – Right to Access

- Permitting other parties to use licensed area (photocell socket) will be difficult if we are to maintain integrity of streetlight operation.

2.A – Term

- anyCOMM will petition for a 25-year term for the Master Agreement and a 15-year lease with two (2) 5-year automatically renewing options for the Site Licensing Agreement.

3 – Usage Fee

- Because 40,000 Nodes will be installed, anyCOMM will petition for a revision of the Usage Fee of $12/Node/Year

14.B – Emergency – anyCOMM has a remote disconnect capability.

15. A Remedies for Default by Company

- anyCOMM will want to discuss this point in advance with the City.

18. Assignment

- anyCOMM will want to discuss this point in advance with the City.

Exemplar for Property Use Agreement

5. Termination of this Agreement

- anyCOMM will want to discuss in advance the following section: " CITY shall have the right to terminate this Agreement, without cause, by giving not less than seven (7) days prior written notice of termination to LICENSEE."

6. Taxes

- anyCOMM will want to discuss the following section in advance to understand any applicable taxes. " LICENSEE shall pay all real estate or personal property taxes, possessory interest taxes, business or license taxes or fees, service payments in lieu of such taxes or fees, annual or periodic license or use fees, excises, assessments, bonds, levies, fees or charges of any kind which are assessed, levied, charged, confirmed, or imposed by any public authority due to LICENSEE'S occupancy and use of the Property (or any portion or component thereof)."

9. Assignment - anyCOMM will want to discuss this in advance.

12. Attachment H: Backhaul Specifications (if applicable)

If proposal requires backhaul and proposer is not supplying their own private backhaul, the proposer shall provide the following information:

1. ***Name and address of private or public backhaul provider***
2. ***Map or description of backhaul access points***
3. ***Letter of intent (or equivalent) documenting agreement to provide backhaul as the responsibility of the proposer should backhaul proposal be accepted by the City***

The Siemens proposed alternative lighting controls solution, the anyCOMM node, will provide street lighting controls over its own private backhaul.

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13. Attachment I: Power Specifications (if applicable)

If proposal requires electrical power, the following information is required:

1. ***Name and address of private or public power source***
2. ***Map or description of power access points***
3. ***Letter of intent (or equivalent) documenting agreement to provide power should Proposal be accepted by the City***

PLEASE NOTE: THERE ARE SEVERE RESTRICTIONS ON THE USE OF UNMETERED CITY STREETLIGHTS AS A POWER SOURCE. ANY CIRCUIT OR OTHER ELECTRICAL UPGRADES TO CITY INFRASTRUCTURE (INCLUDING SETTING METERS, ETC.) ARE THE RESPONSIBILITY OF THE PROPOSER. THE PROPOSER MUST RESOLVE ANY POWER ISSUES BEFORE AN AWARD OR CONTRACT WILL BE GRANTED.

Within the anyCOMM node, separate power measurements will be made for:

- Streetlight / streetlight controller / lighting control network performing streetlight control functions
- Additional anyCOMM node functions.

City power budget shall include 2.8W (streetlight “off”), 5W (streetlight “on”), similar to Owlett system.

Access to the anyCOMM next generation lighting control is provided at no charge (no Software License nor Annual Software Maintenance Fee(s)) – see Attachment C.

The City of San Jose, anyCOMM and PG&E have worked together for the demonstration project currently underway to develop a model for collaborative partnership. The anyCOMM node will separately meter all power consumed for services other than the streetlight, street lighting control and lighting control network.

For the proposed solution, and/or for any additional functions that the anyCOMM node may perform under a separate agreement, no additional sources of power are required.

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14. Attachment J: Telecommunications Specifications (if applicable)

Proposers submitting telecommunications proposals must submit Attachment J.

Attachment J is required for all telecommunications proposals, whether project is an installation project or payment in lieu of installation, and whether equipment will be installed on streetlights or other City property.

For telecommunications projects, the following information is required:

1. Map or description of installation locations

An anyCOMM Node will be placed on every streetlight in four (4) specified Zones of the City.

2. Make and model of telecommunications equipment to be installed at each location anyCOMM Node(s).

See attached Specification Sheet (s) in Appendix 2.3.

3. Detailed specifications for the telecommunications equipment listed in #2, including power requirements, capacity, etc.

See attached Specification Sheet (s) in Appendix 2.3.

4. If equipment will be placed on streetlights, provide specifications for weight load and wind factors.

1.5 lbs.

5. If backhaul is required, proposer must submit Attachment H, Backhaul Specifications.

Please See Attachment H

6. If electrical power is required, proposer must submit Attachment I, Power Specifications.

Please See Attachment I

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15. Attachment K: Streetlight Control & Management System Specification Response Form

Proposer shall fill in and submit this Form in their proposal if an alternate control system is proposed. “Spec Item” refers to the section numbers in Appendix 4, Wireless Controller Unit Specifications. Mark with an “X” under “Yes” to indication if the proposed solution meets the spec, otherwise mark “X” under “No”. Please note location where the spec is reflected in your proposal and note any exceptions to the spec if any.

	Spec Item	Yes	No	Proposal Response Location	Note any Exceptions
Central Mgmt System	2.1.1	Provide response for this item in the space provided at the bottom of this form			
	2.1.2	**X**		Appendix 2.3	
	2.1.3	**X**		Appendix 2.3	
	2.1.4	**X**		Appendix 2.3	
	2.2.1	**X**		Appendix 2.3	
	2.3.1	**X**		Appendix 2.3	
	2.4.1	**X**		Appendix 2.3	Based on City specifications, application software can ("will") be developed.
Wireless Communication System	3.1.1	**X**		Appendix 2.3	
	3.1.2	**X**		Appendix 2.3	
	3.1.3	**X**		Appendix 2.3	Please see Spec Sheet Appendix 2.3 for details. Control communication is provided over the anyCOMM wi-fi mesh network using standard wi-fi protocol.
	3.1.4.1	**X**		Appendix 2.3	All radio communication signals are impacted by the presence of physical objects, such as trees, buildings and houses. Conversely, the public is highly concerned about high strength radio waves that may impact human health.
	3.1.4.2			Appendix 2.3	The anyCOMM radio strength is approximately the same as a standard cell phone, and attenuation concerns are significantly mitigated because there is a Node on every streetlight. So, for example, where an object may block radio frequency to a certain location, several other Nodes on nearby streetlights will provide coverage.

