KING CITY
CALIFORNIA

Item No. 11(A)

REPORT TO THE CITY COUNCIL

DATE: **APRIL 28, 2020**

TO: **HONORABLE MAYOR AND MEMBERS OF THE CITY COUNCIL**

FROM: **OCTAVIO HURTADO, CITY ENGINEER**

RE: **CONSIDERATION OF CONSULTANT SERVICES AGREEMENT FOR THE KING CITY MULTIMODAL TRANSIT CENTER TEMPORARY PLATFORM PROJECT**

RECOMMENDATION:

It is recommended the City Council: 1) approve and authorize the City Manager to execute a Consultant Services Agreement with Railpros to prepare final design for the King City Multimodal Transit Center (MMTC) Temporary Platform project and to apply for and negotiate necessary agreements and permits; and 2) authorize the City Manager to make non-substantive changes as necessary in a form approved by the City Attorney.

BACKGROUND:

The City, in partnership with the San Luis Obispo Council of Governments ("SLOCOG"), recently received approval for funding under the State Rail Assistance ("SRA") Program to complete the pre-construction portion of the MMTC project. Since approximately 2006, the City has been actively developing plans to construct the MMTC on land adjacent to the rail corridor along First Street between Pearl Street and Broadway Street. The King Station passenger service platform was identified in the 2018 California State Rail Plan in the 2022 scenario: *"Make early investment in additional local stops on the Coast Route in Soledad and King City, for immediate use by the long-distance Coast Starlight and longer-term use by intercity trains between Goleta and Gilroy."* As a way to fast-track this project, SRA funding can be used to design and construct a temporary railroad platform to enable the Coast Starlight to serve residents of the City, personnel of Fort Hunter-Liggett, visitors to the Pinnacles National Park and residents of neighboring rural, low-income communities along this rail corridor. If the funding available is not sufficient to complete all tasks, the contract may be structured in phases and additional funding will be requested to complete the final phases in the future.

The Amtrak-managed Coast Starlight service currently operates between Salinas and Paso Robles without stopping anywhere along this 100-mile section of the Central Coast. Although a rail station ("King's Station") was first opened in the City of King in 1886, King City and the surrounding area are not currently served by any rail service, even though the rail corridor is within walking distance of most of the town. The City is identified in the 2018 California State Rail Plan in the 2027 scenario: *"Provide bihourly integrated intercity rail and integrated express bus service from Salinas to San Luis Obispo, including at least one intercity rail service in addition to the long-distance Coast Starlight."* Additionally, the King City acts as the gateway to the nearby United States Army Garrison Fort Hunter-Liggett, which has seen significantly increased activity since the 9/11 terrorist attacks.

The City needs to finalize Pre-Construction work before applying for funding for construction of the temporary railroad platform. This RFP requires the chosen consultant to negotiate agreements with Union Pacific Railroad ("UPRR"), AMTRAK, and other stakeholders and design and engineer the temporary railroad platform. On August 13, 2019, the City entered into a SRA grant agreement with the San Luis Obispo Council of Governments in the amount of $1,471,470.00 to provide funding for engineering, design and pre-construction activities needed for a passenger rail station platform in King City, for use on the Coast Starlight Route.

The City sent out a Request for Proposal ("RFP") late last year and only received one response. As a result, a second RFP was distributed to qualified consultants early this year and Railpros was once again the only consulting firm that submitted a proposal. Therefore, staff is recommending award of the contract at this time.

DISCUSSION:

The primary items Railpros will be involved with in this project include:

1. Take the lead in seeking UPRR, AMTRAK and other agencies' approval(s) and agreement(s) for a new railroad crossing at Broadway Street, acquisition of right-of-way necessary for the new crossing at Broadway Street and the proposed temporary platform and future MMTC at Pearl Street, and other required items; and

2. Designing and engineering a temporary railroad platform at Pearl Street and a new crossing at Broadway Street.

The primary deliverables include:

a. Design for the King City Interim Station Platform (temporary) and the new crossing at Broadway Street;

b. Final Estimate, Schedule and Funding Plan for Construction; and

c. Services and Operations Agreement with UPRR and AMTRAK for Platform Use.

The King City temporary rail platform improvements shall include the following:

- Track and platform improvements at and adjacent to the King City Train Station;
- Station improvements at the King City Train Station to accommodate a temporary platform;
- Track improvements required for operation of rail service between Goleta and Gilroy (The necessary improvements to operate a rail stop at King City);
- Construction of improvements to connect Jayne Street to Broadway Street (ultimate) and to Chestnut Avenue (temporary);
- Installation of lighting, landscaping, signage and fencing at the station and parking areas to accommodate a temporary platform (not the ultimate Multimodal Center);
- Installation of station amenities, such as ticket vending machines, station signage, seating, shelters, and a visual message system, as needed to accommodate a temporary platform; and
- Utility investigations, as needed.

Staff reviewed the submitted Scope of Work and recommends the following clarification:

Railpros shall take a leadership role in representing the City in seeking approval of UPRR and other stakeholders and obtain agreements to assist the City in the pre-construction phase of building a temporary railroad platform. Railpros will begin working on this task at the beginning of the contract, including but not limited to, preparing a strategy for the City to obtain necessary approvals from

UPRR and other stakeholders, coordinating with the City in preparing a Project Description, negotiating with UPRR and other stakeholders the needed Agreements; and preparing the Draft and Final Agreements. With these clarifications, staff believes the proposal much more accurately addresses the City's needs than the proposal received in response to the first RFP. Therefore, staff recommends award of the contract at this time.

COST ANALYSIS:

Available grant funds for the Railpros consulting agreement is $1,279,323.00. Funding for the construction of this project has not been procured. Cost estimates will be developed to be used to seek grant funding to proceed with construction. An additional $192,147.00 is available to provide Environmental Review and Project Management. Therefore, there will be no impact on the General Fund.

ENVIRONMENTAL REVIEW:

The Project is covered by the Final Program Environmental Impact Report/Statement ("EIR/S") that SLOCOG completed for the San Luis Obispo - Salinas rail corridor, and the City will coordinate with UPRR on a Categorical Exemption for a temporary railroad platform within the existing rail right-of-way. The full buildout station project would be subject to subsequent environmental analysis tiering off of the Final Program EIR/S. The City will contract separately for the environmental review.

ALTERNATIVES:

The following alternatives are provided for City Council consideration:

1. Approve staff's recommendations;
2. Modify the phasing of the project;
3. Direct staff to renegotiate the contract;
5. Do not approve proceeding with design until construction funding is secured; or
6. Provide staff other direction.

Exhibits:

1. Railpros King City MMTC Temporary Platform Proposal
2. Railpros King City Temporary Platform Scope and Fee
3. Subconsultant List and Fees
4. Grant Agreement

Prepared by: _____
Octavio Hurtado, City Engineer

Approved by: _____
Steven Adams, City Manager

EXHIBIT 1

PROPOSAL

To Provide Design and Engineering Services/Application/Negotiation of Agreements and Permits for the City of King Multimodal Transit Center Temporary Platform Project

Submitted to

KING CITY

March 19, 2020

Submitted by

RAILPROS

15265 Alton Parkway, Suite 140
Irvine, CA 92618
www.railpros.com

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UNDER SEPARATE COVER

Cost Proposal

RAILPROS

RAILPROS
Rail isn't a part of our business, it *IS* our business.

March 19, 2020

City of King
City Hall
212 S. Vanderhurst Avenue
King City, CA 93930

Attn: Steve Adams, City Manager

Subject: **King City Multimodal Transit Center Temporary Platform Project Pre-Construction Design and Engineering Services/Application/Negotiation of Agreements and Permits**

Dear Mr. Adams,

RailPros' Procurement and Correspondence Contact

Robert Williams, PE, Project Manager
15265 Alton Parkway, Suite 140
Irvine, CA 92618
(949) 383-2331 (direct)
(714) 797-7809 (mobile)
robert.williams@railpros.com

The King City Multimodal Transit Center (MMTC) Temporary Platform Project has been on RailPros' radar since 2014, when we prepared the initial concept design report. In the time since, our firm has grown significantly in size, experience, and industry reputation – all of which we are proud to offer as assets to the City for the project, as described in this proposal.

Founded in 2000, RailPros comprises a multi-disciplinary team of professionals, many of whom are recognized leaders in their respective areas of expertise. All under one roof, we employ engineers, designers, inspectors, flaggers, and more, from recent college graduates to seasoned veterans of major railways such as Amtrak, UPRR, and BNSF. The individuals we have hand-selected for this project team are committed to executing the contract with RailPros' trademark outstanding quality.

We bring the City three key distinctives that will facilitate the project delivery: 1) the familiarity with the project we gained from our preparation of the concept design report; 2) our understanding of the City's long-term goals for the MMTC; and 3) strong relationships with UPRR and Amtrak.

To comprehensively address the City's needs, we have also invited five trusted subconsultants to join our team:

- Anil Verma Associates (AVA) will perform optional architectural engineering and design, including electrical and mechanical;
- Leighton Consulting, Inc. (LCI) will perform geotechnical engineering;
- Overland, Pacific & Cutler (OPC) will perform right-of-way acquisitions; and
- Rail Surveyors & Engineers (RSE) will provide surveying.
- If needed, Rincon will provide optional environmental support.

RailPros has collaborated with each of these firms on previous projects. In particular, we worked closely with AVA on both the Vista Canyon Multimodal Transit Center in Santa Clarita, and the Van Nuys North Platform Project in Los Angeles. We are therefore confident not only of every firm's commitment to quality, but also of our cohesiveness as a team.

RailPros Project Manager Robert Williams, PE, QSD, will lead the team, drawing from more than a decade of project management experience to coordinate efficiently within the team, with the City, and with other stakeholders. He managed previous studies and concept development for this project and has extensive experience managing projects of various size and scope for cities and transit agencies statewide. He looks forward to bringing his background to lead this project to success. With our team's collective experience, expertise, and understanding of stakeholders, we are committed to delivering this project with no surprises.

This proposal constitutes a firm offer for a sixty (60) day period from the date listed above. I certify that I am authorized to negotiate a contract with the City of King.

Sincerely,

RAILPROS

Doug Sawyer

Douglas B. Sawyer, Senior Vice President, West Region

RAILPROS
Rail isn't a part of our business, it *IS* our business.

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RAILPROS

Doug Sawyer

Douglas B. Sawyer, Senior Vice President, West Region

RAILPROS

2. APPROACH

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UNDERSTANDING OF PROJECT

Construction of a temporary railroad platform in King City is an important step toward a project that has been years in the making. Development began in 2006, with the long-term goal of ultimately constructing a Multimodal Transit Center that would serve as a new stop along Amtrak's Coast Starlight route, and as a hub for integrated intercity bus and rail services. Beneficiaries of the completed MMTC would include the City and its residents; neighboring communities along the 100-mile stretch between Salinas and Paso Robles through which the Coast Starlight currently passes without stopping; personnel of Fort Hunter-Liggett, which has a staging area at the station; and travelers including visitors to Pinnacles National Park.

The RailPros Difference

- Legacy knowledge: developed preliminary conceptual design
- Strong relationships with Amtrak and UPRR
- Understanding of long-term goals for MMTC

While the MMTC would facilitate the California State Rail Plan's 2027 scenario to "provide bihourly integrated intercity rail and integrated express bus service from Salinas to San Luis Obispo, including at least one intercity rail service in addition to the long-distance Coast Starlight," construction of a temporary platform in the meantime will facilitate the Plan's earlier 2022 scenario to "make early investment in additional local stops on the Coast Route in Soledad and King City, for immediate use by the long-distance Coast Starlight and longer-term use by intercity trains between Goleta and Gilroy."

The pre-construction portion of this project will be funded by a grant from the State Rail Assistance (SRA) Program. With abundant prior experience working on all phases of similar projects, the RailPros team has a comprehensive understanding of each of the processes required for this phase of the MMTC temporary platform project, including platform design, rail and roadway services, ROW services, acquisition of design approval, construction drawings, special provisions, and construction cost estimates. Moreover, thanks to our preparation of the earlier conceptual design report for this MMTC, we bring the City an established, in-depth understanding of the project's goals and challenges, and how to address both.

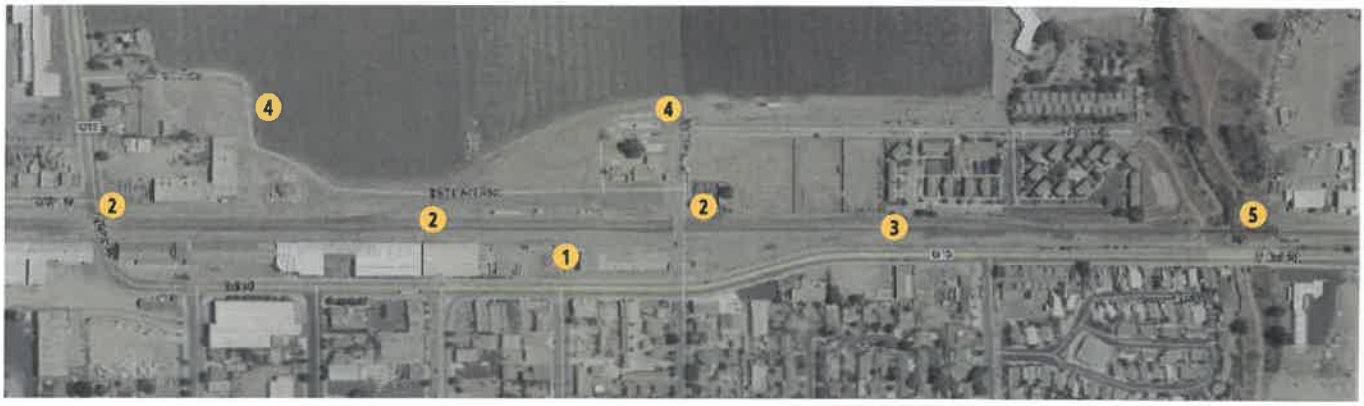
We anticipate that the project will demand the following key considerations:

- ✓ **Strict requirements for obtaining approvals from UPRR and CPUC.** RailPros has an established relationship with UPRR, in part thanks to key staff who previously were UPRR employees. In particular, Dan Nagy, PE, was a Manager of Track Projects, and Dan Thompson, EIT, was a Director of Track Maintenance, and their service territories included the Central Coast corridor; and a former right-of-way manager for UPRR, Renay Robison is able to streamline ROW acquisitions and agreements thanks to her connections and her deep understanding of UPRR processes. The rest of the RailPros team is similarly well-versed in working with UPRR and Amtrak, and in obtaining approvals from CPUC and other agencies. RailPros also has in-house staff who are former Amtrak employees and can therefore provide expert consultation regarding Amtrak standards.
- ✓ **Constructing the temporary platform with the future MMTC in mind.** We are approaching this project informed not only by our previous involvement in the conceptual design, but by our experience working on other similar projects – most notably the Vista Canyon MMTC. As a result, we bring familiarity and lessons learned that we will be able to implement in service of the City's goals for the MMTC as efficiently and cost-effectively as possible.
- ✓ **Minimizing impacts to train service, station layout, structures, track configurations, and other features of the surrounding area.** Our team has substantial knowledge of the station vicinity specifically, and of construction impacts generally; in the exhibits on the following page, we have highlighted some of the most significant issues we foresee, along with how we plan to address them.

2. APPROACH

KEY ISSUES

1. Station/platform
2. Grade crossing modifications
3. Track mainline and siding modifications and extension
4. Proposed extension of Jayne Street
5. Existing bridge and channel



1

Station/platform

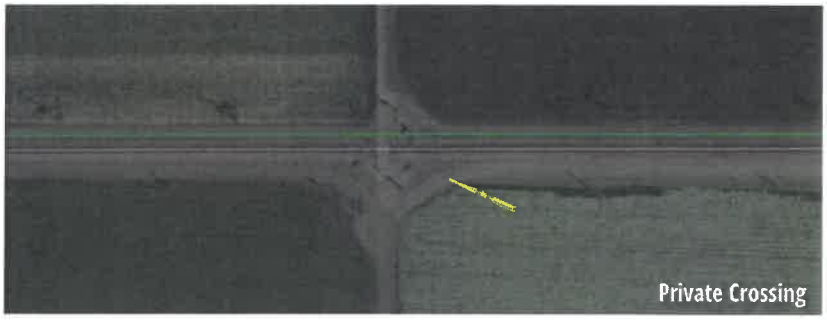
The station will need to be designed per Amtrak requirements and is anticipated to be 1,200 feet long and 16 feet wide. The project will need to address any level boarding concerns or requirements with the CPUC and FRA, as well as UPRR clearances and other requirements. In addition to meeting these stakeholder requirements, our approach will include anticipating long-term MMTC design needs to facilitate the eventual implementation of the MMTC, while minimizing need for rework when the MMTC is eventually constructed. The design team will also evaluate requirements for ROW, removal/demolition of existing tracks and buildings in the proposed station and platform area, ADA accessibility, parking layout, and general access to the temporary platform, as well as any potential military uses. Discussion of a potential cost saving alternative approach is included under the heading "Special Issues, Optional Services, and Procedural/Technical Innovations."