	Spec Item	Yes	No	Proposal Response Location	Note any Exceptions
	3.1.5	X		Appendix 2.3	See notes for Attachment I
	3.1.6	X		Appendix 2.3	>80,000 hours for wireless communication devices
	3.1.7	X		Appendix 2.3	
	3.1.8	X		Appendix 2.3	
	3.1.9	X		Appendix 2.3	3.1.9.1 Node is mounted atop streetlight (15'-25') atop street. (no physical access) Also, all data is encrypted with 2048-bit encryption key.
	3.2.1.1	X		Appendix 2.3	
	3.2.1.2	X		Appendix 2.3	
	3.2.1.3	X		Appendix 2.3	
	3.2.1.4	X		Appendix 2.3	
	3.2.2.1	X		Appendix 2.3	
	3.2.2.2	X		Appendix 2.3	anyCOMM nodes are controlled individually. Any combination of nodes can be configured as a "group" with control available for all nodes in each "group".
	3.2.2.3	X		Appendix 2.3	
	3.2.2.4	X		Appendix 2.3	
	3.2.3.1	X		Appendix 2.3	
	3.2.3.2	X		Appendix 2.3	
	3.2.3.3	X		Appendix 2.3	
	3.2.3.4	X		Appendix 2.3	
	3.2.3.5	X		Appendix 2.3	Stores information, locally, on the node for up to 30 Days
	3.2.3.6	X		Appendix 2.3	
	3.3.1	X		Appendix 2.3	See Notes for Attachment H

Item 2.1.1 Response:

Provide a description of the method and/or strategy proposed to meet the City's goal of one control system for all of the streetlights in its inventory

In the Owlett system, backhaul communication from SeCos to the Management Server, located in a City Facility, is wired via existing Ethernet over copper devices and/or point-to-multi-point City-wide IP based wireless communications system.

For the anyCOMM nodes, controller data transfer/communication will happen the same way, in the required City format, but without the SeCos.

16. Attachment L: LED Luminaire Specifications

Proposed Roadway/Cobra-head Luminaire

Requirements		Yes	No	Reference
General:				
DLC Qualified Product	Product on DesignLights Consortium Qualified Products List by the sample submission date. For product listing details, see DesignLights Consortium websites. If the luminaire is not on the current DesignLights Consortium Qualified Product List by the sample submission date, then the City, in its sole discretion, may reject the proposal.	**X**		Appendix 2.1
Environmental Stewardship	Constructed with materials that minimize hazardous waste and indicate if hazardous waste disposal is provided in accordance with the European Union's "RoHS" compliance for hazardous materials, and "Waste, Electrical & Electronic (W.E.E.) initiative or similar U.S. programs.	**X**		Appendix 2.1
LED LUMINAIRE Performance:				
Mesopic Luminance	Lighting performance evaluations shall be done using the luminance metric with mesopic adjustments applied.	**X**		Appendix 2.1
	Luminaire replacement shall be done in accordance with the City's "Public Streetlight Design Guide – Replacement Guide".	**X**		Appendix 2.1
Correlated Color Temperature (CCT)	4000° K +/- 300° K.	**X**		Appendix 2.1
Wavelength Distribution Range	Percentage of emissions below 550 nm should be equal to or less than 45% to minimize adverse effects to astronomy research at the Lick Observatory verified by independent laboratory report.	**X**		Appendix 2.1
Uplight Rating/ Cut Off	Full cutoff: UL & UH = 0	**X**		Appendix 2.1
L70 Lifetime	Minimum 70,000 hours	**X**		Appendix 2.1
Lumen Efficacy	Minimum 90 lumens/Watt	**X**		Appendix 2.1

Requirements		Yes	No	Reference
IESNA LM-79 Photometric Test and Report	Shall be IESNA LM 79 tested from a CALiPER or NVLAP certified lab and provide testing documentation and photometric report that includes: o Total light output o Luminous intensity distribution o Color	X		Appendix 2.1
IESNA LM-80 Test and Report	Shall be IESNA LM 80 tested from a CALiPER or NVLAP certified lab and include testing documentation. The results shall show relative (%) light output over time at 55° C, 85° C, and a third temperature of the manufacturer's choice. In-situ temperature test report in conformance with ANSI/UL 1598-04 (hardwired) with measurements showing that the temperature of the hottest LED junction temperature is within the recommended temperature specified by the chip manufacturer in order to conform to the L70 test data. Measurement at the nearest accessible locations are acceptable with thermal model of heat dissipation and airflow throughout the luminaire calculating the LED junction temperature. Model and test shall have at least 4 matching points for measuring and calculating temperature respectively.	X		Appendix 2.1
Power Supply / Driver				
Dimming Capability	0-10 volts dimming input driver	X		Appendix 2.1
Power Factor	Minimum power factor of 0.90	X		Appendix 2.1
Operating Temperature	Power supply shall operate between -20° C and 50° C.	X		Appendix 2.1
Frequency	Output operating frequency shall be > 120 Hz (to avoid visible flicker).	X		Appendix 2.1
	Input operating frequency shall be 60 Hz.	X		Appendix 2.1
Interference	Power supply shall meet FCC 47 CFR Part 15/18 (Consumer Emission Limits).	X		Appendix 2.1
Noise	Power supply shall have a Class A sound rating per ANSI standard C63.4.	X		Appendix 2.1
Off-state Power Consumption	Power draw of the luminaire shall not consume more than 0.5 watts when in the off-state (not including control systems).	X		Appendix 2.1