2 **Grade crossing modifications**

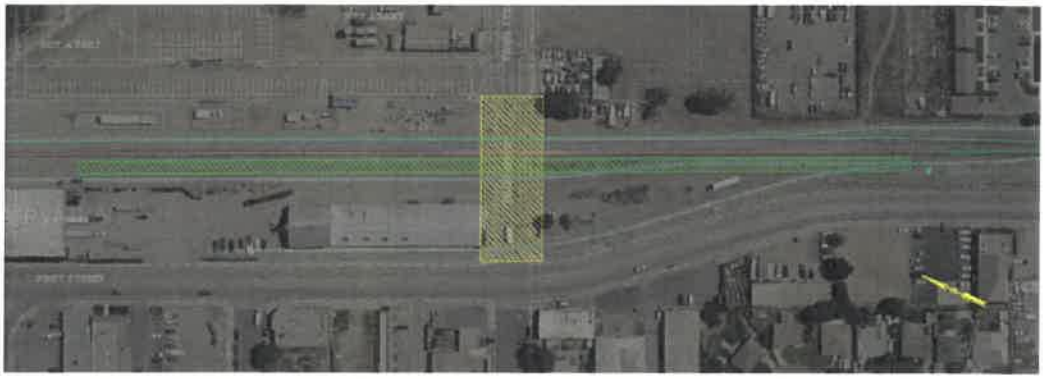
Multiple crossings are included in the project. Crossings require coordination and approval from multiple stakeholders and regulatory agencies, including the City, UPRR, CPUC, and private owners. Modifications and improvements will need to address current standards and safety requirements for approval and may include roadway modifications, sidewalks, pedestrian treatments, relocating railroad equipment, and consideration of traffic signalization. Crossings work includes the closure of Pearl Street; a new Broadway crossing; modifications to Lyon Street/Bitterwater Road; San Antonio Drive; and a private crossing. Time- and cost-saving alternative approaches to the crossings are discussed under the heading "Special Issues, Optional Services, and Procedural/Technical Innovations."

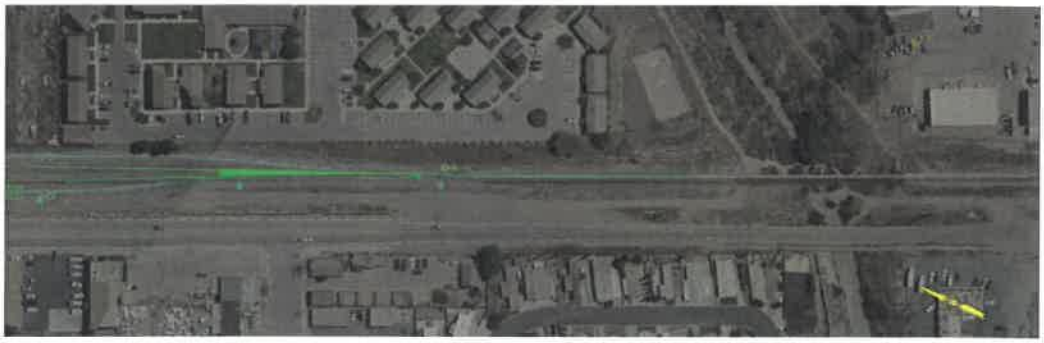
San Antonio Drive

New Broadway Crossing (left pin)
Pearl Street Closure (center pin)


Private Crossing

Lyon Street/Bitterwater Road





3 UPRR mainline and siding track modifications and extension

The existing mainline will be converted to a new siding track to service the station platform and will be extended and reconfigured to provide additional siding storage outside the city/station area. The new mainline alignment will be installed to provide UPRR freight traffic direct access through town and will have access to the proposed new siding with turnouts on both ends and universal crossovers in between to optimize access and operations. Existing spur tracks in the platform area will be removed for the station facility. Significant time- and cost-saving track alignment alternatives are detailed under the heading "Special Issues, Optional Services, and Procedural/Technical Innovations."

4 Proposed extension of Jayne Street

With the proposed closure of Pearl Street, access to the area will be allowed by extending Jayne Street to the proposed new Broadway alignment. Additionally, a temporary road extension of Jayne Street to Chestnut Avenue will provide additional access and circulation on to this part of the city. Our roadway design experts will work closely with the City and stakeholders to identify any issues, including utility, right-of-way, and other impacts; and we will develop cost-effective approaches to deliver the roadway design elements.

5 Existing bridge and channel

The trackwork will stop north of the existing bridge and channel in order to minimize project impacts to the existing structure and any potentially environmentally sensitive area. We will work closely with the City and UPRR to meet the project and environmental requirements, parking layout, and general access to the temporary platform as well as any potential military uses.

2. APPROACH

DETAILED APPROACH

RailPros has a proven approach, outlined on the following pages, to managing and delivering design projects similar to the King City Multimodal Transit Center (MMTC). In addition to our "no surprises" approach, our expertise, history with the project and surrounding area, and relationships with project stakeholders, particularly UPRR, set us apart from the competition. It is our goal and intention to leverage these advantages to optimize implementation of project elements and expedite delivery and approval of project plans and agreements.

For example, our involvement in the development of the City's previous studies gives us insight into the long-term plans for the future MMTC; this insight will inform our design of a temporary platform and station layout that accommodates conversion to the future permanent transit center, with minimal redesign and reconstruction, which will save the City time and money in the long run. Several of our staff are former UPRR employees with unmatched relationships, knowledge, and experience working with UPRR.

The RailPros team's overall approach to developing and managing this project includes four key elements that we will use to eliminate unknowns and successfully deliver the project, on time, on budget, and to the City's satisfaction.

RailPros' previous involvement in the MMTC project, combined with our relationships with railroad staff and understanding of UPRR and other railroad requirements, will allow us to hit the ground running without any learning curve.

1. DATA-DRIVEN DEVELOPMENT

The success of any project begins with developing a full understanding of the existing conditions, the project's requirements, and stakeholder goals and objectives. Equally important are the potential impacts of improvements to the railroad operations and the surrounding community. Understanding these elements leads to the effective development of project components.

RailPros has been involved in the development of this project from the early stages; we developed the layout plans and exhibits and provided project study support, and are very familiar with the City's goals, the railroad's requirements, and the proposed improvements. Additionally, RailPros fully understands the value of addressing community concerns with the City, San Luis Obispo Council of Governments (SLOCOG), and the railroad early in the project. Our previous involvement in the project, combined with our relationships with railroad staff and understanding of UPRR and other railroad requirements, will allow us to hit the ground running without any learning curve.

In preparation for this project, and in addition to previous discussions with the City, we have already begun the process of collecting information and building project consensus by visiting the project site and reaching out to stakeholders including, Amtrak, UPRR, the California Public Utilities Commission (CPUC), and Smith Monterey staff and representatives to collect data and feedback on the project and our approach. In this process we have already identified several potential cost saving enhancements and innovations that are discussed in more detail in our proposal. We have outlined these under the heading "Special Issues, Optional Services, and Procedural/Technical Innovations."

Upon contract NTP, we will begin by obtaining any additional project information and feedback from the City, Amtrak, and UPRR staff on the project's goals and objectives. We will also perform site investigations, and bring all the data together with the project team to brainstorm opportunities and constraints for the project. This data-driven approach lays the groundwork for a successful project and is essential to building stakeholder consensus.

2. BUILD CONSENSUS - DEVELOP A PS&E DESIGN THAT MEETS STAKEHOLDER GOALS

With the proposed station and rail modifications on an active UPRR corridor and with multiple stakeholders, the project development process is complex. RailPros has worked on numerous freight and passenger rail corridors and has a particularly well-established working relationship with UPRR. We understand the particular and oftentimes complicated issues that occur between stakeholders, including railroads, local municipalities, and third parties, and have developed an expertise in recognizing stakeholder needs, developing meaningful working relationships, resolving concerns, and building project consensus.

Our ability to proactively involve and build relationships with stakeholders, along with our data-driven development, helps eliminate surprises and is crucial to delivering the project successfully.

3. CONFIRM THE BUILDABILITY OF THE PROJECT

Constructing improvements on a railroad which needs to remain operational can be very complex. The project will benefit from the knowledge and insights of our team of engineering, operations, and construction experts who:

1. Are familiar with the various components involved
2. Understand train operations and the project's potential impacts
3. Are familiar with the equipment, staging, and laydown areas required to build the proposed improvements

The RailPros team comprises industry leaders and technical staff who have this expertise and a history of successful design and delivery of similar projects for clients such as UPRR, BNSF, Amtrak, Metrolink, NCTD, SANDAG, SBCTA, and OCTA. In our experience, this approach of involving and coordinating the efforts of our technical experts is imperative to our "no surprises" delivery of the Project.

Performing a constructability review is the first line of defense against changes, claims, and schedule delays during construction. Our team proposes design and specification review meetings prior to the bid-opening of any project, including site walks for the construction management team to view the project location and identify any possible areas of conflict or change during construction. In the constructability review, the phasing of the project is scrutinized. Items such as laydown yards and phasing of construction near live track operations are on the forefront of the reviews. The team values and recognizes the American with Disabilities Act (ADA). It is well known, especially on station projects, that ADA audits are performed during design and also during construction; therefore, our team is ready to take on that task and will be sufficiently prepared for any audits.

4. DEVELOP ACCURATE ESTIMATES AND BUDGETS

RailPros has an advantage in developing accurate estimates and budgets, which are a key part of our services in managing over $800 million in railroad capital projects. We have access to a vast, up-to-date library of unit costs. As an example, from our current involvement with SANDAG as program managers for the LOSSAN Corridor, we have access to cost data from several recent similar projects from which we can draw. Because we represent the owner, we are responsible for developing the entire project budgets for LOSSAN Corridor projects, including all the add-ons for flagging, third-party, and host railroad review, permits, ROW and environmental mitigation, and other budgetary needs as they arise. RailPros continually refines our data for these add-ons, based on actual project cost history. We are also currently providing program management services for SBCTA's Redlands Passenger Rail Program and similar services for various other agency projects from which we can collect the most recent data available. Our expertise in this area will translate directly to the successful on-time, on-budget delivery of this project for King City.

APPROACH TO COMPLETING THE TASKS IN THE SCOPE OF WORK

Incorporated into RailPros' proven approach to project delivery, discussed above, is our approach to complete the key project elements and tasks outlined in the City's scope of work. This specific approach follows the outline of anticipated tasks shown below.

Project Initiation and Project Team Coordination

One of our first priorities at the outset of the project will be to schedule a project kick-off meeting to work with the City to define project goals, stakeholders, collect any relevant project information and begin laying out details of our strategy for successful design and coordination efforts. Our Project Manager and Key Staff will work closely with the City to develop and define a work plan for delivering the project successfully. The work plan will be built upon and further expand the approach and scope of work elements outlined in our proposal to incorporate and address City and other stakeholder goals and needs. This will in turn be incorporated into our Project Management Plan (PMP) that will guide the project from start to finish.

Working closely on the Oceanside Quiet Zones Project with our track, railroad signal, civil, and construction experts, the RailPros design team, led by Robert Williams, PE, identified innovative solutions to eliminate impacts to complex railroad track and signal system infrastructure from the original design, reducing the construction costs by nearly 20% and saving the City of Oceanside over $1 million.

The Right Man for the Job

Project Manager Robert Williams

- 12 years of industry experience
- Proven success as project manager
- Oversaw development of preliminary conceptual design report for this project
- Existing relationships with stakeholders

Project Management & Coordination

Implementing our approach to success and delivering the Temporary Platform Project to the City's satisfaction depends upon having the right Project Manager (PM) with proven leadership, technical expertise, and the ability to work effectively with the City, UPRR, SLOCOG, Amtrak, the FRA, CPUC, and other stakeholders. Robert Williams, PE, is the right Project Manager. He managed the development of the concept rail and station development, has worked closely with these stakeholders on a variety of projects, and he will see this project through successfully.

Project Management Plan

RailPros has developed a proven Project Management Plan (PMP). Robert will write a project-specific PMP by clearly defining the key elements outlined in the RFP, particularly the scope, schedule, and budget controls. At the project kick-off meeting, we will meet with the project participants, explain the project requirements, and provide the PMP to guide the team throughout the project.

Quality Control Plan

Quality Assurance and Quality Control are key elements critical to the success of any project and are a mandatory component of any RailPros design. Our QA/QC plan and project controls approach are discussed in more detail beginning on page 29. This is a living document that will be modified to meet the needs of the project as it develops.

Document Control

With the City's approval, RailPros will establish a digital document control system using Microsoft SharePoint or another similar system to document, track, and maintain all necessary project files, providing access rights and delivery to appropriate parties, stakeholders, and team members. RailPros has successfully developed, implemented, and maintained document control systems for large projects and programs such as SANDAG's LOSSAN Corridor Program and SBCTA's Redlands Passenger Rail Program. Our experience and expertise will facilitate document control processes for the project.

Project Schedule

Upon NTP and as part of our PMP, RailPros will develop a project master schedule. We will review the components and schedule data with the City to verify that the project is being properly tracked. The schedule will be updated regularly as part of our reporting procedures.

Monthly Progress Reporting

Monthly progress reports are included with monthly invoices and will include sufficient project information and details to provide an accurate depiction of the work performed and planned and status of the project. Details of the progress report are discussed in our PMP and will be presented to the City PM for approval and feedback.

Project Development Team (PDT) Meetings

Robert Williams will lead regular PDT meetings to discuss project status, deliverables, and other key elements. Action Items will be tracked and monitored, and minutes will be prepared for each meeting, recording the project status.

Stakeholder Coordination, Agreements, and Negotiation Support

As noted in our approach above, working with stakeholders early and often to involve them in the project development and to build consensus is the key to the successful delivery of the project; this is an area where RailPros staff and relationships set us apart from the competition. We will work closely and regularly with the City (including outreach staff), UPRR, Amtrak, and other relevant stakeholders and regulators, holding meetings, workshops, site visits, and preparing exhibits, visuals, and other documentation as needed to build support for the project.

RailPros has a uniquely strong relationship with UPRR. We have worked closely with UPRR on various public projects and also provide design, coordination, flagging, and other services directly for UPRR. Several of RailPros staff are former UPRR employees, including track, signal and structural designers,; managers of industry and public projects; and maintenance of way staff, including Dan Nagy and Dan Thompson, who oversaw UPRR projects, maintenance, and operations along this corridor and have an intimate knowledge of the project area. Additionally, Renay Robison is a

former UPRR Director of Real Estate with a wealth of experience processing UPRR agreements and ROW impacts for projects throughout the country. These three individuals will be instrumental in coordinating and facilitating the processing of agreements and approvals with UPRR and informing the overall negotiation strategy. Anticipated agreements include roadway crossing Construction and Maintenance Agreements (C&M), Service and Operations Agreement, and any necessary temporary or permanent easements, licenses, or other agreements for ROW, access, and construction. Our team will also be supported by our ROW experts, as well as staff from subconsultant firm Overland, Pacific & Cutler (OPC).

All our key staff have worked with UPRR and have unmatched knowledge of UPRR requirements, as well as relationships with UPRR staff. Several of our staff are also former Amtrak employees, including our company founders, and our team has excellent understanding of station requirements and history working with Amtrak. The stakeholder effort will be led by Robert Williams, in coordination with the City PM, with support from our team's extensive experience and relationships

Development of Preliminary Engineering and Final PS&E and Design Documents

Robert Williams will oversee the development of the Preliminary Engineering Design and Final PS&E documents. He will be supported by the team of technical experts identified in the organization chart. Upon approval by the City and UPRR, the preliminary documents development will begin to support the environmental documentation processes. Once the preliminary documents are approved by the City and stakeholders, the final PS&E documents will be developed. Robert will work with the design team to deliver the design on time, on budget, and in accordance with applicable standards as outlined in the PMP.

Many of the project components will be performed, prepared, and progressed concurrently by various team members and subconsultants. Robert will provide regular coordination and hold internal team meetings to guide and direct the development and collaboration effort and make sure communication is open and information is shared between team members. This type of collaborative effort is essential to streamlining a project delivery with no surprises.

- **Engineering plans** will start with the development of project schematic plans to confirm base project information, location, and details. As a part of the design and in conformance with the industry standard design procedures, we will develop a complete rail design drawing to illustrate and direct design details. The schematic and project drawings will continue to be refined throughout the project life, as more information is developed and confirmed in all disciplines. We will utilize standard industry format for this work. All drawings and drawing files will be prepared in conformance with national CADD standards and will be provided in both hardcopy and as CAD files. We will follow standardized design quality assurance processes and procedures for plans, specifications, estimates, reports, and calculations development.
- **Specifications** will be prepared in industry standard format that blends UPRR, Amtrak, and City requirements. RailPros will work with the project team to identify appropriate specification sections and modifications.
- **Project Cost Estimates** will be prepared in industry standard format, using stakeholder guidelines and standards. As noted previously, RailPros has access to over $800 million in railroad capital projects current cost information, which allows us to develop accurate project costs. This is yet another unique way we can provide peace of mind to our clients and eliminate any surprises at bid opening. RailPros continually refines our data for these costs, based on actual project cost history. We will utilize our team's value engineering expertise and cost estimating techniques to confirm both accuracy of our cost predictions, as well as look for value savings opportunities. We will compare this against our access to dozens of recent bids to confirm it is on par with industry patterns and results.

"Every time we meet, I am reminded RailPros was definitely the best choice for this project — for [SGVCOG], for the City, and for me. Your knowledge and professionalism are appreciated. Plus, you are just a great group of people with which to work, making meetings productive, comfortable, and enjoyable."

–Rachel Korkos, former Senior Project Manager, San Gabriel Valley Council of Governments (previously ACE)

- **Construction Schedule** - Our team of experts in design and in construction management will work together to develop accurate, efficient, effective documents for managing the project during design and construction, utilizing Primavera P6. As we finalize the design, we will work with King City to develop a CPM construction schedule to provide to the construction manager.
- **Public Outreach and other Design Support** will be provided as needed to support the City's outreach and coordination efforts. RailPros anticipates providing project details, exhibits and other necessary documentation for public presentations, outreach and to support discussions, applications or other requirements in support of the City's efforts.

On the following pages, we will discuss our understanding and approach to the specific key project design and coordination elements anticipated.

Topographic Surveys

Topographic surveys will form the base for the design, and it is crucial to have accurate data to deliver a successful project. For this reason, we have teamed with Rail Surveyors and Engineers (RSE), a firm of rail and engineering experts, with whom we have a strong history of successful project delivery. RSE will perform documentation collection and review, aerial mapping, and field Survey to provide a topographic base for the project development. RSE will also provide as-needed supplemental surveys throughout the design as additional elements or requirements are identified. As noted in their name, RSE are experts with rail and station projects with a firm grasp of the railroad requirements and elements. RSE and RailPros have collaborated on major rail projects such as the Metrolink Positive Train Control (PTC) Program and have an excellent working relationship.

Utility Investigation

To identify right-of-way (ROW) impacts, a full site plan (preliminary geometrics plans) will be prepared. The site plan will include track areas, station platform and facilities, and grade crossing and roadway modifications. The site plan will be laid out to provide a fully functional siding track and temporary station platform and associated facilities, while aiming to keep ROW impacts at a minimum. The completed site plan and ROW acquisition delineation plan will be issued to the project's stakeholders for review, and for subsequent approval after comments have been addressed.

A complete existing and proposed utility analysis will be provided to identify conflicts between the existing utilities and the proposed improvements. Existing utilities will be identified and plotted by inspecting available as-built records, consulting with the corresponding utility agencies, using information from ground or aerial surveys, and direct site observations. After the existing utilities have been plotted and analyzed against the proposed improvements (proposed utilities and facility layout), utility plans for the design alternatives will be produced, along with a completed utility conflict matrix and accompanying cost estimate.

Luis Flores, PE, RailPros' civil department manager, is a site development expert with extensive experience in site plan development and utility design for a variety of facilities and for diverse clients. His last major site development project was a multi-modal transportation (park and ride) facility which integrated rail, bus, and automobile modes of transportation in Miami, Florida. He is currently working on the development of the Goleta Transit Center.

EXPERTS IN COST SAVINGS

Not only does the RailPros team have a proven history of leading station and MMTC projects to success; but we do so while maximizing cost-efficiency for our clients.

VISTA CANYON MMTC, SANTA CLARITA
- Obtained $8.9 million from SB-1
- Supported the City in obtaining serveral million dollars in LACMTA Measure M and Measure R funding for the project's sustainability aspects

VAN NUYS NORTH PLATFORM, LOS ANGELES
- Innovative solutions to challenges saved $20 million and kept the project under budget
- Final PS&E design completed three months ahead of schedule, allowing the receipt of state Prop 1B grants to fully fund the project

Luis will work closely with our design team, subconsultants, and the City's staff and ROW team to identify and evaluate the extent of impacts; as well as with our surveyor, ROW engineering, ROW experts and the City in identifying and coordinating utility and ROW impacts. Our ROW team includes experts such as Renay Robison, who previously worked for UPRR for over a decade, and is therefore able to provide unparalleled insight and expertise in working with UPRR and with third-party utility owners on and around the railroad.

Geotechnical Report

Leighton

Leighton Consulting, Inc. (Leighton) has been working in California on light and heavy commuter railway stations for 58 years. Their experienced, California-licensed civil and geotechnical engineers routinely work with AREMA and Caltrans requirements. Leighton has three in-house Caltrans certified geotechnical and materials testing laboratories. They will address both geotechnical and geoenvironmental issues for this site in an integrated, cost-effective manner.

Leighton will perform geologic site reconnaissance and review readily available geotechnical, geologic, and soil information for the temporary platform site and develop a draft report for stakeholder review and feedback. A final report will be provided based on stakeholder feedback. Additionally, Leighton proposes drilling six borings, 240 feet on-center along the proposed platform footprint, with the northernmost boring drilled 50 feet deep and the remaining borings drilled 20 feet deep below existing grade with the findings to be included in the report. Leighton is also capable of handling geoenvironmental (hazmat) testing, as discussed under the Special Issues, Optional Services, and Procedural/Technical Innovations Section below.

Key Design Elements

As noted above, Preliminary and Final Design documents will be developed for the Project along with the associated Estimates of Probable Construction Costs and specifications necessary to build the project. The following sections discuss key elements of the design and development process and our approach to deliver them.

Temporary Platform/Station Design Plan

The proposed MMTC site is located west of the existing tracks between the proposed Broadway crossing and San Lorenzo Creek. The station would be serviced by a 1,200-foot long, 16-foot wide side platform, pursuant to Amtrak standards. The platform ends approximately 100 feet from the proposed Broadway crossing, on the north end, to allow for proper activation of the crossing warning equipment. On the south end, the platform ends clear of the proposed railroad signal and turnout. The platform is proposed to be within UPRR right of way. The UPRR mainline track will be realigned and the existing mainline track will be converted to a siding track that will service the platform.

The temporary platform and station elements will be developed to maximize usage, while minimizing future impacts and reconstruction required for the full implementation of the future MMTC. Our design team will consider all the proposed requirements for the permanent transit center, including station buildings, parking, "kiss-n-ride," bus access and stops, Fort Hunter-Liggett staging area, and De Anza Trail connection; we will accordingly identify improvements and methods to simplify the transition from the temporary platform to the future MMTC. This approach will save the City time and money for completing the overall station development.

Our station lead is Danielle Libring, PE, who has been instrumental in the successful delivery of both the Van Nuys Station and Vista Canyon Station projects. She will be supported by our civil, structural and architectural experts in developing the temporary platform and station design.

One of the greatest assets the RailPros team brings to the City is our longtime relationships with key stakeholders.

UNION PACIFIC

Staff: Dan Nagy, Dan Thompson, and Renay Robison all are former UPRR employees, while Karen Hankinson has held consulting contracts for more than a decade and counting

Projects: On-Call Systemwide Preemption; On-Call Construction Management Services

AMTRAK

Staff: Multiple RailPros staff had long careers previously as Amtrak employees

Projects: 8th Street Yard Analysis; Derailment Training; Fort Worth Mechanical and Commissary Building

Track Design

Track will be designed in accordance with UPRR design standards and Amtrak station requirements. The design will need to meet the operational UPRR requirements and improvements for operation of Amtrak service between Goleta and Gilroy. The current design includes shifting the mainline track to the north and converting existing mainline to a siding track to allow passenger trains to service the station via the proposed siding, without interrupting through trains using the proposed mainline. The siding track will also be lengthened, and crossovers and turnouts will be installed for movement between the mainline and siding track to allow trains to access the station or to lay over farther outside the city on the siding track.

Our team will verify the existing corridor conditions and provide a constructible final engineering alignment and layouts for trackwork that meets the project's needs and King City's requirements, and also follows Amtrak standards and design criteria. Available data will be verified and used to advance and develop a set of plan and profile sheets and sections. Trackwork details and alignments showing curve data will be prepared.

Trackwork alignments will be developed and prepared using the latest version of CAD, with Intelligent Design CAD software such as PowerRail. The use of the Intelligent Design CAD software platform is complemented by a sophisticated 3D coordinate geometry component and is utilized from the known data evaluation through the alignment design process. All available surfaces and existing digital terrain models are created and used to develop proposed horizontal alignments and top of rail profiles.

As part of the development of the horizontal and vertical alignment plans, horizontal curve cardinal points (TS, SC, PI, CS, and ST) and vertical curve points (PVC, PVI, and PVT) and gradients will be displayed. The locations and types of special trackwork (turnouts, crossovers, frogs, and crossings) will also be shown. The layout of special trackwork configurations will utilize standard turnout layouts depicting the limits from the point of switch (PS) to the last long timber (LLT) to determine the feasibility and placement of the switches. In addition, cardinal stations for the point of switch, point of intersection (PITO), and points of frog (PF) will also be displayed.

Completing early analysis on the track alignment and optimizing it at the beginning is key, so that all other features can be designed around it. Any track changes will impact all other disciplines and it is crucial to assess the constructability of the design, phasing, and operational impacts early on.

These standard practices will be further targeted to the specific stakeholders involved in this effort: UPRR, Amtrak and Caltrans, all of which RailPros completes tasks for and coordinates with on a regular basis. With this proven experience, we confidently begin from the concept confirmation in advancing only options and alternatives that meet the needs and requirements of the collective stakeholder group.

Track Design Lead Nathan Ortega, PE, is an industry expert licensed in 14 states and who has over 17 years of construction, design, and management. His experience and knowledge and design management will make developing and coordinating proposed improvements a smooth and efficient process.

Signal and Communication Design

Station communications and systems will be implemented in accordance with Amtrak requirements. Our signal and communications team will be led by Carrene Gilbert, PE, supported by her team of railroad signal and communications experts, including several former UPRR signal and communication designers. Our signal and communications team has provided similar services for the Van Nuys Station and Vista Canyon Station projects and are well versed in the development of station communications.

Typically, UPRR staff design the railroad signal and communication plans for their wayside and crossing signal systems. RailPros has staff capable of performing these services, including former UPRR signal design staff with an intimate knowledge of UPRR systems and requirements. With UPRR's approval, RailPros can provide these signal design services as an optional service.

Railroad Grade Crossing Design

Highway rail at-grade crossings are a crucial project element – one of the few where the public interfaces directly with the railroad. Due to this nature, there are various stakeholders involved in modifying or creating a crossing. Improving highway-railroad grade crossings requires a clear understanding not only of the rail related intricacies, but also of the existing traffic nuances and impacts. In addition to the technical aspects of design, improving highway-railroad grade crossing safety requires building consensus among various stakeholders including UPRR (with different departments within the railroad such as signal and communications, civil, operating and maintenance of way staff), regulatory agencies like the CPUC, local agencies like the City, residents, and business owners. In order to obtain stakeholder consensus, the team must effectively communicate, plan, design and implement the grade crossing improvements while maintaining efficiency of both rail traffic and roadway traffic. The RailPros team is unique in that we have a long history of studying and planning grade crossings, building stakeholder consensus, developing designs and delivering grade crossing improvements for freight railroads, commuter railroads, local agencies and private entities both in California and throughout the US.

In addition to the crossing design, CPUC GO 88-B applications will be required for modifications to existing crossings and a formal application will be required for the new crossing at Broadway. There is also a private crossing along the proposed track extension and any modifications will need to be coordinated with the private owner and the railroad.

RailPros crossing design will be led by our Project Manager, Robert Williams, who has extensive experience developing crossing modifications and safety enhancements on a variety of crossings including the Pomona At-Grade Crossing Safety Enhancement Project, Oceanside Grade Crossing Safety Enhancement and Quiet Zone Project, Orange County Grade Crossing Safety Enhancement and Metrolink Service Expansion Double Track Project for OCTA, San Diego Quiet Zone Project, and Santa Barbara Calle Cesar Chavez Crossing and Ventura Ash Street Crossing Projects. Our experience an ability to coordinate and build consensus will be key to facilitating the crossing development.

Roadway Design

RailPros will design roadway geometrics using King City standards and Caltrans design criteria, with proper consideration given to the design traffic volumes, design speed, capacity and levels of service, functional classification, adjacent land use, design consistency and driver expectancy, aesthetics, existing, pedestrian and bicycle concerns, and ADA requirements. Special attention will be given to at-grade crossings to maintain vehicular and pedestrian safety and to follow King City, CPUC, Amtrak, and UPRR standards and requirements.

RailPros will design a safe and effective Temporary Traffic Control Plan (TTCP) to move vehicular and pedestrian traffic during all phases of construction. The design shall include construction phasing of roadways ingress and egress to existing property owners and businesses, routing, signing and pavement markings, roadway pavement, drainage structures, ditches, front slopes, back slopes, drop offs within clear zone and transit stops. The design shall also include construction phasing of roadways to accommodate the construction or relocation of utilities.

Hydraulics/Hydrology Study

Existing drainage patterns, catchment basins, and storm flows will be analyzed and maintained or updated in the Hydrology/Hydraulic study for the proposed project. The Hydrology/Hydraulics study will identify necessary new storm water improvements and any modifications to the existing system that may be necessary. The Hydrology/Hydraulic study will be done in conjunction with the Best Management Practices design for this project and according to the City's Drainage Master Plan and Water Quality Best Management practices.

Mr. Mariano Pineda, under the supervision of Civil Lead Luis Flores, will conduct the hydrology/hydraulic study. He has extensive hydrology/hydraulics experience and has a masters degree in water resources.

Grading and Drainage Plan

Grading will be designed to keep all walking and driving surfaces free of storm water ponding and will allow direct drainage away from railroad tracks within the project limits. Special attention will be paid to pedestrian-accessible routes, parking and passenger loading areas, and curb ramps that provide access to the proposed site to promote pedestrian safety and full compliance with the ADA and California Title 24. Major improvements required to accommodate track work, pedestrian access, or any other improvements, such as street relocations, retaining walls, and storm drain system modifications, will be promptly identified and communicated to the rest of team for review and discussion. All work will fully comply with federal, state, City, agency, and UPRR regulations and standards.

Luis Flores, PE, has extensive experience in grading and drainage, as he has worked on many facilities and private land developments. Mariano Pineda will assist Luis with grading and drainage.

Platform Structures

Platform structures include the pedestrian ramps, stairs, walls, and canopy structures. These are all new structures that will be designed in accordance with the Amtrak design criteria and engineering standards and will conform to any architectural requirements and stakeholder preferences. Structures will be designed in a manner which maintains Amtrak and UPRR operations, minimizes ongoing maintenance, and maximizes use of sustainable materials. Refer to the architectural section (beginning on page 27) for additional discussion of platform features.

- **Ramps, Stairs, and Walls.** Pedestrian ramps and stairs are needed to provide ADA-compliant access to the platform. Retaining walls separate the ramp and stairs from the surrounding earth. Ramps and stairs are designed for typical platform loads. These structures are

GRADE CROSSING EXPERTS

This project will necessitate the modification of multiple grade crossings, and the RailPros team includes industry-leading experts.

Project Manager Robert Williams works closely with Traffic Lead Karen Hankinson on a regular basis. Their numerous crossings projects include:

OCEANSIDE QUIET ZONES
City of Oceanside
5 crossings

DOWNTOWN SAN DIEGO QUIET ZONE
Civic San Diego
12 crossings

CROSSING SAFETY IMPROVEMENTS
SGVCOG
5 crossings

CROSSING SAFETY ENHANCEMENTS
Orange County Transportation Authority
53 crossings

designed per AREMA Chapter 8, using railroad surcharge loading when located close to the railroad track and platform, or vehicle surcharge loading when located outside the limits of the track.

- **Canopy Structures.** Canopy structures are typically open-sided metallic structures with a roof to protect pedestrians from sun or rain while waiting for a train or purchasing tickets. They are configured by the architects but the member sizes and connections require structural design and detailing. The structural design of canopy structures utilizes design criteria with wind and seismic loads from the California Building Code.

PROVEN COLLABORATORS

RailPros and subconsultant Anil Verma have a well-established history of successfully working together on station projects, including the Vista Canyon MMTC and the Van Nuys North Platform.

Track Structures

Track structures that may be impacted include existing pipelines and culverts that may need extension for new track alignment and/or protection from track loadings. Culverts are typically extended in kind for the new track alignment, but there may be a need to provide protection for the water pipeline.

Utility Plans

Existing utility locations will be fully studied and plotted at the onset of the project for early identification. Due diligence and engagement of with the utility's owners will be sought at the earliest possible time for full and early coordination and the timely completion of designs and cost estimates. A complete existing and proposed utility analysis will be provided to identify conflicts between the existing utilities and the proposed improvements. Existing utilities will be identified and plotted by inspecting available as-built records, consulting with the corresponding utility agencies, using information from ground or aerial surveys and direct site observations. After the existing utilities have been plotted and analyzed against the proposed improvements, utility plans for the design alternatives will be produced along with a completed Utility Conflict Matrix and accompanying Preliminary Cost Estimate. Potholing and/or subsurface investigations will be performed to obtain additional utility information once conflicts are identified during the design.

Existing utilities impacted by the projects will be relocated as necessary and new utilities designed to fully comply with specific utility company, as well as Amtrak and UPRR requirements. As mentioned above, consultation will be sought with the rest of the team early in the process to identify any alternatives that could minimize the amount of utility relocation. Design will include sewage lines, pumping stations, fire protection systems, potable water, power, communication etc. for a complete and functional facility. Wet utilities (water and sewer) design will be provided by RailPros. Dry utilities (power, gas, communications, etc.) will be relocated by the owning utility company but will be coordinated by RailPros accomplish all relocation and new services within schedule and without conflicts.

Construction Staging Plan

Our team of design experts, supported by input from our construction management experts, will a develop functional, buildable project. This collaboration between our design and construction experts is an element that sets our team apart in delivering projects that work with no surprises and will help identify all the elements outlined in the Construction staging plan. This effort will be led by Track Design Lead Nathan Ortega, in coordination with our other discipline leads.

Architecture, MEP, and Landscaping

Station and Facility Architecture Design Approach

AVA has a diversified portfolio of transit project experience, including the planning, programming, design, and construction management of stations. AVA's approach to station and transit facility architecture is to develop creative visioning and guiding principles for each project, which include considerations of:

- **Program** - AVA will listen to King City staff and stakeholders' goals to develop a clear program and visioning for the temporary platform / station
- **Walkability** - AVA will strive to improve the walkability of surrounding King City neighborhoods for accessing the station.
- **Pedestrian-Friendly Environments** - AVA will design the site to human scale that is visually attractive and pedestrian friendly, which in turn promotes healthy and active living.
- **Connectivity** - AVA's design will increase connectivity of uses, transportation modes, and public/civic facilities within King City. AVA will study the pedestrian flow models based upon number of users anticipated.
- **Mixed Uses** - Successful transit facilities foster a mix of uses within developments.
- **Identity** - AVA's design will strengthen King City's identity and create a memorable public space.