Requirements		Yes	No	Reference
LUMINAIRE Housing:				
Accessibility	Luminaire housing shall allow tool-less entry to access: o Terminal strip for landing feeder wiring in the luminaire o Dimming driver o Over current protection	X		Appendix 2.1
Construction	Shall be constructed of aluminum.	X		Appendix 2.1
	Shall be powder-coated gray with rust resistant finish.	X		Appendix 2.1
	All screws shall be stainless steel.	X		Appendix 2.1
	Shall have captive screws on any component that requires maintenance after installation.	X		Appendix 2.1
	No parts shall be constructed of polycarbonate unless it is UV stabilized (lens discoloration shall be considered a failure under warranty).	X		Appendix 2.1
	Luminaire circuitry shall include quick connect/disconnects to allow easy separation and removal of: o Dimming driver	X		Appendix 2.1
	Shall have no wire exposure	X		Appendix 2.1
	Gaskets are permissible o Silicone sealants are not allowed	X		Appendix 2.1
	Shall have a minimum rating of IP66 as specified in IEC 60529, with the ability to shed water from inside the housing (i.e. weep holes).	X		Appendix 2.1
Cooling System	Shall consist of a passive heat sink with no fans, pumps, or liquids.	X		Appendix 2.1
	Shall be resistant to debris buildup and any build up shall not degrade the heat dissipation performance.	X		Appendix 2.1
Mounting	Must fit on a 2-inch nominal pipe size tenon and be compatible with the City's existing streetlight mast arms per Appendix 5, Exhibit 5.A, "City Standard Detail Drawings," Drawings No. E-09 and E-10.	X		Appendix 2.1
	Provide information on mounting of proposed street lights.	X		Appendix 2.1
Control Receptacle	ANSI C136.41 7-pin twist-lock receptacle.	X		Appendix 2.1
Weight of Luminaire	Complete assembly shall not exceed 31.5 pounds (not including control system).	X		Appendix 2.1

Requirements		Yes	No	Reference
Wind Load	Maximum wind load of 2.25 square feet effective projected area.	X		Appendix 2.1
UL Standards	The entire luminaire assembly shall be UL listed and approved.	X		Appendix 2.1
IEEE C62.41.2-2002	IEEE Recommended Practice on Characterization of Surges in Low-Voltage (1000 V and less) AC Power Circuits.	X		Appendix 2.1

Proposed Special / Ornamental / Decorative Luminaire

Requirements		Yes	No	Reference
General:				
DLC Qualified Product	Product on DesignLights Consortium Qualified Products List by the sample submission date. For product listing details, see DesignLights Consortium websites. If the luminaire is not on the current DesignLights Consortium Qualified Product List by the sample submission date, then the City, in its sole discretion, may reject the proposal.	X		In process for 78w
Environmental Stewardship	Constructed with materials that minimize hazardous waste and indicate if hazardous waste disposal is provided in accordance with the European Union's "RoHS" compliance for hazardous materials, and "Waste, Electrical & Electronic (W.E.E.) initiative or similar U.S. programs.	X		Appendix 2.2
Led LUMINAIRE Performance:				
Mesopic Luminance	Lighting performance evaluations shall be done using the luminance metric with mesopic adjustments applied.	X		LM-79 and IES files to be provided by request
	Luminaire replacement shall be done in accordance with the City's "Public Streetlight Design Guide – Replacement Guide".	X		Design information needed
Correlated Color Temperature (CCT)	4000° K +/- 300° K.	X		Appendix 2.2
Wavelength Distribution Range	Percentage of emissions below 550 nm should be equal to or less than 45% to minimize adverse effects to astronomy research at the Lick Observatory verified by independent laboratory report.	X		Appendix 2.2
Uplight Rating/ Cut Off	Full cutoff: UL & UH = 0		X	Less than 5% uplight
L70 Lifetime	Minimum 70,000 hours	X		Appendix 2.2
Lumen Efficacy	Minimum 90 lumens/Watt	X		Appendix 2.2

Requirements		Yes	No	Reference
IESNA LM-79 Photometric Test and Report	Shall be IESNA LM 79 tested from a CALiPER or NVLAP certified lab and provide testing documentation and photometric report that includes: o Total light output o Luminous intensity distribution o Color	X		Appendix 2.2
IESNA LM-80 Test and Report	Shall be IESNA LM 80 tested from a CALiPER or NVLAP certified lab and include testing documentation. The results shall show relative (%) light output over time at 55° C, 85° C, and a third temperature of the manufacturer's choice. In-situ temperature test report in conformance with ANSI/UL 1598-04 (hardwired) with measurements showing that the temperature of the hottest LED junction temperature is within the recommended temperature specified by the chip manufacturer in order to conform to the L70 test data. Measurement at the nearest accessible locations are acceptable with thermal model of heat dissipation and airflow throughout the luminaire calculating the LED junction temperature. Model and test shall have at least 4 matching points for measuring and calculating temperature respectively.	X		Appendix 2.2
Power Supply / Driver				
Dimming Capability	0-10 volts dimming input driver	X		Appendix 2.2
Power Factor	Minimum power factor of 0.90	X		Appendix 2.2
Operating Temperature	Power supply shall operate between -20° C and 50° C.	X		Appendix 2.2
Frequency	Output operating frequency shall be > 120 Hz (to avoid visible flicker).	X		Appendix 2.2
	Input operating frequency shall be 60 Hz.	X		Appendix 2.2
Interference	Power supply shall meet FCC 47 CFR Part 15/18 (Consumer Emission Limits).	X		Appendix 2.2
Noise	Power supply shall have a Class A sound rating per ANSI standard C63.4.	X		Appendix 2.2
Off-state Power Consumption	Power draw of the luminaire shall not consume more than 0.5 watts when in the off-state (not including control systems).	X		Appendix 2.2