- **Accessibility** - AVA has a thorough knowledge of the design guidelines, codes and requirements such as ADA, and accessibility guidelines for site, building, and transit facility design.
- **Sustainable Design** - AVA is a leader in the implementation of sustainable design strategies, addressing these both during design and construction phases.
- **Safe and secure facilities** - Through good design practice and adherence to crime prevention through design principles, AVA focuses on pedestrian and vehicular safety throughout the station and site.
- **Respect and resolve community contextual requirements.** Station design must be compatible and respectful of the surrounding community. The construction impacts to the adjacent neighbors minimized.
- **Cost-effective designs** - Station design must consider the proposed system's initial cost and long-term life cycle costs to achieve the best value in design. AVA has in-house estimators.

From AVA's lessons learned on past transit projects, their team has developed a top-level approach to projects including: 1) Identify transit station planning as a major area of focus; 2) Place a great emphasis on communication with common stakeholders such as Amtrak, UPPR, and other agencies in order to strive for common-sense solutions and coordination; 3) Develop and focus on project goals from the outset and implement updates at the start of each major phase; and 4) Focus on people as invaluable resource.

"Focus on people as invaluable resource" is crucial to our approach. Our carefully selected team will bring to the Project individuals with the right attitude, innovative spirit, and respect for King City client and stakeholders.

Mechanical, Electrical, and Plumbing Engineering (MEP) Approach

AVA's MEP engineers understand the progressing standards for lighting. Energy conservation is a key issue of our times. Photometric studies are important to understand just the appropriate amount of light required for safety, and the need not to provide more than what is required for energy cost savings.

- The focus of our MEP efforts will be to progress the design concepts at a sufficient level of detail to develop accurate capital cost estimates, construction staging, and final preparation of working drawings. The following are main elements of the MEP work during the design process:
- Conducting a current conditions site survey of the MEP services to determine of the project needs.
- Plan the work so that it does not disrupt service operation. This often will require the provision of a separate distribution board for the additional electrical loads as other rail systems may not be able to tolerate the down time needed to make the new connections.
- Verify that the incoming utility power service will support the additional loads and if not, coordinate with the electrical utility to provide the additional capacity. Size the power and lighting cables and routing the associated conduits. Provide switchboard, power breakers and lighting panels to accommodate loads.
- Stations require ample lighting to help create a safe environment. Provide power for any necessary adjacent lighting. Design the light fixtures to match the existing lights and panel schedules.
- Provide for drainage system, sump pumps if needed, and site water needs.
- Electrical design work will performed in accordance with NEC, IEC, IEE and UL Standards and NEMA. Mechanical and plumbing design work will be performed in accordance with UPC, UMC, UBC, and NFPA13 and NFPA14.

THE AVA APPROACH
to Transit Projects

1. Focus on station planning
2. Emphasis on stakeholder communication
3. Develop goals; update with each phase
4. People as key resource

Landscape Architecture Design Approach

AVA has a well-established team of landscape architects that is well versed with transit guidelines and the nuances of working with stakeholders. They have a thorough process for developing and progressing the landscape design to meet our clients' needs, whereby working drawings are produced. They approach each project with a holistic view and will express King City's unique geographic and cultural identity. The team carefully considers a site's natural and historical ecologies and has expertise in developing a relevant program of uses suitable to the client's needs.

AVA incorporates and consults upon art design where necessary, and accommodates for entertainment and civic functions. With in-house rendering capabilities, three-dimensional graphic illustrations help explain plans and concepts in community workshops in order to

engage the community and gain stakeholder buy in. Their design oversight continues during construction and during long term maintenance for the best chance of success.

AVA landscape architects are guided by sustainability principles with focus on water reduction, longevity, maintenance, energy, and resources. They have a thorough knowledge of the Southern California ecosystem, habitats, and an understanding of landscape materials and methods that has benefited us in numerous successful projects. They are committed to creating dynamic, people-oriented environments.

The AVA team has a thorough knowledge of requirements under ADA/Title 24 codes, hardscape methodologies, site grading, site lighting, accessibility LID approaches, sustainability principles, and general constructability. AVA has an in-house irrigation team that is well versed in the latest technology related to water conserving strategies. With the new water restriction for Southern California, these capabilities will be required for all future projects.

Right of Way impacts and Costs

To identify right-of-way (ROW) impacts, a full site plan (preliminary geometrics plans) will be prepared. The site plan will include track areas, station platform and facilities, and grade crossing and roadway modifications. The site plan will be laid out to provide a fully functional siding track and temporary station platform and associated facilities, while aiming to keep ROW impacts at a minimum. The completed site plan and ROW acquisition delineation plan will be issued to the project's stakeholders for review, and for subsequent approval after comments have been addressed.

Our PM, Engineering Staff and ROW experts will work closely throughout the project development to not only highlight the ROW impacts, but to also identify solutions and estimated costs. Our ROW team, led by Renay Robison, will coordinate regularly with UPRR throughout the project development to keep them engaged on the process and help provide a smooth and timely project delivery.

ROW coordination and support effort will be led by RailPros' Renay Robison, a former UPRR ROW department manager, who has a firm understanding of the railroad procedures and relationships with their staff. Renay and her team will also be supported by OPC to address, coordinate and evaluate estimated costs for any ROW impacts for the project. The RailPros team will coordinate closely with the City and support the City for any property acquisition needs. Our teams staff included licensed professionals and experts who are more than capable of supporting ROW evaluations, estimates, researching, ROW engineering, developing and negotiating agreements or other project needs that may arise.

Applications and Negotiations for Agreement(s) and Permits

One of the key elements to delivering the Temporary Platform Project is to identify and acquire all the necessary permits and agreements needed for approval and ultimately construction. RailPros will develop and maintain a matrix of all permits, applications and agreements anticipated for the project. This will be maintained and managed along with the PMP and other key project management tools, by our PM. He will work closely with key staff and stakeholders to identify and manage the processing of these crucial documents. Our Key staff and relationships with stakeholders will be instrumental in facilitating this process.

At the kick-off meeting we will work with the City to identify each anticipated agreement, permit or application and outline our approach for each one, including key project staff and relationships, stakeholders and their key staff, information and documents requirements, and the schedule and timeline for each review or step in the process. Following this approach will not only help manage the development and processing of these crucial documents but help deliver them with no surprises.

A current list of anticipated agreements, permits and applications includes:

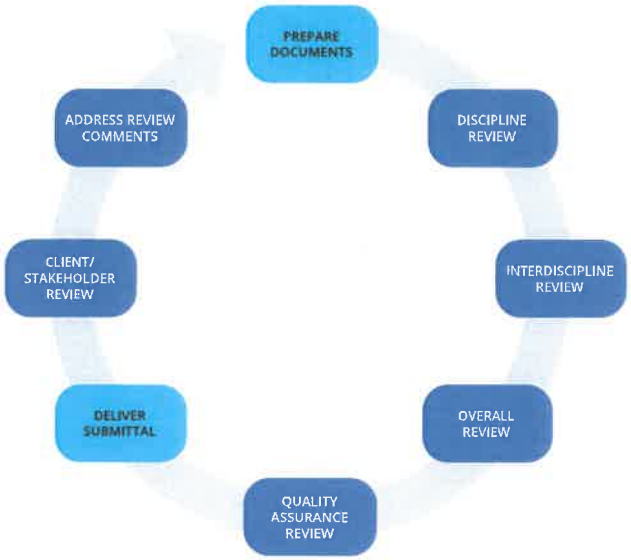
- CPUC Formal Application for New Broadway Street Crossing
- UPRR Preliminary Engineering Agreement (for UPRR coordination and support during design)
- UPRR Right of Entry Permits (ROE) during design
- UPRR ROE for Construction
- UPRR Construction and Maintenance (C&M) Agreement(s) for roadway crossings and station
- UPRR ROW Agreement(s), License(s), and/or Easement(s)
- Amtrak Engineering Agreement (for Amtrak coordination and support during design)
- Amtrak Station Agreement
- Potential CPUC General Order 88-B Applications for the Lyon Street/Bitterwater Road and San Antonio Drive Crossings (See additional discussion on these crossings in the Technical Innovations section below)
- Potential Agreements with property owners (including existing building owner on UPRR ROW, see Innovations section below for additional discussion)
- Potential Utility Agreement(s), License(s), and/or Easement(s)

Upon NTP this list will be verified and updated with City and stakeholder staff and details of our approach to each will be presented at the kick-off meeting.

Optional Contract Items

Additional services can be provided as needed at the request of the City and may include hazardous material reports, additional ROW cost estimate, UPRR Flagging, enhancements or additional services to the scope elements identified or other currently unidentified service. Upon selection we will meet with the City to verify the anticipated scope of work and identify any additional services or enhancements necessary to meet the City's goals from the outset of the project. We will also conservatively manage the project scope and budget to allow room for addressing any unforeseen or unanticipated elements that may arise through the project development, insofar as possible.

METHODS TO GUARANTEE QUALITY, BUDGET, AND SCHEDULE



Quality Assurance Program

The Quality Assurance Program utilizes a Project Design Quality Plan (PDQP) developed specifically for this project. The PDQP will be developed and submitted for City review and acceptance. The PDQP will include clarifications to the standard RailPros Design Quality Plan to satisfy the City's Quality Assurance Program requirements. RailPros' standard Design Quality Plan is based on applicable elements of the FTA Quality Management System Guidelines for planning and design projects.

The PDQP is applicable to the entire Project Team, including subconsultants. The Project Quality Assurance Manager (PQAM) dedicated to this project is Matt Britten, PE. Matt will be responsible for all Project Quality Assurance functions, including internal design activities and external subconsultant design activities. The PQAM will effectively implement the Quality Program by providing training to all RailPros team members, including subconsultants. This will be followed up with regular audits and surveillances for compliance with the PDQP and reviewing of submittal documents prior to delivery. RailPros' QA/QC Process for each milestone submittal is illustrated in the figure above left.

Cost Control

The Project Manager has overall responsibility for cost monitoring and control. The Project Management tools used to track and monitor cost include reviewing labor costs on a weekly basis, using Deltek Ajera enterprise financial software, and holding regular progress meetings with the discipline and subconsultant leaders. Subconsultants and discipline leads share responsibility for completing tasks within the budgets shown on the Project Budget.

Schedule Control

The Baseline Project Design Schedule is included in Section 4: Work Plan and Schedule. The Project Management tools used to track and monitor schedule include developing and maintaining a Project Design Schedule on a monthly basis using Primavera P6 Professional, and holding regular progress meetings with the discipline and subconsultant leaders. The schedule shall be updated monthly after the Progress Meetings to reflect decisions made during the meeting. The Project Manager has overall responsibility for schedule monitoring and control. The schedule is distributed to all discipline and subconsultant leads and periodic internal meetings are held to verify compliance with the project schedule. Adjustments in project staff can be made to accelerate progress on specific tasks.

SPECIAL ISSUES, OPTIONAL SERVICES, AND PROCEDURAL/TECHNICAL INNOVATIONS

Optional/Additional Services

In our detailed review of the project documents, site details and scope elements, we were able to develop a scope of work that will deliver the project requirements well within the project budget, in part by applying some of the enhancements, innovations and alternatives discussed below. This approach will also result in significant construction cost savings, primarily by eliminating or effectively addressing impacts not previously identified during the concept phase. As a result of this design optimization, additional or optional project elements can be added or addressed with the remaining design budget, at the City's request, including any unanticipated or unforeseen circumstances, such as additional railroad fees or flagging requirements.

Temporary Station Project Features, Enhancements and Innovation Alternatives

Amtrak platform and station design elements are adaptable depending upon the anticipated local uses, project requirements and other preferences. We anticipate that certain elements will be included as part of the Temporary Platform Project while other elements may be optional or included in the future MMTC build-out, such as buildings and facilities, messaging boards, surveillance, speakers, or other alternatives. With this understanding, it is important to define which features need to be included or at least accommodated now and which elements will be reserved for the future MMTC. It is our goal to facilitate a smooth and simple transition for the ultimate build-out, and we will help the City identify solutions during the current temporary platform design with that goal in mind. For example, designing conduit and pull box installation for future power, signal and communication and other future needs during the current stage will provide a cost-effective transition to the full build-out.

This cost-effective approach, both in terms of the design and construction of the Temporary Platform and Station area, would be to focus on the essential elements required for a Temporary Amtrak Platform to function on the UPRR corridor. Non-essential elements can be included at the City's discretion or held in reserve for implementation as part of the overall MMTC build-out. Proposed essential elements would include a temporary platform with ADA access, required railing, signage, striping and conduit and pull-boxes (for future installation of equipment for the MMTC), and parking area with ADA access. Rail improvements for station service and UPRR siding and roadway improvements for closure of Pearl Street and opening Broadway Street with access to Jayne Street would also be essential. Focusing on these key elements and minimizing non-essential elements could result in a significant design cost savings as well as potentially millions in construction costs.

A few optional project cost saving alternative examples are discussed below.

Temporary Platform Alternative

As noted above, the platform can include minimal features and amenities in the "Temporary" condition while planning for and accommodating their future installation. Keeping a simple concrete platform with only required ADA access, safety features, signage and other necessary elements will save the City hundreds of thousands of dollars just in design costs by eliminating non-essential features such as architectural elements, canopies, signal and communication systems, messaging boards, ticket vending and other amenities (or waiting for the MMTC phase).

Temporary Parking Area Alternative

The existing fenced and gated parking/storage area between Basset Street and Broadway Street could be utilized as the Temporary Platform Parking area with minimal improvements for ADA access to the station. The parking area has existing street access and could maintain the existing surface or be upgraded with cost effective surface, striping and signage, lighting landscaping or other elements to meet the project needs.

Current Amtrak service on this corridor is minimal, consisting of a few trains per day. A large, long-term parking area may not be necessary to meet current demands and utilizing this Temporary Parking Area would provide parking, station access and minimize UPRR ROW impacts and the adjacent business owner, potentially until the future MMTC build out.

Additionally, the area south of Pearl Street between First Street and the tracks could be included as additional Temporary Parking Area or used for other immediate bus or military needs with minimal improvements similar to those discussed above.

Minimizing UPRR and other Property Impacts Alternative

The approach above may allow for construction of the Temporary Platform and Temporary Parking Area without impacting the adjacent business and building currently leasing UPRR property on the corner of First Street and Pearl Street. Existing access to this building would be maintained from both First and Pearl Streets. This approach would eliminate the need for demolition of the building, allow the business to remain in operation and allow additional time to work out the complexities of the ROW impacts and negotiations associated with this building. This would result in a significant time and cost savings for the Temporary Platform phase.

First Street Alternative

As an option, the First Street crossing can be closed with minimal design and construction effort. In the most simplistic example, UPRR would need to remove the warning equipment and track panels, the platform would be installed and could be protected by K-rail or fencing and signage, and the approach to the crossing from Jayne Street could be protected in a similar manner. This approach would utilize the existing First Street on both sides of the tracks, while maintaining existing access points and infrastructure and minimizing any demolition or design and installation of new driveways, roadways, utilities or other infrastructure. The ultimate buildout could then be included in the development of the future MMTC.

Lyons Street/Bitterwater Street and San Antonio Drive Crossings Alternative

The current conceptual track layout shows widening or shifting of the track alignments through both the Lyons Street/Bitterwater Street and San Antonio Drive crossings. This constitutes a change in the crossing that would require significant coordination with UPRR and the CPUC and would likely result in

additional improvements and modifications to the crossings, that may include features such as ADA accessible sidewalks, relocation of railroad equipment, roadway impacts, traffic and queuing analysis and consideration of traffic signalization and railroad interconnect, all of which have a significant potential cost associated with both the design and implementation. The process would require stakeholder diagnostic meetings at each location to discuss and review the proposed project and recommend additional modifications, ongoing stakeholder coordination and design reviews, and a CPUC General Order 88-b application with UPRR concurrence for each crossing. The coordination effort for crossing modifications can be quite extensive.

As a potentially significant cost and time savings alternative, we recommend maintaining the existing track alignment through both crossings insofar as possible, and beginning any necessary track shifting north of San Antonio Drive. This would allow the Project to install any proposed new track as a railroad maintenance upgrade without impacting the existing configuration crossings or requiring CPUC authorization to construct. This would also eliminate the need for a new UPRR C&M Agreement at each of these crossings, which can take months of costly back and forth legal reviews to process. The elimination of the added crossing study, design, coordination, two CPUC applications and two UPRR agreements will significantly benefit the project.

UPRR Siding Track Alternatives

The existing UPRR siding track extends beginning South of First Street, through King City's crossings to approximately 2,000' north of San Antonio drive with a total length of approximately 7,000' (in rough, round numbers). The current conceptual layout shows the addition of universal crossovers in the area of the existing northern terminus and extension of an additional approximately 15,000' through an existing private crossing and stopping short of the existing crossing at Spreckles Road.

As the simplest alternative option, we could propose maintaining the approximate existing siding track length and alignment to minimize both track design, geotechnical analysis, survey and construction costs associated with the longer conceptual alignment as well as the proposed special track work and associated signal system upgrades (universal crossovers) and private crossing impacts. Some drawbacks to this may include conflicts on the storage track (access to the platform by Amtrak trains need authorization from UPRR and will need to be coordinated to avoid conflicts with any UPRR trains being stored), UPRR storage across crossings (this may or may not be an existing or ongoing issue, storage of UPRR trains may block crossings), and UPRR standards and usage in this corridor may recommend longer storage lengths.

Another alternative would be to move the proposed crossovers further south (for example just north of San Antonio Drive) and replace the existing 7000' length of the siding going north from that point. This would provide a "like for like" replacement of the existing siding length, with the added benefit of moving the UPRR storage outside of the City crossings, while also providing station access and operational improvements between the siding and mainline, minimizing potential conflicting usage of the storage/station track. This alternative also would not impact the private crossing, eliminating additional design, coordination, construction and a private crossing agreement. Additionally, if UPRR requires additional storage length based on the usage in this corridor, the track can be extended to approximately 11,000 without impacting the private crossing or lengthening further if necessary.

In each of the alternatives and scenarios discussed above there is room for modification or alterations that can, if identified as necessary or desired, be implemented to meet project requirements. We will work with the City and stakeholders at the outset of the project to define, refine and optimize the project goals and scope of work elements, including current and future platform and station area needs.

UPRR Coordination and Revised Standards and Requirements

The existing UPRR siding track extends beginning South of First Street, through King City's crossings to approximately 2,000' north of San Antonio drive with a total length of approximately 7,000'. The current conceptual layout shows the addition of universal crossovers in the area of the existing northern terminus and extension of an additional 15,000' through an existing private crossing and stopping just south of the existing crossing at Spreckles Road.

We are proposing to evaluate value alternative options, one of which is to maintain the approximate existing siding track length and alignment to minimize both track design, geotechnical analysis, survey and construction costs associated with the longer conceptual alignment as well as the proposed special track work and associated signal system upgrades (universal crossovers) and private crossing improvements and impacts. Some drawbacks to this alternative may include conflicts on the storage track (access to the platform by Amtrak trains will need authorization from UPRR and will need to be coordinated to avoid conflicts with any UPRR trains being stored), UPRR storage across crossings (this may or may not be an existing or ongoing issue, storage of UPRR trains may block crossings), and lastly, once engaged, UPRR standards and usage requirements in this corridor may recommend longer storage lengths.

Another alternative is to place the proposed crossovers further south (for example just north of San Antonio Drive) and replace the existing 7000' length of the siding going north from that point. This would provide as siding of equal length as existing in a "like for like" replacement of the existing siding length, with the added benefit of moving the UPRR storage outside of the City crossings, while also providing station access and operational improvements between the siding and mainline, minimizing potential conflicting usage of the storage/station track. This alternative also would not impact the private

crossing, eliminating additional design, coordination, construction and a private crossing agreement. Additionally, if UPRR standards and usage requires additional storage length based on this corridor's needs, the track can be extended to approximately 11,000 without impacting the private crossing or lengthening further if necessary.

In each of the alternatives and scenarios discussed above there is additional possibility for modification or alterations that can, if identified as necessary or desired, be implemented to meet project requirements. We will work with the City and stakeholders at the outset of the project to define, refine and optimize the project goals and scope of work elements, including current and future platform and station area needs.

The previous project studies and layouts were prepared several years ago. At that time, little coordination with UPRR had taken place. At the kick-off meeting one of our primary goals will be to establish what coordination efforts, agreements, and understandings need to occur. We will develop and confirm the strategy for stakeholder coordination of the project.

We are aware that UPRR has revised standards and submittal requirements in recent years that may impact the project design and require variances or design exceptions. For example, clearance requirements – such as the distances between track centers, station platform heights or requirements for fencing between tracks in the station area elements – will need to be evaluated and discussed with project stakeholders.

Early in the preliminary engineering phase, RailPros will identify all necessary modifications as well as any design exceptions. If necessary, any design exceptions will be tracked and a design exceptions memo detailing the impacts and reasoning will be included as part of the initial submittal for City and Railroad review. UPRR also has standard processes and submittal requirements and intervals that are different from typical City projects and will need to be accommodated. As noted in our schedule discussion, we propose to optimize the submittal intervals by meeting the UPRR requirements within the typical submittal intervals noted in the schedule and work plan.

UPRR wayside and crossing signal systems are federally protected Sensitive Security Information; as such, UPRR typically provides design modifications in house. We assume that UPRR will provide the railroad signal design for this project, however, as an option, and with UPRR's approval, RailPros can provide this design.

UPRR will also require flagging and right of entry for survey and site investigation. RailPros is the only consultant authorized to provide third-party flagging services in California. Flagging services are anticipated to be provided by RailPros' Field Services group with the approval and direction of UPRR, though the railroad may select to provide flagging services with their own staff at their discretion.

Level Boarding Reports

Station projects are often required to submit a level boarding plan. Stations served by Amtrak trains and that are on public right-of-way are typically mandated to use a 15" above top of rail (ATR) platform. This requirement is not always feasible due to freight train clearances or other requirements and will need to be evaluated and addressed with stakeholders. Because RailPros has prepared level boarding reports in the past that have been approved, including the Vista Canyon and Van Nuys projects, we will be able to use these reports as a template for King City, thereby saving the city time and costs.

Department of State Architect Application

Department of State Architect (DSA) application may be required, including drawings submitted with the appropriate forms for review and approval by DSA. Review and approvals are required by DSA pursuant to the Building Standards Administrative Code, Part I, Title 24, CCR; Essential Services Buildings, effective July 1, 1989; Article 1 (Sections 4-201 through 4-249). The RailPros team can provide complete design calculations and sealed drawings, as needed. Upon receiving review comments from DSA, the RailPros team will review the check-set, if required and make any necessary revisions to the plans, specifications, and supporting documents. A "back-check" appointment will be scheduled at the DSA Regional Office. The design team will bring the corrected drawings and check-sets to back-check appointment for DSA approval. RailPros has provided similar services for projects such as the Vista Canyon Station.

Obtaining Full Funding for Construction

At this time, the City has not obtained full funding for the project. It is our experience that UPRR and Amtrak may be unwilling to provide finalized agreements without the expectation that construction will begin within a reasonable timeframe. Any agreements that are finalized may include stipulations on the project timing or additional costs or fees for delays. Additionally, the CPUC Formal Application approvals typically come with a 3-year expiration period (such as for the proposed Broadway Street Crossing). In addition to our coordination efforts processing agreements and documents with these agencies, The RailPros team can optionally assist the City in obtaining full funding. As part of our program management efforts, RailPros has completed grant applications and supporting engineering documents to obtain hundreds of millions in federal, state and local funding for railroad projects throughout Southern California.

PROJECT WORK PLAN AND SCHEDULE

A high-level Project Schedule detailing the anticipated project elements, submittals, milestones, meetings and review periods is shown on the following page, as well as in Section 5. Schedule. We anticipate typical submittal intervals of 30%, 60%, 90%, and 100%. UPRR has specific submittal intervals and a checklist of required elements for each level that do not conform to the typical Public Agency submittal intervals noted above. We propose combining certain UPRR and requirements and submitting concurrently for UPRR review with the associated City submittals. For example, the City's 30% submittal would correspond to and include UPRR 10% and 25% submittal requirements. The 60% submittal would then include UPRR 30% and 60% submittal requirements and the 90% submittal would include the completion of all UPRR checklist elements. We propose that the City and UPRR reviews would take place concurrently in order to optimize the schedule. Review periods are shown as six weeks; however, UPRR review periods may vary based upon current workloads and availability of staff and may require additional time.

The preliminary engineering 30% phase includes the major data collection and field work effort, and will establish the basis for the design. Impacts to railroad, roadway, and other project elements will be identified, and a stakeholder workshop and site diagnostic meeting will be held to discuss the project plans and improvements. This meeting is imperative to receive feedback and establish consensus among stakeholders and will be crucial both to advancing the design and also to ultimately gaining project approval.

The PS&E design phases will advance the development of Plans, Specifications and Estimates at each submittal stage and will include drafts of necessary applications, agreements, and other documentation for stakeholder review, coordination, and approval. During these phases it is recommended that design review workshops be held with the City, UPRR, Amtrak and any other necessary stakeholders upon submittal of the project deliverables to facilitate collecting feedback and streamline the review process. It should be noted that 3rd party stakeholder reviews, particularly UPRR, may often require 4-6 weeks or longer based on available staffing, workloads and other factors that are out of City or RailPros control. While our proactive approach, including holding design review workshops, will help to facilitate involvement and feedback, there still remains the potential for significant impacts to the review schedule.

In order to further expedite the design delivery, we propose advancing the design concurrently with the stakeholder reviews. This is facilitated by feedback received during design workshops and also allows the design team to advance certain known elements and documents early.

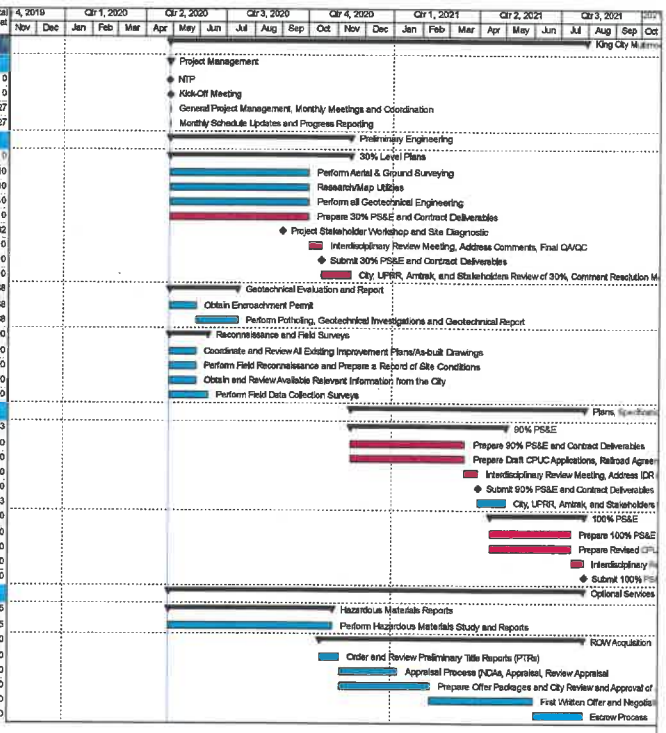
The overall project schedule is already somewhat compressed and, as an option for consideration, with the railroad and City approval, we can also consider eliminating one of the submittal intervals in order to conserve time and money. For example, on other projects the railroad and city have agreed to forgo the 60% submittal and all details and requirements of the 60% submittal would be included with the 90% deliverables. This option should only be considered if all parties agree early on the direction and extent of project improvements. The attached schedule illustrates this approach to facilitate meeting project deadlines.

We will hold regular meetings with the City and monthly internal meetings, ramping up to hold these more frequently if necessary during the project development. This consistent internal and external coordination is important to keep the project moving on schedule and on budget. Internal quality review processes will be performed prior to each submittal.

The work plan will follow the schedule as outlined and is anticipated to be complete by August 1, 2021.

One crucial element that is not shown in the attached schedule is the CPUC Formal Application review and approval process. This process frequently takes 18 months or more to complete once the final application is submitted. The once submitted the application process begins going through a judicial review, which is completely outside the City, railroad and local CPUC representatives' control. Though we have been successful at gaining approvals sooner, the base timeline begins at 18 months. With this in mind, we propose to work closely with project stakeholders build consensus for the Broadway Street Crossing and to finalize and file the formal application as early in the project development as possible. To this purpose, we have already begun reaching out to the CPUC to discuss our approach to this crossing.

Activity ID	Activity Name	Original Duration	Start	Finish	Total Float
King City Multimodal Transportation Corridor Plan - Temporary Railroad Platform		326	29-Apr-20	30-Jul-21	0
Project Management		1	29-Apr-20	29-Apr-20	
PM1000	NTP	0	29-Apr-20		0
PM1010	Kick-Off Meeting	0	29-Apr-20		0
PM1020	General Project Management, Monthly Meetings and Coordination	0	29-Apr-20	29-Apr-20	327
PM1030	Monthly Schedule Updates and Progress Reporting	0	29-Apr-20	29-Apr-20	327
Preliminary Engineering		141	29-Apr-20	15-Nov-20	0
30% Level Plans		144	29-Apr-20	15-Nov-20	0
PE1000	Perform Aerial & Ground Surveying	112	29-Apr-20	01-Oct-20	10
PE1010	Research/Map Utilities	112	29-Apr-20	01-Oct-20	10
PE1020	Perform all Geotechnical Engineering	112	29-Apr-20	01-Oct-20	10
PE1030	Prepare 30% PS&E and Contract Deliverables	112	29-Apr-20	01-Oct-20	0
PE1035	Project Stakeholder Workshop and Site Diagnostic	0	02-Sep-20		32
PE1040	Interdisciplinary Review Meeting, Address Comments, Final QA/QC	10	02-Oct-20	15-Oct-20	0
PE1050	Submit 30% PS&E and Contract Deliverables	0	16-Oct-20		0
PE1060	City, UPRR, Amtrak, and Stakeholders Review of 30%, Comment Resolution Meeting	22	16-Oct-20	16-Nov-20	0
Geotechnical Evaluation and Report		54	29-Apr-20	13-Jul-20	68
PE1070	Obtain Encroachment Permit	22	29-Apr-20	28-May-20	68
PE1080	Perform Potholing, Geotechnical Investigations and Geotechnical Report	32	29-May-20	13-Jul-20	68
Reconnaissance and Field Surveys		32	29-Apr-20	11-Jun-20	90
PE1110	Coordinate and Review All Existing Improvement Plans/As-built Drawings	22	29-Apr-20	28-May-20	90
PE1120	Perform Field Reconnaissance and Prepare a Record of Site Conditions	22	29-Apr-20	28-May-20	90
PE1130	Obtain and Review Available Relevant Information from the City	22	29-Apr-20	28-May-20	90
PE1140	Perform Field Data Collection Surveys	32	29-Apr-20	11-Jun-20	90
Plans, Specifications, and Estimates (PS&E)		181	17-Nov-20	30-Jul-21	0
90% PS&E		120	17-Nov-20	03-May-21	63
PE1220	Prepare 90% PS&E and Contract Deliverables	88	17-Nov-20	18-Mar-21	0
PE1225	Prepare Draft CPUC Applications, Railroad Agreements, Easements and Licenses	88	17-Nov-20	18-Mar-21	0
PE1230	Interdisciplinary Review Meeting, Address IDR Comments, Final QA/QC	10	19-Mar-21	01-Apr-21	0
PE1240	Submit 90% PS&E and Contract Deliverables	0	02-Apr-21		0
PE1250	City, UPRR, Amtrak, and Stakeholders Review of 90%, Comment Resolution Meeting	22	02-Apr-21	03-May-21	63
100% PS&E		75	16-Apr-21	30-Jul-21	0
PE1260	Prepare 100% PS&E and Contract Deliverables	65	16-Apr-21	15-Jul-21	0
PE1265	Prepare Revised CPUC Applications, Railroad Agreements, Easements and Licenses	65	16-Apr-21	15-Jul-21	0
PE1270	Interdisciplinary Review Meeting, Address Comments, Final QA/QC	10	16-Jul-21	29-Jul-21	0
PE1280	Submit 100% PS&E and Contract Deliverables for Stakeholder Final Review and Approval	0	30-Jul-21		0
Optional Services		141	29-Apr-20	15-Nov-20	0
Hazardous Materials Reports		132	29-Apr-20	29-Oct-20	195
OS1000	Perform Hazardous Materials Study and Reports	132	29-Apr-20	29-Oct-20	195
ROW Acquisition		205	15-Oct-20	29-Jul-21	0
OS1010	Order and Review Preliminary Title Reports (PTRs)	15	15-Oct-20	05-Nov-20	0
OS1020	Appraisal Process (NDAs, Appraisal, Review Appraisal	45	09-Nov-20	07-Jan-21	0
OS1030	Prepare Offer Packages and City Review and Approval of Just Compensation	70	06-Nov-20	11-Feb-21	0
OS1040	First Written Offer and Negotiations	80	12-Feb-21	03-Jun-21	0
OS1050	Escrow Process	40	04-Jun-21	29-Jul-21	0



Remaining Level of Effort | Actual Work | Critical Remaini...
Actual Level of Effort | Remaining Work | ◆ Milestone

Page 1 of 1

TASK filter: All Activities

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RAILPROS

3. PROJECT TEAM

3. PROJECT TEAM

3. PROJECT TEAM

PROFESSIONAL QUALIFICATIONS OF KEY STAFF

RailPros has assembled a multi-disciplinary team of professionals who are available and highly qualified to provide the required services for this project. All staff are committed for the duration of the project, and will not be reassigned without the City's written permission. Full resumes for key staff are provided in an appendix.

Bold = Key Staff

KING CITY CALIFORNIA

PRINCIPAL IN CHARGE
Doug Sawyer (RP)

PROJECT MANAGER
Robert Williams, PE, QSD (RP)

QA/QC
Matt Britten, PE (RP)

ARCHITECTURE

Platform/Canopy
Somesh Debnath, AIA (AVA)
Anil Verma, AIA (AVA)

Mechanical, Electrical, Plumbing, Lighting
Joseph Rigonan, PE (AVA)
Edgar Del Rosario, PE (AVA)
Raymundo Cruz, PE (AVA)
Greg Del Rosario, PE (AVA)

ENGINEERING LEADS

Civil
Luis Flores, PE (RP)
Mariano Pineda, PE, CCM, QSD/P, ENV SP (RP)

Traffic
Karen Hankinson, PE, TE (RP)
Mark Esposito, PE, TE, PTOE (RP)

Track Design
Nathan Ortega, PE (RP)

Platform Design
Danielle Libring, PE, TE (RP)

Structural
Bob Matthews, PE, SE (RP)

Signals
Carrene Gilbert, PE (RP)

Geotechnical
Thomas Benson, PE, GE (LC)
Robert Hennessey, PE (LC)

ROW/AGREEMENTS

ROW Coordination
Renay Robison (RP)
Steven Harris (OPC)
Nivrita Chandra (OPC)
Barbette Barnes (OPC)
Cody Festa, LS (RSE)

UPRR Coordination
Dan Nagy, PE (RP)
Dan Thompson, EIT (RP)

SURVEY
Cody Festa, LS (RSE)
Charlie Cheuk, PE (RSE)

Project Team

RP	RailPros
AVA	Anil Verma Associates
LC	Leighton Consulting
OPC	Overland, Pacific & Cutler
RSE	Rail Surveyors & Engineers

Optional Environmental Support
Rincon

ROBERT WILLIAMS, PE, QSD/QSP · Project Manager — KEY

Mr. Williams has 12 years of engineering experience in railroad project management, design, and coordination. He has designed and managed improvements on various rail, infrastructure, and crossing projects throughout Southern California. His diverse capabilities include railroad, public agency, and stakeholder coordination; plan and specification review and compliance; report development and writing; project management; schedule development; budget control; and contract compliance. One of Robert's strengths is his ability to build consensus through communication; this strength has aided in his project management style and ability to coordinate with railroads and regulatory agencies. He has been involved with projects for a number of clients, including ACE; OCTA; SCRRA; NCTD; SANDAG; SBCTA; RCTC; CPUC, FRA, UPRR, BNSF and various Cities and local agencies.