Requirements		Yes	No	Reference
LUMINAIRE Housing:				
Accessibility	Luminaire housing shall allow tool-less entry to access: o Terminal strip for landing feeder wiring in the luminaire o Dimming driver o Over current protection	**X**		Appendix 2.2
Construction	Shall be constructed of aluminum.	**X**		Appendix 2.2
	Shall be powder-coated gray with rust resistant finish.	**X**		Appendix 2.2
	All screws shall be stainless steel.	**X**		Appendix 2.2
	Shall have captive screws on any component that requires maintenance after installation.	**X**		Appendix 2.2
	No parts shall be constructed of polycarbonate unless it is UV stabilized (lens discoloration shall be considered a failure under warranty).	**X**		Appendix 2.2
	Luminaire circuitry shall include quick connect/disconnects to allow easy separation and removal of: o Dimming driver	**X**		Appendix 2.2
	Shall have no wire exposure	**X**		Appendix 2.2
	Gaskets are permissible o Silicone sealants are not allowed	**X**		Appendix 2.2
	Shall have a minimum rating of IP66 as specified in IEC 60529, with the ability to shed water from inside the housing (i.e. weep holes).		**X**	Globe is gasket to keep water out of fixture Fixture IP65
Cooling System	Shall consist of a passive heat sink with no fans, pumps, or liquids.	**X**		Appendix 2.2
	Shall be resistant to debris buildup and any build up shall not degrade the heat dissipation performance.	**X**		Appendix 2.2
Mounting	Must fit on a 2-inch nominal pipe size tenon and be compatible with the City's existing streetlight mast arms per Appendix 5, Exhibit 5.A, "City Standard Detail Drawings," Drawings No. E-09 and E-10.		**X**	Appendix 2.2
	Provide information on mounting of proposed street lights.	**X**		Appendix 2.2
Control Receptacle	ANSI C136.41 7-pin twist-lock receptacle.	**X**		Appendix 2.2
Weight of Luminaire	Complete assembly shall not exceed 31.5 pounds (not including control system).		**X**	32 lbs. max

Requirements		Yes	No	Reference
Wind Load	Maximum wind load of 2.25 square feet effective projected area.	**X**		Appendix 2.2
UL Standards	The entire luminaire assembly shall be UL listed and approved.	**X**		Appendix 2.2
IEEE C62.41.2-2002	IEEE Recommended Practice on Characterization of Surges in Low-Voltage (1000 V and less) AC Power Circuits.	**X**		Appendix 2.2

17. Product Sample Submissions per Appendix 3, Scope of Services for Streetlight Installation Proposals, Section 4, Product Sample Submission

4.1 Proposer must submit a sample of all wireless controller units, field devices, luminaire product(s) proposed to be used in the project. The City in its sole discretion may conduct destructive testing on the product at no cost to the City.

4.2 Samples shall be submitted at the time of Proposal Submittal. Proposers are to ensure that controller unit and luminaire samples are properly identified with the RFP number and the name of the submitting company on the shipping label and documents. ONLY the product samples are to be sent to the following location along with operational specification/data sheets for testing and evaluation, and ALL other required Proposal information shall be sent to the contact listed and specified on the cover page of this RFP.

SEND SAMPLE LUMINAIRES AND CONTROL PRODUCTS ONLY TO:

City of San José
Department of Transportation
1404 Mabury Road
San José, CA 95133
Attention: Tony Ortiz

Samples of the Proposed Solutions have been delivered to Mr. Ortiz in accordance with the requirements of this RFP.

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18. Attachment M: Local and Small Business Preference

City of San José
Request for Contracting Preference for Local and Small Businesses

Chapter 4.12 of the San José Municipal Code provides for a preference for Local and Small Businesses in the procurement of contracts for supplies, materials and equipment and for general and professional consulting services.
The amount of the preference depends on whether the vendor qualifies as a Local Business Enterprise* or Small Business Enterprise** and whether price has been chosen as the determinative factor in the selection of the vendor.
In order to be a Local Business Enterprise (LBE) you must have a current San José Business Tax Certificate Number and have an office in Santa Clara County with at least one employee. If you qualify as an LBE you can also qualify as a Small Business Enterprise (SBE) if the total number of employees (regardless of where they are located) of your firm is 35 or fewer.
There are two ways in which the preference can be applied. In procurements where price is the determinative factor (i.e. there are not a variety of other factors being considered in the selection process) the preference is in the form of a credit applied to the dollar value of the bid or quote. For example, a non-local vendor submits a quote of $200 per item and a LBE submits a quote of $204 per item. The LBE receives a 2.5% credit on the quote, which equals approximately $5 and thus the LBE will win the award because the quote is evaluated as if it had been submitted as $199.
In procurements where price is not the determinative factor such, as an RFP, typically a variety of factors are evaluated to determine which proposal best meets the City's needs. In procurements such as these, a qualified LBE will be given 5% and a qualified SBE will be given an additional 5% of the total points in the scoring.