Relevant Qualifications: Robert is already deeply familiar with this project, having led the preliminary design for the concept study. He has longstanding relationships with UPRR and understands their unique needs and requirements.

3. PROJECT TEAM

LUIS FLORES, PE · Civil Engineering Lead — KEY

Mr. Luis Flores has over 25 years of increasing technical and managerial responsibility as a Lead Civil Engineer, Project Engineer, Deputy Resident Engineer, and Project Manager for the design and construction of civil infrastructure for major private and governmental clients. Luis' expertise in civil engineering includes projects for multi-modal transportation facilities, roadways and highways, transportation management centers, ports, airports, and military facilities. Luis has experience designing and managing the construction of site improvements, utilities, grading, drainage, parking, pedestrian and bicycle facilities, storm drains, curb and gutter, sewer and water lines, and retaining walls.

Relevant Qualifications: Luis' extensive expertise will be vital to the roadway, utility, and civil portions of the work. The team he manages, who will support the work, are highly experienced with delivering comparable project requirements.

MARIANO PINEDA, PE, CCM, QSD/P, ENV SP · Civil Engineer

Mr. Pineda has 14 years of experience in civil engineering design, NPDES permitting, and construction management of public and private projects. His design experience includes the preparation and review of PS&E's for wastewater pipelines, grading plans, storm drain plans, street improvement plans, water transmission pipelines, WQMP's, temporary traffic control plans, and Hydrology & Hydraulics (H&H) reports. His NPDES Permitting experience includes the development and inspection of Storm Water Pollution Prevention Plans (SWPPP) for projects for local municipalities, state, and energy companies throughout southern and central California. In addition, he has performed plan check reviews of numerous land development plans such as sewer improvement plans, street improvement plans, storm drain plans and rough grading plans for cities in the Inland Empire. Improvements varied in size from 10,000 square feet to over 20 acres. Plans were reviewed for conformance with local ordinances, approved tentative maps, general plan, conditions of approval, city standards, ADA standards, and design criteria.

Relevant Qualifications: Mariano's extensive drainage, utility design, and coordination experience will make him a valuable support for the civil engineering aspects of this project.

NATHAN ORTEGA, PE · Track Engineering Lead — KEY

Mr. Nathan Ortega, a Registered Civil Engineer in 14 states, has over 17 years of construction, design, and management experience in primarily Commuter and Freight Rail, Land Development, Commercial and Roadway projects. Nathan has extensive knowledge and skilled experience in Microstation™ and RailTrack™ design software, with a keen understanding of how design translates to construction. Nathan has managed and designed projects and programs that include both horizontal and vertical alignments for mainline, siding, and yard tracks; roadway design; culverts; grading; at-grade crossings; grade separations; sewer, water, and storm drain plans; hydrology and hydraulic analysis; and storage and intermodal facilities for Class 1 railroads, Commuter Rail, and Light Rail/Transit clients, as well as for various Departments of Transportation and municipalities. Additionally, Nathan is well-versed in leveraging design software to create existing surfaces using provided survey and grading data, utilizing Roadway Modeler through RailTrack Design.

Relevant Qualifications: Nathan's background includes years of track design experience for UPRR and dozens of other Class 1 and passenger joint corridors.

BOB MATTHEWS, PE, SE · Structural Engineering Lead — KEY

Mr. Matthews is a civil and structural engineer with extensive experience that includes planning, design, and construction support of railways, roadways, and buildings. His technical specialty is structural engineering and he has designed buildings, roadway bridges, railway bridges, retaining walls, and drainage and utility structures. He is actively involved with AREMA as former Chairman of Committee No. 9 (seismic design for railway structures) and prepared the seismic analysis procedures that are published in the AREMA Manual for Railway Engineering. He has developed several structural analysis computer programs, maintains technical websites and has prepared and instructed in-house classes on subjects ranging from construction specifications to structural analysis.

Relevant Qualifications: As an AREMA committee chairman, Bob is an industry-recognized expert on structural engineering and minimizing structural impacts. He is highly familiar with AREMA, UPRR, and Amtrak standards.

3. PROJECT TEAM

DANIELLE LIBRING, PE, TE · Platform Design Lead — KEY

Ms. Libring is a registered civil and traffic engineer with over ten years of experience in program and project management; rail design; stations; traffic engineering and analysis; grade crossings; construction management; quiet zone design and implementation; preemption calculations; and interconnection. Her expertise encompasses railroad stations trackwork; traffic signals; traffic analysis; signing and striping; drainage; civil improvements; traffic control; grade crossings; station customer information and security systems; and street improvements. Her participation in various rail, transit, and traffic engineering projects in California and across the Unites States expands her knowledge and experience in the rail and traffic engineering industry. Ms. Libring has a high attention to detail, uses in-house tools for tracking cost/schedule/quality, is highly responsive in meeting project deliverables, and an excellent player.

Relevant Qualifications: In her role as design lead on the Vista Canyon MMTC and Van Nuys North Platform projects, Danielle has worked closely and established an excellent relationship with architectural subconsultant AVA. Also because of this experience, she is qualified to facilitate the transition from temporary to long-term design plans.

CARRENE GILBERT, PE · Signal Design/Engineering Lead — KEY

Ms. Carrene Gilbert is an Electrical Engineer with over 30 years experience in the rail and transit industry. Her experience has involved signals, systems, and communications elements. For the last seven years at RailPros, she has led the signals and systems team. Carrene understands the design and integration of systems and is able to review and inspect existing systems to provide comments to eliminate service interruptions. She has worked extensively with rapid transit authorities on a number of systems engineering projects. She is adept in contractor coordination and has worked on projects throughout design, installation, testing, and operation phases. Carrene coordinated the interface between agencies; railroads; departments of transportation (DOTs); cities; and developers throughout design, installation, testing, and operation as required by individual contracts. She reviews electrical, electronic, mechanical, and control systems computations; designs and analyses; and reviews and prepares cost estimates, reports, special studies, and technical specifications.

Relevant Qualifications: Well-versed in station signal and communications design, Carrene also brings the support of a team with extensive UPRR experience.

KAREN HANKINSON, PE, TE · Traffic Engineering Lead — KEY

Ms. Karen Hankinson is a Registered Civil Engineer in over 12 states nationwide and a registered Traffic Engineer in California. Karen leads RailPros' Traffic Engineering group, managing a wide variety of grade crossing related projects in multiple states. Karen is also involved in providing grade crossing traffic engineering training to UPRR.Karen also serves on the National Committee of Uniform Traffic Control Devices and the ITE Grade Crossing Committee. Karen was a featured speaker on updated Preemption of Traffic Signals Near Railroad Crossings Recommended Practice Guidelines at the ITE National Conference in Toronto in August 2017, as well as a speaker at the League of Railway Women Conference in September 2018 on Public Agency Partnering Opportunities at Grade Crossings.

Relevant Qualifications: Karen is well established as an industry expert on grade crossings and UPRR coordination.

MARK ESPOSITO, PE, TE, PTOE · Traffic Engineer

Mr. Esposito's role as a Senior Project Manager is to provide project management and design expertise for various traffic-related projects. He has 28 years of experience with the preparation of project plans, specifications, and estimates (PS&Es). Mr. Esposito's specific areas of expertise are signal design and signal operations, ITS design, lighting design, signing, striping, and traffic control design.

Relevant Qualifications: Mark is an industry-recognized expert on traffic studies, signals, and striping as a result of his diverse experience statewide.

3. PROJECT TEAM

DAN NAGY, PE · UPRR Coordination — KEY

Mr. Dan Nagy has over 18 years of experience in construction management, civil engineering, product detailing, and project management. While employed at UPRR, he managed an annual budget of over $60 million in Capital Improvement projects involving trackwork, structures, and drainage for a major freight railroad, as well as on a number of steel industrial facility projects. He has effective team leadership in project scheduling, cost savings, production, and efficiency, while also demonstrating strengths in recognizing, analyzing, and implementing simple solutions to complex problems, all in an operating railroad environment and with a high focus on safety. He is able to perform well in fast paced environments while handling multiple facets of operational responsibilities and managing multiple high dollar projects, providing maximum cost savings and profit.

Relevant Qualifications: During his years as Manager of Track Projects at UPRR, Dan's service territory included the Central Coast corridor. At RailPros, he continues to coordinate closely with both UPRR and other transit agencies.

DAN THOMPSON, EIT · UPRR Coordination

Mr. Thompson has over 19 years of high level, front line leadership; 11 years of project detailing, scheduling, safe execution, and cost control, while also demonstrating strengths in recognizing, identifying, and implementing solutions to complex problems. During seven years in the U.S. Army, Dan served as an aeroscout platoon leader, logistics platoon leader, and troop executive officer during two tours in Operation Iraqi Freedom, and one tour in the Republic of South Korea. It was there that he learned to hone his sound decision making skills, and he has built upon that skill set through ten years of Class 1 railroad leadership, including five years serving as a Track Director.

Relevant Qualifications: Prior to RailPros, Dan worked for UPRR as Director of Track Maintenance. His service territory included the Central Coast corridor.

RENAY ROBISON · UPRR Right-of-Way Specialist — KEY

Renay has been involved in real estate and economic development for over 25 years. She has in-depth knowledge of railroads, having worked for one of the largest railroad companies in the nation. She works to develop and oversee RailPros' real estate management services in the national railroad market including application and occupancy permitting process; contract preparation and management; rental management; acquisition and property sales oversight; and negotiations and fair market value pricing of railroad real estate. She provides leadership, management, and advanced sales expertise in all areas of her work.

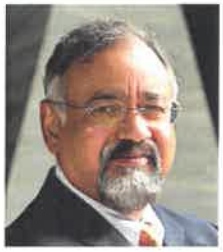
Relevant Qualifications: As a former right-of-way manager for UPRR, Renay is able to streamline ROW acquisitions and agreements thanks to her connections and her deep understanding of UPRR processes.

SOMESH DEBNATH, AIA · Architectural Design Lead

Somesh has over 30 years in the design and construction of intermodal transit stations, heavy rail underground and aerial transit stations and tunnel structures. He has designed public and ancillary equipment spaces of several subway stations and his experience of underground tunnel and cut and cover construction has helped resolve some extremely complex coordination issues related to equipment, systems interface, ancillary spaces and construction sequencing. He is an expert in technical drawings and specifications for rapid transit facilities and has the capability of coordinating complex criteria to reduce the size of the cut and cover footprints of stations, and thereby reducing construction costs.

Relevant Qualifications: Somesh has led the architectural design for our collaboration on previous station projects and has expertise in delivering station facility projects throughout the nation.

ANIL VERMA, AIA · Architectural Designer



Anil Verma has dedicated his entire career to community urban design and the development of mass transit projects. He excels in the planning, design, and construction of transit stations intermodal transit and maintenance facilities and has successfully delivered numerous rapid transit systems projects worldwide. His worked on major intermodal transit stations, and has planned and designed most of LA's Union Station since the 80s. Other Intermodal Facilities include Sacramento Intermodal Transportation Center at the AMTRAK Depot and Sound Transit's Multimodal Center at Auburn. His experience has included the design of underground, aerial and at-grade rail transit stations, tunnel ventilation structures, maintenance facilities, etc. He specializes in the design of ancillary equipment spaces and he has a though knowledge of all systems equipment required for rail operations.

Relevant Qualifications: Anil provides not only oversight as the AVA Principal, but also support as a technical resource as an industry expert in transit station design.

3. PROJECT TEAM

JOSEPH RIGONAN, PE · Mechanical Engineer

Joe has over 30 years of design engineering and construction experience with an extensive background in HVAC plumbing, process piping and fire protection for commercial, institutional, and industrial facilities projects. He has worked on several commuter rail transit stations, and is very familiar with working with various rail transit authorities, counties, cities, and Caltrans, adhering to each of their standards and quality control. He has comprehensive rail qualifications including station design, guideline preparation, construction document preparation, specification writing, design services during construction, and construction administration.

Relevant Qualifications: Joseph is a mechanical expert responsible for delivering elements of the Vista Canyon and Van Nuys station projects, as well as multiple station and rail projects in California.

EDGAR DEL ROSARIO, PE · Mechanical Engineering Designer

Edgardo has over 30 years of experience in design, specifications, and construction observation of building plumbing systems for transportation, commercial, military, institutional, educational, industrial, and medical facilities. His responsibilities included complete design supervision of plumbing systems from initial design to project completion and final shop drawings. He has worked on several commuter rail platforms and stations throughout California.

Relevant Qualifications: Edgar supported the MEP development for the Vista Canyon and Van Nuys station projects.

RAYMUNDO CRUZ, PE · Electrical Engineer

Raymundo is an experienced registered Electrical Engineer with local and international experience in the design, construction support and equipment commissioning of electrical systems for commuter and heavy rail transit systems. Raymundo's electrical design has included the design of ticket vending machines (TVMs) station lighting, and other electrical amenities. He has demonstrated the ability to quickly learn and apply new concepts, easily adapts to change, mentors others, and possesses excellent communication skills. He is experienced in high and low-voltage electrical power systems. He is an effective team member, working closely and coordinating with other departments, agencies, and regulators.

Relevant Qualifications: Raymundo was part of the team for the Vista Canyon and Van Nuys station projects.

GREGORIO DEL ROSARIO · Electrical Designer

Gregorio has over 35 years of experience in Electrical Design. He has performed the electrical/lighting design for stations, underpasses, plazas, hospitals, and other government facilities throughout his career. He has inspected and verified electrical, control and communications rooms to assess the conditions of the spaces and the availability of existing conduits, and sources of normal and Uninterrupted Power Supply (UPS) required for the upgrade and replacement of five new escalators at the station and associated controls and communications.

Relevant Qualifications: Gregorio is an electrical and lighting expert with experience on various similar MMTC and station projects.

THOMAS BENSON, PE, GE · Geotechnical Lead

Mr. Benson brings more-than 37 years of geotechnical experience in Southern California on primarily linear infrastructure projects. His technical experience in California has been broad, to meet the challenges of the region. He has been the technical lead on numerous earthwork, shoring, dewatering, seismic, liquefaction, slope stability, tunneling, rock stabilization and soil improvement studies. In addition, he has managed engineering geology tasks such as geologic mapping, hydrogeologic studies, fault studies, scour analyses and rock stability analyses. His projects have been in widely different geotechnical environments ranging from Long Beach estuaries to Mount Wilson granitic peaks.

Relevant Qualifications: Thomas is a geotechnical expert with a wealth of experience working on rail and transit projcts in California.

3. PROJECT TEAM

ROBERT HENNESSEY, PE · Geotechnical Engineer

Leighton Consulting, Inc.
A LEIGHTON GROUP COMPANY

Mr. Hennessey is a licensed Civil Engineer with more than six years of technical and project management experience providing consulting on all aspects of geotechnical engineering. He has experience in classification and mitigation of geotechnical hazards for public sector civil engineering works projects and commercial land development projects. As such, Mr. Hennessey possesses a sound working knowledge of applicable geotechnical-related local, state, and federal regulations.

Relevant Qualifications: Robert has experience dealing with hazardous materials and other geotechnical engineering elements for various projects throughout California.

STEVEN HARRIS · Right-of-Way Acquisition

OVERLAND PACIFIC & CUTLER, INC.

Mr. Harris is a dedicated professional with more than 30 years of management experience. As a Right of Way Project Manager, he is the main point of contact with clients and the project team. He directs staff and oversees all R/W tasks and issues associated with the project. Mr. Harris has 13 years of experience delivering large multi-parcel R/W projects requiring compliance with local, state, and federal regulations, as well as Caltrans R/W Certification oversight. Mr. Harris years of experience have made him very adept in assisting clients to identify potential right of way issues early on in the planning phase and acquisition phase of the project and presenting possible mitigation measures to minimize potential costly delays, litigation and keep the project on schedule.

Relevant Qualifications: Steven has extensive ROW expertise from working with transit and development projects throughout California.

NIVRITA CHANDRA · Right-of-Way Acquisition

Headshot Unavailable

OVERLAND PACIFIC & CUTLER, INC.

Ms. Chandra has over 15 years of experience in real estate. As a Senior Agent, she provides acquisition and relocation assistance for public agency projects. She is knowledgeable of both federal and state regulations relating to relocation assistance and benefits. Her experience includes real estate management, budget administration, leasing, contract/lease negotiation, and property management.

Relevant Qualifications: Nivrita brings experience from various projects throughout California, including as an acquisition and relocation agent for Commuter Rail Extension for Transportation Agency for Monterey County.

BARBETTE "BARBIE" BARNES · Right-of-Way Acquisition

OVERLAND PACIFIC & CUTLER, INC.

Ms. Barnes has a broad-based background including Right of Way Project Management, Acquisition Management, Relocation Management, and Utility Coordination Management on several high-profile projects. Ms. Barnes has managed right of way contracts for California High Speed Rail, San Diego Association of Governments (SANDAG), and various government and local agency projects via Caltrans. Her right of way project management, acquisition, relocation, and utility coordination management experience involves full and partial acquisitions including fee, permanent, and temporary easements, and property types including retail, office, industrial, multi-family residential, single family residential, mixed-use, billboard, solar farms, storage units, and agricultural. Over the span of thirty years, Ms. Barnes has overseen the day to day activities necessary for the delivery of right of way for hundreds of projects and thousands of parcels throughout California.