The following determinations have been made with respect to this procurement: (for official use only)			
Type of Procurement	____ Bid	____ Request for Quote	_**X**_ Request for Proposal
Type of Preference Amount of Preference	___ Price is Determinative LBE preference = 2.5% of Cost SBE preference = 2.5% of Cost	_**X**_ Price is Not Determinative LBE preference = 5% of Points SBE preference = 5% of Points	

In order to be considered for any preference you must fill out the following statement(s) under penalty of perjury.			
Business Name	**anyCOMM Holdings Corporation**		
Business Address	**2681 Zanker Rd. San José, CA 95134**		
Telephone No.	**Primary 916-265-1050 or Secondary Alternative 408-464-6374**		
Type of Business	_**X**__ Corporation	___ LLC	___ LLP
	___ General Partnership	___ Sole Proprietorship	___ Other (explain)

*LOCAL BUSINESS ENTERPRISE (LBE) PREFERENCE	
In order to qualify as an LBE you must provide the following information: Current San José Business Tax Certificate Number	**0469559689**
Address of Principal Business Office or Regional, Branch or Satellite Office with at least one employee located in Santa Clara County:	**2681 Zanker Rd.** **San José, CA 95134**

**SMALL BUSINESS ENTERPRISE (SBE) PREFERENCE
In order to qualify as an SBE you must qualify as an LBE and have 35 or fewer employees. This number is for your
entire business --NOT just local employees, or employees working in the office address given above.
Please state the number of employees that your Business has: _____

Based upon the forgoing information I am requesting that the Business named above be given the following preferences (please check): Local Business Enterprise Small Business Enterprise
I declare under penalty of perjury that the information supplied by me in this form is true and correct.
Executed at: 2681 Zanker Rd. San Jose, CA 95134, California

Date: March 28, 2016

Signature

Print name Robert Brashe

Appendix 1: Key Personnel Assignments / Responsibilities

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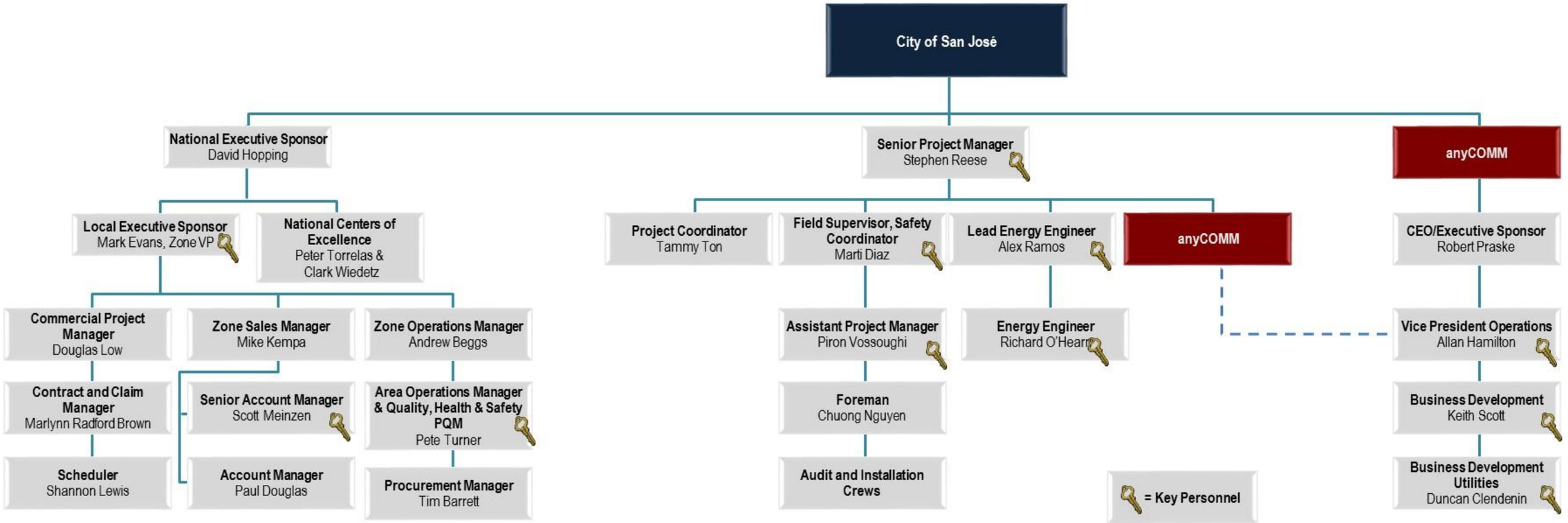
Appendix 1.1: Organization Chart / Project Team



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Appendix 1.2: Executive Leadership

Name:	David Hopping
Title:	U.S. President of Siemens Building Technologies
Role	Senior Executive Sponsor

A 27-year veteran of Siemens Industry, Inc., David is responsible for all US Operations for Siemens Buildings Technologies.

As the Senior Executive Sponsor for this project, David will actively oversee the Project's progress, make national resources available and will be available for any Leadership meetings required to assure its successful completion.

Name:	Mark Evans
Title:	Zone VP & General Manager, Siemens Building Technologies
Role	Local Executive Sponsor

A 21-year veteran of Siemens, Mark is responsible for all Building Technology Operations in California, Arizona, Nevada and New Mexico.

As the Local Executive Sponsor for this Project, Mark is involved in regular planning sessions, meets regularly with Leaders of San Jose and aligns Personnel with the Zone to best serve the City of San Jose.

Name:	Robert Praske
Title:	CEO, Founder and Board of Directors, anyCOMM Corporation
Role	Executive Leadership – anyCOMM Holdings Corporation ("anyCOMM")

Rob has led anyCOMM Corporation for over 17 years. His background in data gathering, software, encryption, and networks has guided the company through its product development and launch.

As CEO of anyCOMM, Rob is responsible for aligning the technical resources of anyCOMM to assure the next generation solution exceeds the City of San Jose's expectations.

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Appendix 1.3: Key Personnel Project / Account Management

Appendix 1.3.1: Steve Reese, Senior Project Manager

Name:	**Stephen Reese**	**Years With Siemens:**	4
Title:	Senior Project Manager		
Role on Project:	Energy and Environmental Solutions – Executive Project Management		
Education:	Project Management Professional (PMP) NABCEP Siemens Global Project Management accreditation		

Specific Qualifications:

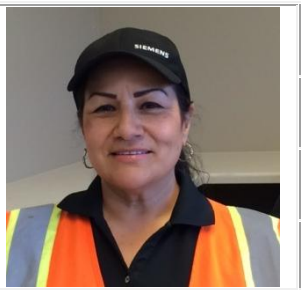
Stephen has 15 years of industrial and commercial construction management experience, including 5 years of Performance Contracting experience. His past projects include Street lighting, Solar, HVAC Lighting, Trash Compaction, Water Conservation Measures including Water Meters and Water Treatment Facilities.

Steve has directed and supported site-specific staff in the design and construction of HVAC and controls, water treatment systems, lighting and lighting control systems, solar and street light installation.

Project Experience:

Since joining the Siemens Energy & Environmental Solutions team, Stephen has worked on numerous Performance Contracting projects, including:
Pleasant Valley State Prison - Phase 1 ($959K) – Lighting, Electric Vehicle Charging, Wastewater Treatment Plant Upgrades, VFDs
City of Vacaville ($14M) – Lighting upgrades, Water Meters, Solar Thermal Pool Upgrades, HVAC
City of Merced ($7M) - Interior & Exterior Lighting, HVAC, DDC Controls, Building Envelope Upgrades, Retro-commissioning, Interior LED Lighting
City of Atwater ($4.9M) -1.1MW solar array.
Merced County ($900K)- Arsenic Water Treatment Plant
City of West Sacramento ($1.5M) -Street light project
Redwood City School District ($3.8M) Lighting, HVAC, Trash Compaction, Water Conservation,
NorthBay Healthcare ($2.1M) –Lighting controls, Water Conservation, HVAC controls, Motors
City of Davis ($2.9M) - Street light project
City of Sacramento ($4.9M) Street light project

Appendix 1.3.2: Martha ("Marti") Diaz , Field Supervisor / Safety Coordinator



Name:	**Marti Diaz**	**Years With Siemens:**	12
Title:	Associate Project Manager		
Role on Project:	Energy & Environmental Solutions – Associate Project Manager		
Certifications:	OHSHA 30		

Specific Qualifications:

Marti's responsibilities include organization of:
Pre-bid reviews
Sales-to-Operations turnover meetings. Evaluation of accuracy of the project estimate and project layout.
Analysis of construction contract specifications and determination of project requirements.
Alignment with appropriate stake-holders. Assure understanding and satisfaction of project Scope, Timeline and Deliverables.
Marti has experience in documenting safety programs, QC reviews of installation and monitoring performance testing and commissioning activities.
She has extensive experience in municipal and federal markets.

Project Experience:

Since joining the Siemens Energy & Environmental Solutions team as an APM, Marti has worked on dozens of projects, including:
City of West Sacramento ($1.6 M) – LED Street Light Retrofit
City of Vacaville ($14 M) – City-wide Lighting Upgrades, Water Meters, Solar Thermal Pool upgrades, HVAC
City of Sacramento ($4.9 M) City-wide Streetlight Audit/Bade + LED retrofit
Ft Irwin ($26 M) – Waste-to-Energy, Solar pv, Automation, HVAC, Lighting

Appendix 1.3.3: Piron Vossoughi, Assistant Project Manager

Name:	**Piron Vossoughi**	**Years With Siemens:**	1
Title:	Senior Project Manager		
Role on Project:	Project Manager		
Education:	BS, Manufacturing, Western Michigan University		
Licenses and Certifications:	PMP Certified		
Affiliations:	None		

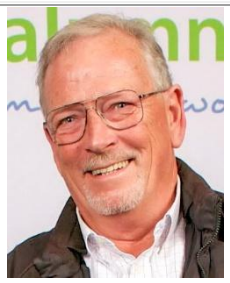
Specific Qualifications:

Piron has extensive project management experience with leadership in managing successful projects from proposal development through multifaceted design, product and implementation development and qualification phases to multi-year production programs. He is experienced in managing multiple teams and subcontracts while responsible for budget, delivery and technical performance of the project. Piron also excels in project risk mitigation and planning.

Project Experience:

City of Huntington Beach, CA ($1.4M) – Streetlight Retrofit (Project Manager)
Abrams Tanks ($20M)- Develop manufacturing process (Program Manager)
Rix Industries ($6M) – Design and develop military systems (Program Manager)
US Defense Agency ($3M)- Design and develop turbo pumps (Program Manager)

Appendix 1.3.4: Allan Hamilton, VP Operations, anyCOMM



Name:	**Allan Hamilton**
Title	Vice President, Operations
Education:	BASc and MASc, University of Toronto
Patents	Awarded 13 U.S. patents

P Allan has been with anyCOMM since 2011, focused primarily on Operations Management and Supply-Chain Development / Management.

A veteran of Silicon Valley, Mr. Hamilton has lived and worked in the San Jose area for over 25 years.

As a co-founder, President and CEO of Calibre Inc., Mr. Hamilton was instrumental in founding, funding and completing a merger with ZiLOG where he was a vice president and GM.

Prior to Calibre, he was with TEMIC, Chips & Technologies and Intel.