Relevant Qualifications: Barbie brings expertise in numerous rail and transit projects for clients such as California High Speed Rail Authority, Caltrans, and San Diego Association of Governments (SANDAG).

CODY FESTA, LS · Surveyor

RSE

Mr. Festa has more than 14 years of survey and project management experience and has provided survey management for several RSE rail projects. His railroad survey experience includes right-of-way engineering, capital improvement construction management (survey), mapping railroad and rail facilities, railroad right of way surveys, control surveying including conventional surveying and GNSS systems. In addition, Mr. Festa provides oversight to survey teams and support to field engineers utilizing various survey support software, CAD, traverse adjustments, calculations, and construction support. Cody is also a licensed pilot and experienced in aerial/drone surveying.

Relevant Qualifications: Cody's expertise in working on and around railroads and roadways on transit projects will facilitate survey and right-of-way engineering for the project.

CHARLIE CHEUK, PE · Surveyor

Headshot Unavailable

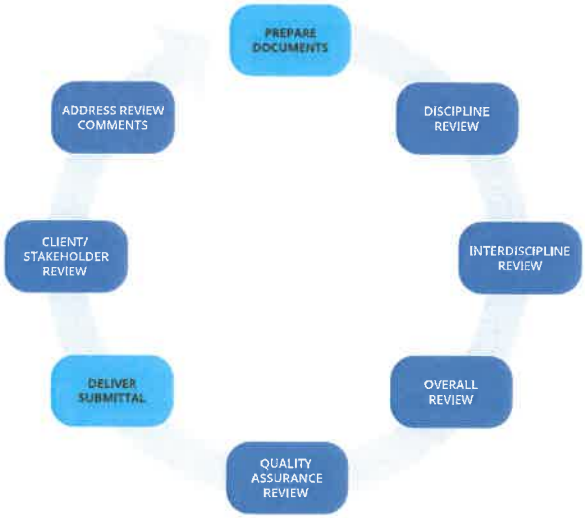
Mr. Cheuk is a Project Engineer with five years of design experience on railtransit projects. He has been responsible for designing station and track layouts with plans, profiles, and sections. In addition, Mr. Cheuk has performed grade crossing hazard analysis and safety improvements for LA Metro, Metrolink, and Caltrain. His projects have encompassed light rail and commuter rail systems for agencies including LA Metro, Metrolink, VTA, BART, and Caltrain.

Relevant Qualifications: Charlie's work on similar transit and station projects brings additional knowledge and experience that will be a support to the project delivery.

CITY AND SUBCONSULTANT COMMUNICATION

We know that to do our job successfully, we must have a foundation of good communication with the City. We will continue to work conscientiously to build upon the trust we have earned over the years by communicating openly, acting with integrity, doing what we say we will do, and providing useful advice. All design team communications with the City that may impact the project scope, cost, schedule, or quality objectives will be made through the RailPros Project Manager, as will all deliverables to the City. UPRR owns the railroad right-of-way and all agreements and right-of-way easements, licenses, and acquisitions will go through the City.

RailPros will provide each subconsultant the baseline documents including prior project documents from the City, City, Amtrak and UPRR standards, manuals, specifications and other documentation and requirements. This will create uniformity of all project documents from our subconsultants. RailPros' Project Manager will conduct regular status and review meetings at least monthly, and more frequently when warranted, with subconsultants to review their progress and verify up-to-date information is being used and the appropriate activities are being performed. Subconsultants will submit all research, reports, and plans to the RailPros Project Manager for review of conformity with the project scope of work, directives, applicable codes, design criteria, and all other City and railroad requirements.



MANAGEMENT OVERSIGHT AND QUALITY ASSURANCE

As Project Manager, Robert Williams will be responsible for planning and scheduling staff and work efforts based on the project needs. One of the benefits of RailPros structure, depth of staff resources and our close relationships with our subconsultant teams is our ability to respond quickly and flexibly to project demands. We can increase or reduce staff and workload as needed, optimizing the time and effort to deliver the project on time and on budget. Robert will work closely with each of the discipline leads to identify any needs or changes in staffing early and often during our internal meetings.

Quality Assurance Program

The Quality Assurance Program utilizes a Project Design Quality Plan (PDQP) developed specifically for this project. The PDQP will be developed and submitted for City review and acceptance. The PDQP will include clarifications to the standard RailPros Design Quality Plan to satisfy the City's Quality Assurance Program requirements. RailPros' standard Design Quality Plan is based on applicable elements of the FTA Quality Management System Guidelines for planning and design projects.

The PDQP is applicable to the entire Project Team, including subconsultants. The Project Quality Assurance Manager (PQAM) dedicated to this project is Matt Britten, PE. Matt will be responsible for all Project Quality Assurance functions, including internal design activities and external subconsultant design activities. The PQAM will effectively implement the Quality Program by providing training to all RailPros team members, including subconsultants. This will be followed up with regular audits and surveillances for compliance with the PDQP and reviewing of submittal documents prior to delivery. RailPros' QA/QC Process for each milestone submittal is illustrated in the figure above left.

RAILPROS

4. EXPERIENCE AND QUALIFICATIONS

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FIRM AND KEY TEAM MEMBERS

RESPONDENT FIRM INFORMATION

RailPros, a California Corporation, was founded in 2000 to provide a suite of transportation consulting services, specializing in rail engineering, design, and management. From concept through operation, characterized by technical excellence and outstanding services, we create long-term value for our clients. RailPros is the ideal engineering and management firm. We bring technical expertise, qualified staff, and proven flexible approaches and methodologies. Our senior project managers work directly with clients and have decision-making authority, providing clients unmatched responsiveness.

We have grown from approximately 65 staff located in Irvine, California in 2014 to over 650 professionals nationwide in 2019. This rapid growth, partly through the acquisition of complementary firms, has allowed us to take on new work and expand our service offerings to include railroad flagging, training, and media production. No matter how large we grow, however, RailPros is committed to providing the same focus on exceptional client services that formed the basis of our inception.

Our services include design; engineering; planning; project, program and construction management; as well as specialty services including project development reports. We have provided these services to public agencies including the Los Angeles County Metropolitan Transportation Authority (LA Metro), Southern California Regional Rail Authority (SCRRA), Orange County Transportation Authority (OCTA), Riverside County Transportation Commission (RCTC), San Bernardino County Transportation Authority (SBCTA), San Diego Association of Governments (SANDAG), and cities and municipalities across the U.S.

LITIGATION, FRAUD, DEBARMENTS AND SUSPENSIONS, AND REGULATORY VIOLATIONS HISTORY

RailPros has been operating successfully since 2000. Our firm has enjoyed steady growth with both new clients and projects in the rail engineering and rail management fields. This growth has been accompanied by consistent profitability, resulting in strong financial health and resiliency. Over the last 15 years, RailPros has experienced a 31% average annual growth rate, and projects revenues of approximately $114 million for the year 2019. The firm has strong banking relationships and the ability to access a line of credit if required to meet operating cash needs. The firm has no planned office closures, mergers, or pending litigation that would hamper our ability to deliver on this project.

FIRM OWNERSHIP

The firm and all its subsidiaries are owned by RailPros Holdings, LLC, a private equity partnership.

RailPros by the Numbers...

20 years in business

31 % average growth rate

7 California offices

750 staff nationwide

FIRM QUALIFICATIONS AND REFERENCES

Our most relevant experience comes from our previous work on this very project. Over the last decade, RailPros developed project studies, concept plans and cost estimates for a new Amtrak station and 4.3 miles of double track in the UPRR corridor in King City. Our plans were based on a scope that included evaluating operational impacts; designing new mainline to access the station; realigning or relocating existing UPRR main line track; improvements to four at-grade crossings; construction of a new Amtrak platform and station parking; and coordination with Amtrak, UPRR, CPUC, and FRA. Project Manager Robert Williams oversaw preparation of this report.

On the following pages, we have provided additional project profiles, as well as references who will be happy to vouch for the RailPros team's performance.

Van Nuys North Platform Project (2014-Ongoing)
LACMTA, Los Angeles, CA

Reference:
Ayokunle Ogunrinde, LACMTA
One Gateway Plaza, Los Angeles, CA 90012
(213) 418-3330 | ogunrinde@metro.net

Key Staff: Danielle Libring, Nathan Ortega, Bob Matthews, Carrene Gilbert, Anil Verma (AVA), Joseph Rigonan (AVA), Edgar Del Rosario (AVA), Raymundo Cruz (AVA), Gregorio Del Rosario (AVA)

This proposed station platform modification project is located on the SCRRA Ventura Subdivision along the LOSSAN Corridor, which currently accommodates 38 weekday passenger rail trains and two long distance trains through the Van Nuys Station. Currently, only one permanent side platform exists for two main line tracks at this station; two trains traveling in opposite directions cannot simultaneously serve this station, so one must hold at control points until the other has cleared the station. When one or more trains are running behind schedule, the lack of safe platform access to both mainline tracks greatly impairs the ability of train dispatchers to adjust train movements and recover back to normal operating schedules.

The proposed project, which features a first-of-its-kind (for the Metrolink system) center platform, will improve operational flexibility; reduce travel times; and maintain safe, fully grade-separated pedestrian and baggage cart access to the platform. The project design was originally led by LA Metro, in partnership with SCRRA on the implementation, and requires coordination with a significant number of stakeholders, including SCRRA, Amtrak, UPRR, Caltrans, City of Los Angeles, CPUC, FRA, LOSSAN JPA, and a variety of utility and fiber companies, as well as neighborhood groups and two city council districts.

In order to build the center platform, innovative design solutions and construction phasing were required to avoid major facilities nearby and became the key project constraints. RailPros' project design team successfully crafted a design solution that worked within the funding allocations and still keeps the project on schedule. In this tightly constrained area, our team designed a track alignment that keeps at least one track in service at all times during construction phasing and minimizes passenger outages to the station to just one weekend (during which a bus bridge will be available). The unique track alignment allowed the project to meet FRA level boarding requirements even with the three different operators (SCRRA, UPRR, and Amtrak) who have rights to run on all mainline tracks. It also avoided a host of other impacts, including the need to widen or seismically retrofit Van Nuys Blvd Bridge; impacts to the Sprint Fiber Booster Station; major impacts to a 24' wide box culvert; and splicing of existing transcontinental fiber lines. All of these solutions saved more than $20 million for the project, keeping it under budget.

RailPros' scope of work includes: railroad design and coordination, railroad signal design and communications, fiber optic relocation design, structural retrofit, civil design, ticket vending machines and notifications systems, project management and coordination, and quality assurance and control. RailPros also is responsible for managing the design, coordination, and oversight of the following disciplines: mechanical, electrical, plumbing, video surveillance system, customer information system, structural, architectural, landscaping, geotechnical, environmental investigations, drainage, utilities, and surveying. Final design of PS&E concluded in November 2015, which was three months earlier than the client's original schedule and allowed the receipt of state Prop 1B grants to fully fund the project.

Vista Canyon Multi-Modal Center (2016-Ongoing)

City of Santa Clarita, Santa Clarita, CA

Reference:
Carla Callahan, City of Santa Clarita
23920 Valencia Blvd., Ste 300, Santa Clarita, CA 91355
(661) 286-4130 | ccallahan@santa-clarita.com

Key Staff: Robert Williams, Danielle Libring, Nathan Ortega, Bob Matthews, Anil Verma (AVA), Joseph Rigonan (AVA), Edgar Del Rosario (AVA), Raymundo Cruz (AVA), Gregorio Del Rosario (AVA)

RailPros is providing engineering and architectural services for the development of the $35 million Vista Canyon Multi-Modal Transit Center project by the City of Santa Clarita, in partnership with the Los Angeles County Metropolitan Transportation Authority (Metro), and Vista Canyon Ranch, LLC. Located within the eastern Santa Clarita Valley, the installation of the transit center will involve the relocation of the existing Via Princessa Metrolink Station to the Vista Canyon development.

The transit center will serve as a regional hub for numerous modes of transportation, including commuter rail, local and commuter bus transit, and bicycle and pedestrian trails in the Santa Clarita Valley, and includes the following components: development of a new passenger rail station (Metrolink Station) including new railroad track and required signal improvements; a center platform (including canopies, mini-high platform, light poles, benches); and a grade separated pedestrian access (overcrossing or undercrossing) to the platform. A 500-space surface parking lot to be constructed by Vista Canyon Ranch, LLC. At ultimate build out the surface parking will be replaced with a 750-space parking structure.

RailPros' scope of work includes: project management and coordination, railroad design and coordination, station communications design, structural engineering, civil design, fiber optic relocation design, and quality assurance and control.

RailPros also is responsible for managing the design, coordination, and oversight of the following disciplines: mechanical, electrical, plumbing, video surveillance system, customer information system, structural, architectural, landscaping, geotechnical, ticket vending machines, drainage, utilities, surveying, and right-of-way easements.

RailPros supported the City by providing exhibits and write-ups for various funding grant applications, and were successful in obtaining $8.9 million from SB-1 We also supported the City in obtaining several million in Metro's Measure R and Measure M funding for the project and its sustainability aspects.

UPRR ROW Engineering Services (2005-Ongoing)

Various Agencies, Various Locations, CA

Reference:
Paul Rathgeber, UPRR
1400 Douglas St., Stop 0910, Omaha, NE 68179
(402) 544-4357 | paulrathgeber@up.com

Key Staff: Robert Williams, Luis Flores, Karen Hankinson

In addition to providing services directly to UPRR, RailPros also has successfully provided coordination services for various agencies within the UPRR right-of-way. Our excellent staff and relationships have facilitated the development of local and regional agency projects, including station design and special trackwork projects throughout Central California. The scopes of these projects typically consist of the development and approval of proposed improvements, including assisting with site access, easements, ROE, agreements and other documentation.

At-Grade Crossing Safety Improvements (2015-Ongoing)
SVCOG, Pomona, CA

Reference:
Rachel Korkos, SGVCOG (retired)
1000 Fremont Ave. #42, Alhambra, CA 91803
(562) 305-2694 | akorkos@aol.com

Key Staff: Robert Williams, Karen Hankinson, Bob Matthews, Luis Flores, Carrene Gilbert

RailPros is providing preliminary engineering and final design services for the San Gabriel Valley Council of Governments' (SGVCOG, formerly the Alameda Corridor-East Construction Authority) $20 million At-Grade Crossing Safety Improvement Project in Pomona, California. The goal of the project is to enhance vehicular and pedestrian safety and reduce train noise at five existing at-grade crossings in Pomona, California along the UPRR Alhambra and Los Angeles Subdivisions. The crossings include Hamilton Boulevard, Park Avenue, Main Street, Palomares Street, and San Antonio Avenue, all within an existing Quiet Zone that will be maintained. This project requires excellent knowledge of the railroad operating environment and keen understanding of the constraints associated with design and construction on active railroad corridors.

Our scope of services includes performing site studies and identifying enhancements and modifications, developing concept plans for proposed improvements, preparing the PS&E package for construction, and engineering support during construction. Project elements may include: traffic engineering, roadway design, right of way engineering, drainage, utilities, construction estimates, quality assurance, and regular coordination with UPRR and the CPUC for approvals. Specific improvements include modifying roadway profile curbs and gutter, drainage structures, interconnected traffic signal design, improved pedestrian channelization (including sidewalks, pedestrian gates, railing, tactiles), Amtrak/Metrolink Platform modifications, ADA access, station and street landscaping, and updating signage and striping..

East Area One Project (2015-Ongoing)
Lewis Homes, Santa Paula, CA

Reference:
Tim Jones, Lewis Management Corp.
1156 N. Mountain Ave., Upland, CA 91768
(909) 985-0971 | tim.jones@lewismc.com

Key Staff: Robert Williams, Danielle Libring, Casey Murdie, Karen Hankinson

The multi-faceted project involves developing a new 523-acre mixed-use addition to the City of Santa Paula. RailPros' involvement has been related to the project's rail components, including development of a new proposed Hallock Drive at-grade crossing for primary access to the development, and closure of adjacent Padre Lane crossing and private crossing access. The roadway crossing and rail efforts involved working with the CPUC, Fillmore and Western, City of Santa Paula and Ventura County Transportation Commission to develop the proposed roadway and crossing improvements and get the authority to construct a new grade crossing at Hallock Drive and close two existing grade crossings. Our successful efforts resulted in CPUC approval for construction of the new roadway. The new Hallock Grade Crossing will be interconnected to the proposed traffic signal at Telegraph Road and Hallock Drive, and will include a presignal. RailPros is providing railroad coordination, railroad signal design, crossing design and traffic signal, signing and striping, and track design engineering support.

Redlands Passenger Rail Program (2015-Ongoing)

SBCTA, San Bernardino County, CA

Reference:

Victor Lopez, SBCTA
1170 W. 3rd Street, 2nd Floor, San Bernardino, CA 92410
(909) 889-8611 x118 | vlopez@gosbcta.com

Key Staff: Robert Williams, Bob Matthews, Danielle Libring, Mark Esposito

San Bernardino County Transportation Authority (SBCTA) developed the Redlands Passenger Rail Project to provide a cost-effective travel alternative for the Redlands Corridor area. The project runs along existing railroad right-of-way owned by SBCTA from E Street in San Bernardino east to the City of Redlands, a roughly nine-mile extension of passenger rail service. The total program cost is estimated at $250 million and aims to provide:

- Tier 4 vehicle emission acquisition and procurement
- Management and development of future vehicle operator
- Development of future operations and maintenance staff
- Design oversight
- Third-party agreements
- Roadway crossing quiet zone implementation
- System safety
- Obtaining and managing funding requirements
- Multiple procurements for consultants and contractors
- Fare collection
- Operations startup, testing, and commissioning

RailPros, as prime, is working with SBCTA on this commuter rail expansion project. This project will develop four new stations; acquire vehicles; renew existing track infrastructure; reconstruct or rehabilitate existing bridge structures; construct a new train layover facility; install new crossing(s), improve 22 at-grade roadway crossings; close five public at-grade crossings; improve safety; create quiet zones; build new parking facilities; and improve pedestrian access.