Appendix 1.3.5: Scott Meinzen, Sr. Account Manager

Name:	**Scott Meinzen, MBA**	**Years With Siemens:**	4
Title:	Sr. Business Development Manager		
Role on Project:	Energy & Environmental Solutions – Account Management		
Education:	MBA, Entrepreneurship and Finance, Pepperdine University BS, Business Administration, Cal Poly University, San Luis Obispo		
Affiliations:	Advisory Committee Member –iHub Sonoma County League of CA Cities		

Specific Qualifications:

Scott is responsible for coordination, supervision and overall financial management of multiple local projects. Prior to Siemens, Scott held multiple roles with the market leading smart water-technology company, leading the nation's largest deployment of smart water management solutions in the multi-family housing, hospitality and education sectors.

Project Experience:

Since joining Siemens, Scott has worked on many Performance Contracting projects, including:

NorthBay HealthCare $2.3M (Fairfield & Vacaville) – HVAC, lighting water conservation, renewable energy

City of Cotati, CA – $2.3M Street lighting, HVAC, Building Controls, Water Meters/AMI, Water Conservation

City of Sacramento $4.85M Street lighting Phase 1 (57 buildings and 23,000 additional streetlights awaiting contract

California Department of Corrections (CDCR)>$5M – Multiple Projects – Lighting, HVAC, Food Service, Water/Sewer conservation

3Green Public Housing $4M – Under Development (Yolo & Sutter Counties) – Lighting, water conservation, renewable energy

City of Benicia $6M – Under Development – Water Meters / AMI, Intelligent Infrastructure, streetlight controls

Pacific Ethanol $8M – Under Development – CoGeneration, Solar PV, Lighting, HVAC, Processing Equipment

City of Sacramento – Buildings $8M – Under Development – Lighting, HVAC, renewable energy

County of Santa Clara – Facilities $8M Phase 1 – Under Development – Lighting, HVAC, renewable energy

Appendix 1.3.6: Paul Douglas, Account Manager

Name:	**Paul Douglas**	**Years With Siemens:**	5
Title:	Business Development Manager		
Role on Project:	Energy & Environmental Solutions – Account Management		
Education:	BS, Life Sciences, Oregon State University Financial Decision Making , Stanford School of Business Marketing Precision, Wharton School of Business		
Affiliations:	League of California Cities California State Association of Counties		

Specific Qualifications:

Paul's responsibilities include energy and sustainability consultation, project development and sales in the Local Government sector. He has experience in Government, K-12, and Higher Education markets in Energy Management Systems, Systems Integration, and Water Conservation practices. He was appointed as a Chair person for Green Buildings in Sacramento's Green Initiative Policy Committee to provide guidance for the city in the area of energy efficiency and bringing clean tech jobs to the region. He has served on numerous committees as a trusted advisor to City staff, City Council in the area of energy efficiency.

Project Experience:

Since joining Siemens, Paul has worked on several Performance contracting projects, including:

City of Vacaville ($14 M) – City-wide Lighting Upgrades, Water Meters, Solar Thermal Pool upgrades, HVAC

City of West Sacramento – $1.6M City-wide LED Street Light

City of Davis ($4M) – LED Street Lighting

City of Manteca – Project Under Development – Water Meters, Building Upgrades, Co-Generation

Appendix 1.3.7: Keith Scott, VP Strategy and Business Development, anyCOMM

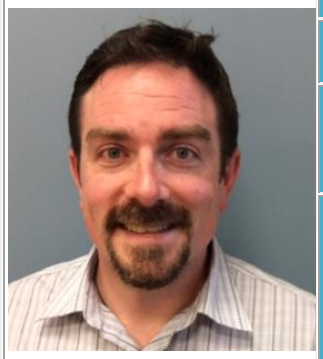
Name:	**Keith Scott**
Title	Business Development Government & Commercial Sector(s)
Education:	Bachelor and Masters Degrees
Patents	Awarded 6 U.S. patents

Keith has been with anyCOMM since 2014, concentrating on strategy and business development.

Keith has an extensive background in traditional and LED lighting, including the development and management of a LED street lighting division within Bridgelux focused on government and commercial partners.

Prior to Bridgelux, he worked with OSRAM Sylvania and was a founding member of the Philips LumiLEDs team that launched LEDs into the conventional lighting market.

Appendix 1.3.8: Pete Turner Area Operations Manager/ Quality, Health & Safety PQM



Name:	**Pete Turner**	**Years With Siemens:**	8
Title:	Area Operations Manager		
Role on Project:	Energy & Environmental Solutions – Operations Manager		
Education:	Old Dominion University, Norfolk, VA University of New Mexico, Los Alamos, NM		

Specific Qualifications:

Pete's responsibilities include managing the Operations Team, consisting of engineers, project coordinators and project managers, in the development, planning and execution of energy projects. He also holds the role of Project Quality Manager and is responsible for overseeing the PM@Siemens process on projects throughout the Zone (California, Arizona and New Mexico).

Before assuming the role of Operations Manager, Pete was a Senior Energy Engineer for Siemens in Colorado and California for six years.

Mr. Turner's background is in consulting engineering and his experience includes large municipal, commercial, institutional and industrial systems with an emphasis on HVAC, controls, steam, central plants and process systems.

Mr. Turner holds memberships (renewal in process) as a Certified Energy Manager (CEM) and Association of Energy Engineers (AEE).

Project Experience:

Since joining the Siemens Energy & Environmental Solutions team, Pete has worked on numerous large-scale energy projects, including:
City of Westminster, CO ($6M) – HVAC, lighting, pools, solar thermal
Trinidad State Junior College, Trinidad, CO ($3M) – Boilers, windows, lighting
Colorado Dept. of Human Services Phase III ($10M) - HVAC, controls, irrigation, lighting, solar thermal
Glenwood Springs, CO ($2M) – Pools, lighting, pumps, ice arena, HVAC
Salt Lake City, UT ($6M) – Lighting, irrigation, HVAC, controls
City of Cotati – ($2M) – Water Meters, lighting, controls
City of Davis ($3M) – Street Lights
City of Sacramento ($4.9M) – Street Lights

Appendix 1.3.9: Duncan Clendenin, Utilities Account Manager, anyCOMM

Name:	**Duncan Clendenin**
Title	Business Development – Utilities Sector
Education:	BS Mechanical Engineering, University of Arizona MBA, University of California, Berkeley, Haas School of Business.
Patents	Awarded 6 U.S. patents

Duncan has been with anyCOMM since 2011.

Duncan has over a decade of experience in the energy sector, including as the Director of SmartMeter Field Delivery Solutions at Pacific Gas and Electric during the largest advanced metering deployment project in the country.

Additionally, Duncan worked in Corporate Strategy and Development for the PG&E Holding Company and has consulted to Lawrence Livermore National Laboratory on the Laser Inertial Fusion Energy (LIFE) project.

Prior to his civilian career Duncan was an F/A-18 pilot in the U.S. Navy, where he still serves as a Captain (select) in the Reserves.

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Appendix 1.4: Key Personnel Design and Engineering

Appendix 1.4.1: Alex Ramos, Lead Energy Engineer

Name:	**Alex Ramos, PE, CEM, LEED AP**	**Years With Siemens:**	14
Title:	Senior Energy Engineer		
Role on Project:	Energy & Environmental Solutions – Project Development		
Education:	BS, Mechanical Engineering, San Francisco State University		
Licenses and Certifications:	Licensed Professional Engineer (PE) - Mechanical ○ California – 2000 ○ Arizona – 2009 Certified Energy Manager (CEM) LEED® AP		
Affiliations:	Association of Energy Engineers (AEE) ASHRAE		

Specific Qualifications:

Alex's responsibilities include leading the Energy Engineering and Performance Assurance teams in the design, energy use analysis, retrofit cost analysis, and measurement and verification of energy projects.

He has experience in municipal, commercial, institutional and industrial markets in Lighting, HVAC, Controls and Renewable Energy systems.

Project Experience:

Since joining the Siemens Energy & Environmental Solutions team, Alex has worked on numerous large-scale energy projects, including:
Pleasant Valley State Prison - Phase 1 ($959K) – Lighting, Electric Vehicle Charging, Wastewater Treatment Plant Upgrades, VFDs
Pleasant Valley State Prison - Phase 2 ($1.4M) – HVAC, Water Conservation
City of West Sacramento ($1.6 M) – LED Street Light Retrofit
City of Vacaville ($14 M) – City-wide Lighting Upgrades, Water Meters, Solar Thermal Pool upgrades, HVAC
Sacramento County ($3.8M) – Lighting, Fire Life Safety, Boiler Replacement, VAV Conversion, Solar PV System
Siemens Transportation Systems, Phase 1 ($ 9M) – Solar PV System
Contra Costa County Regional Medical Center ($1.6M) – Cogeneration System.
City of Merced ($7M) – Interior & Exterior Lighting, HVAC, DDC Controls, Building Envelope Upgrades, Retro-commissioning
City of Millbrae ($2M) Street lighting, HVAC, interior lighting, smart-irrigation, solar pv
City of Davis – ($4M) Street lighting and pathway lighting
City of Cotati ($2.1M) – Streetlights, Lighting, HVAC, Water Meters (AMI)
City of Sacramento ($4.9M) - Streetlights

Appendix 1.4.2: Richard O'Hearn, Energy Engineer

Name:	**Richard O'Hearn, CEM**	**Years With Siemens:**	4
Title:	Senior Applications and Energy Engineer		
Role on Project:	Energy Engineer		
Education:	▪ BS, International Business & Facilities Engineering, Massachusetts Maritime Academy ▪ Post-Bachelors Program, Accounting, University of Massachusetts		
Licenses and Certifications:	Certified Energy Manager		
Affiliations:	Association of Energy Engineers		

Specific Qualifications:

Richard has over 7 years in the roadway lighting industry, focusing on turnkey & energy efficiency projects on the national level. He has acted as a consultant for a joint venture between the U.S. Dept. of Energy & the National Renewable Energy Labs, as the industry expert in roadway lighting data collection. Since joining Siemens Mr. O'Hearn has been involved in numerous energy analysis projects and has added rich value and expertise to each opportunity he has been assigned.

Project Experience:

City of Manchester ($3.2M) – LED Streetlight Retrofit of ~9,000 fixtures (cobraheads and decoratives)
City of New Bedford ($5.6M)- LED Streetlight Retrofit of ~10,000 fixtures (cobraheads, decoratives, and traffic signals)
Cape Light Compact ($6.2M)- LED Streetlight Retrofit of ~16,000 fixtures (cobraheads, decoratives, and floods)
Cities of Wenham/Hamilton, MA ($.47M)- LED Streetlight Retrofit of ~1,000 fixtures (cobraheads and decoratives)
City of Salem, MA ($1.4M)- LED Streetlight Retrofit of ~3,300 fixtures (cobraheads)

Appendix 2: Luminaire and Controller Specifications

Appendix 2.1: Proposed Roadway/Cobra-head Luminaire

Appendix 2.2: Proposed Special / Ornamental / Decorative Luminaire

Appendix 2.2.1: Alternate Special / Ornamental / Decorative Luminaire

SIEMENS

Appendix 2.3: Next generation Lighting Controls and Multi-Functional Node

SIEMENS

Appendix 3: Letters of Interest to Provide Tax-Exempt Equipment Lease Purchase Financing

Appendix 3.1: Siemens Financial Services / Siemens Public, Inc.

Appendix 3.2: Banc of America Public Capital Corp

Appendix 3.3: PNC Equipment Finance, LLC