RailPros' scope of work includes project management, development of third-party agreements, third-party coordination, operations and maintenance, regulatory compliance, environmental oversight, risk management, operations startup and testing, systems safety, design reviews, start-up and commissioning, fare collection, CPUC applications (including General Order 88-b and Formal Applications), quiet zone implementation, and all procurements (including vehicle procurement). Design reviews will include track, structures, systems, signals and positive train control, structures, site work stations and crossings.

ADDITIONAL PROJECT EXPERIENCE

Goleta Train Depot Project (2019-Ongoing)

City of Goleta, Goleta, CA

This project will construct a multi-modal train depot just south of the existing Goleta Amtrak train platform site. The new depot building will be approximately 8,000 square feet. It will include a lobby, electronic ticketing area, waiting room, café, community meeting room, restrooms/shower/changing facilities, a new parking facility, and accommodations for buses, vanpools and bicycles. RailPros' scope includes the site design of the new depot facility including grading and drainage, site layout, utility design (including fire protection up to the building), Low Impact Development (LID) Design and hydrology studies.

RailPros is also the City's consultant/reviewer for the LOSSAN train storage project. It relates to that project's impacts on the new train depot project. The team reviews submittals/reports/alternatives from LOSSAN/Amtrak and meets with them as needed to coordinate the design of the train depot building with their future projects.

Scott Road Widening Project (2019-Ongoing)

City of Menifee, Menifee, CA

RailPros staff were recently awarded a contract to lead the team responsible for completing environmental, design, improvement plans, right-of-way acquisition, specifications and construction bid documents for the widening of Bundy Canyon/Scott Road between Sunset Avenue and Haun Road. Bundy Canyon Road/Scott Road is a two-lane roadway with unpaved shoulders between Haun Road and Sunset Avenue, a length of just under three miles. This road serves as one of the primary east-west arterials between Interstate 215 and 15 through the Cities of Menifee and Wildomar. The roadway is lined with overhead power poles which contain SCE lines, telephone lines, cable TV lines and communication lines. Other utilities are anticipated beneath the roadway including potable water and natural gas. Several drainage channels cross the roadway in a north-south direction.

The RailPros scope of work includes coordination with City Public Works staff and other project consultants for completion of environmental certification, PS&E and ROW acquisition. We are also monitoring project cost and schedule controls, and preparing a variety of project delivery status reports.

SUBCONSULTANT REFERENCES

Anil Verma Associates

Crenshaw LAX Corridor Advanced Conceptual/Preliminary Engineering (2009-12)
LACMTA, Los Angeles, CA
AVA was responsible for responsible for station planning, architectural and engineering design, art coordination, urban design and landscape architecture.

Key staff: Anil Verma, Joe Rigonan

Contact: Roderick Diaz (formerly LA Metro, currently SCRRA)
900 Wilshire Blvd., Ste 1500, Los Angeles, CA 90017
(213) 452-0200 ext. 455 | diaz@scrra.net

Berryessa Extension (SVBX) Design-Build (2012-15)
Santa Clara Valley Transit Authority (VTA), San Jose, CA
AVA was the architect and engineers of record, design and construction support to the design-build joint venture team.

Key staff: Anil Verma, Joe Rigonan

Contact: Rajwinder Sehdev, VTA
3331 N. 1st Street, San Jose, CA 95134
(408) 942-6143 | rajwinder.sehdev@vta.org

Leighton Consulting

Pachappa Union Pacific Overcrossing (2018-Ongoing)
UPRR, Riverside, CA
Leighton Consulting was responsible for stockpile sampling prior to re-use for completion of the railroad overcrossing.

Key staff: Thomas Benson

Contact: Gary Tomasetti, Jacobs (prime)
3257 E. Guasti Rd., Ste 120, Ontario, CA 91761
(909) 974-2747 | gary.tomasetti@jacobs.com

Perris Valley Line Metrolink Expansion (2013-15)
RCTC, Riverside County, CA
Leighton provided quality assurance (QA) geotechnical and materials testing and hazmat review and confirmation sampling.

Key staff: Thomas Benson

Contact: Marlin Feenstra, RCTC
PO Box 12008, Riverside, CA 92502
(951) 787-7141 | mfeenstra@rctc.org

Overland, Pacific & Cutler

Salinas Rail Extension Project (2010-18)
Transportation Agency of Monterey County, Monterey County, CA
OPC provided acquisition and relocation services for the Agency's Commuter Rail Extension project and the Salinas Rail Extension Project to improve the connections between Pajaro, Watsonville, and Salinas to the Caltrain facilities in Gilroy.

Key staff: Steven Harris

Contact: Mike Zeller, Transportation Agency of Monterey County
55-B Plaza Circle, Salinas, CA
(831) 774-4416 | mike@tamcmonterey.org

Davis Road Bridge Replacement and Widening Project (2018-19)
Monterey County Resource Management Agency, Monterey County, CA
OPC is providing acquisition, appraisal, and utility coordination services for 17 parcels as part of the federally funded Marina-Salinas Multimodal Corridor.

Key staff: Steven Harris, Nivrita Chandra

Contact: Enrique Saavedra, Monterey County Resource Management Agency
1441 Schilling Place South Building, 2nd Floor, Salinas, CA 93901
(831) 755-4807 | saavedraem@co.monterey.ca.us

Rail Surveyors & Engineers

Caltrain South San Francisco Station Improvements (2015-20)
Caltrain, San Francisco, CA
RSE provided rail transit engineering and surveying/mapping.

Key staff: Cody Festa, Charlie Cheuk

Contact: Howard Beckford, Caltrain
1250 San Carlos Avenue, San Carlos, CA 94070
(650) 622-7852 | beckfordh@samtrans.com

VTA Rail Rehabilitation Project (2012-20)
Santa Clara Valley Transportation Authority, Santa Clara County, CA
RSE provided rail transit engineering and surveying/mapping.

Key staff: Cody Festa, Charlie Cheuk

Contact: Adolf Daaboul, VTA
3331 North First Street, San Jose, CA 95134
(408) 321-5915 | adolf.daaboul@vta.org

EXHIBIT 2
SUBCONSULTANT LIST

Proposed Subconsultants

Subconsultant Firm(s) Name and Address	Scope of Work	Dollar Amount of Work
Anil Verma Associates	Architectural engineering/design; mechanical/ electrical	*
Leighton Consulting	Geotechnical engineering	
Overland, Pacific & Cutler	ROW acquisitions	
Rail Surveyors & Engineers	Surveying	

* Fees are provided with the cost proposal in an enclosed separately sealed envelope. This is out of an abundance of caution not to compromise the City's ability to receive SRA funding, per certain state and federal grant requirements.

Name of Lead Firm:
RailPros

Printed Name and Title of Signatory:
Douglas B. Sawyer, Senior Vice President

Signature:

Date:
3/19/20

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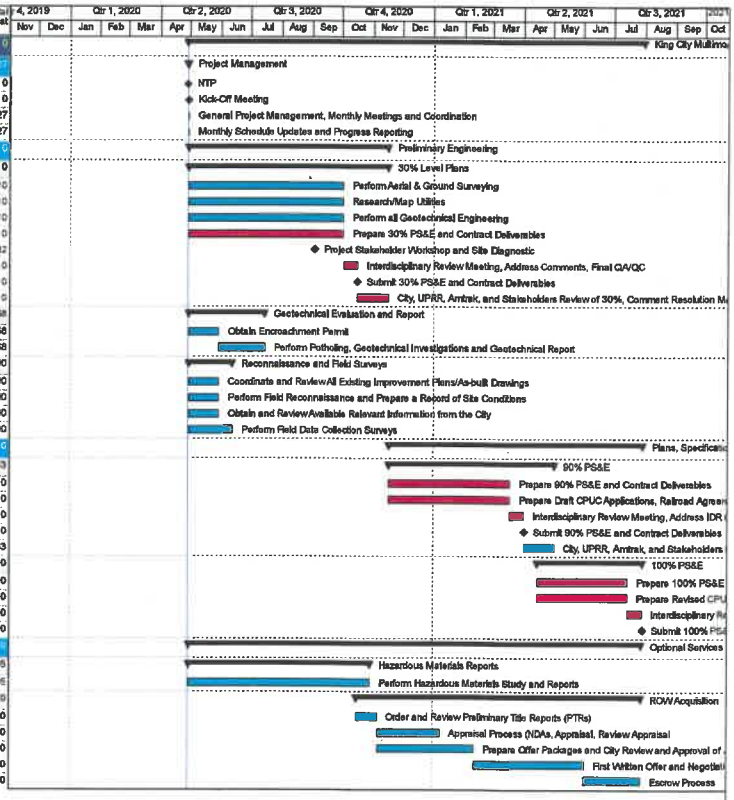
5. SCHEDULE

Activity ID	Activity Name	Original Duration	Start	Finish	Total Float
King City Multimodal Transportation Corridor Plan - Temporary Railroad Platform		328	29-Apr-20	30-Jul-21	0
Project Management		1	29-Apr-20	29-Apr-20	327
PM1000	NTP	0	29-Apr-20		0
PM1010	Kick-Off Meeting	0	29-Apr-20		0
PM1020	General Project Management, Monthly Meetings and Coordination	0	29-Apr-20	29-Apr-20	327
PM1030	Monthly Schedule Updates and Progress Reporting	0	29-Apr-20	29-Apr-20	327
Preliminary Engineering		144	29-Apr-20	16-Nov-20	0
30% Level Plans		144	29-Apr-20	16-Nov-20	0
PE1000	Perform Aerial & Ground Surveying	112	29-Apr-20	01-Oct-20	10
PE1010	Research/Map Utilities	112	29-Apr-20	01-Oct-20	10
PE1020	Perform all Geotechnical Engineering	112	29-Apr-20	01-Oct-20	10
PE1030	Prepare 30% PS&E and Contract Deliverables	112	29-Apr-20	01-Oct-20	0
PE1035	Project Stakeholder Workshop and Site Diagnostic	0	02-Sep-20		32
PE1040	Interdisciplinary Review Meeting, Address Comments, Final QA/QC	10	02-Oct-20	15-Oct-20	0
PE1050	Submit 30% PS&E and Contract Deliverables	0	16-Oct-20		0
PE1060	City, UPRR, Amtrak, and Stakeholders Review of 30%, Comment Resolution Meeting	22	16-Oct-20	16-Nov-20	0
Geotechnical Evaluation and Report		54	29-Apr-20	13-Jul-20	68
PE1070	Obtain Encroachment Permit	22	29-Apr-20	28-May-20	68
PE1080	Perform Potholing, Geotechnical Investigations and Geotechnical Report	32	29-May-20	13-Jul-20	68
Reconnaissance and Field Surveys		32	29-Apr-20	11-Jun-20	90
PE1110	Coordinate and Review All Existing Improvement Plans/As-built Drawings	22	29-Apr-20	28-May-20	90
PE1120	Perform Field Reconnaissance and Prepare a Record of Site Conditions	22	29-Apr-20	28-May-20	90
PE1130	Obtain and Review Available Relevant Information from the City	22	29-Apr-20	28-May-20	90
PE1140	Perform Field Data Collection Surveys	32	29-Apr-20	11-Jun-20	90
Plans, Specifications, and Estimates (PS&E)		183	17-Nov-20	30-Jul-21	0
90% PS&E		120	17-Nov-20	03-May-21	63
PE1220	Prepare 90% PS&E and Contract Deliverables	88	17-Nov-20	18-Mar-21	0
PE1225	Prepare Draft CPUC Applications, Railroad Agreements, Easements and Licenses	88	17-Nov-20	18-Mar-21	0
PE1230	Interdisciplinary Review Meeting, Address IDR Comments, Final QA/QC	10	19-Mar-21	01-Apr-21	0
PE1240	Submit 90% PS&E and Contract Deliverables	0	02-Apr-21		0
PE1250	City, UPRR, Amtrak, and Stakeholders Review of 90%, Comment Resolution Meeting	22	02-Apr-21	03-May-21	63
100% PS&E		75	16-Apr-21	30-Jul-21	0
PE1260	Prepare 100% PS&E and Contract Deliverables	65	16-Apr-21	15-Jul-21	0
PE1265	Prepare Revised CPUC Applications, Railroad Agreements, Easements and Licenses	65	16-Apr-21	15-Jul-21	0
PE1270	Interdisciplinary Review Meeting, Address Comments, Final QA/QC	10	16-Jul-21	28-Jul-21	0
PE1280	Submit 100% PS&E and Contract Deliverables for Stakeholder Final Review and Approval	0	30-Jul-21		0
Optional Services		327	29-Apr-20	29-Jul-21	0
Hazardous Materials Reports		132	29-Apr-20	29-Oct-20	195
OS1000	Perform Hazardous Materials Study and Reports	132	29-Apr-20	29-Oct-20	195
ROW Acquisition		205	16-Oct-20	29-Jul-21	0
OS1010	Order and Review Preliminary Title Reports (PTRs)	15	16-Oct-20	05-Nov-20	0
OS1020	Appraisal Process (NDAs, Appraisal, Review Appraisal	45	06-Nov-20	07-Jan-21	0
OS1030	Prepare Offer Packages and City Review and Approval of Just Compensation	70	06-Nov-20	11-Feb-21	0
OS1040	First Written Offer and Negotiations	80	12-Feb-21	03-Jun-21	0
OS1050	Escrow Process	40	04-Jun-21	29-Jul-21	0



For an in-depth discussion of the work plan and schedule, please refer to Section 2: Approach.

Remaining Level of Effort | Actual Work | Critical Remaini...
Actual Level of Effort | Remaining Work | ◆ Milestone

TASK filter: All Activities

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APPENDIX
KEY PERSONNEL RESUMES

APPENDIX
KEY PERSONNEL RESUMES

ROBERT WILLIAMS, PE, QSD ▪ PROJECT MANAGER

RAILPROS

EDUCATION

BS, Civil and Environmental Engineering, Brigham Young University

REGISTRATIONS

Registered Civil Engineer - California No. C77487

SUMMARY OF QUALIFICATIONS

Mr. Williams has 11 years of engineering experience in railroad project management, design, and coordination. He has designed and managed improvements on various rail, infrastructure, and crossing projects throughout Southern California. His diverse capabilities include railroad, public agency, and stakeholder coordination; plan and specification review and compliance; report development and writing; project management; schedule development; budget control; and contract compliance. One of Robert's strengths is his ability to build consensus through communication; this strength has aided in his project management style and ability to coordinate with railroads and regulatory agencies. He has been involved with projects for a number of clients, including ACE; OCTA; SCRRA; NCTD; SANDAG; SBCTA; RCTC; CPUC, FRA, UPRR, BNSF and various Cities and local agencies.

PROJECT EXPERIENCE

King City Station, City of King City, CA

As Project Manager, Robert managed the preparation of concept plans and cost estimates for a new Amtrak station and double track project on the UPRR corridor in King City. The project included 4.3 miles of new double track, realigning or relocating existing UPRR main line track, improvements to four at-grade crossings, and a new Amtrak platform and station parking. Robert provided coordination with Amtrak, UPRR, CPUC, and FRA.

At-Grade Crossing Safety Improvement Project, San Gabriel Valley Council of Governments (SGVCOG), Pomona, CA

As Project Manager, Robert manages the development and serves as Engineer of Record for a PS&E package for safety improvements at four multi-track at-grade crossings in Pomona. The project is currently estimated at $19.8 million including roadway and curb and gutter modifications, sidewalk modifications, median extensions, pedestrian channelization and gates, railroad signal improvements, Traffic Pre-signals, and other safety measures in an existing a quiet zone along UPRR right-of-way. The project involves several railroad operators (UPRR, Amtrak, and Metrolink) and coordination with multiple agencies including SGVCOG, the City, CPUC, FRA, and Caltrans. Robert manages the design team, subconsultants, project studies, and project development.

Oceanside Quiet Zone, City of Oceanside, CA

As Project Manager, Robert managed the development and served as Engineer on Record of a PS&E package for the safety improvements at five multi-track, at-grade crossings in Oceanside involving $6 to $8 million in improvements, including roadway modifications, median extensions, pedestrian channelization and gates, railroad signal improvements, Queue-Cutter signals, and other safety measures for a quiet zone. The project involves several railroad operators (Coaster, Amtrak, Metrolink, and BNSF) and coordination with multiple agencies. Robert managed the design team, scope, schedule, and budget.

Orange County Grade Crossing Improvement Program, Orange County Transportation Authority (OCTA), Orange County, CA

Robert managed the establishment of 11 Quiet Zones over 43 at-grade crossings in eight Orange County cities. He coordinated improvements and implementation between the cities and OCTA and Metrolink, Amtrak, UP, BNSF, CPUC, and FRA. He advised and assisted with quiet zone signage and on quiet zone documentation including Notice of Intent, Application for Quiet Zone, Quiet Zone Calculations, Inventory Updates, and Notice of Establishment.

Downtown San Diego Quiet Zone, Civic San Diego, San Diego, CA

As Civil Engineer, Robert assisted the City of San Diego with the establishment of a quiet zone over 12 multi-track, at-grade crossings in the downtown area. He provided stakeholder and regulatory agency coordination to gain approval of the safety improvements and quiet zone establishment. He coordinated between the City, regulatory agencies, and the railroad regarding excessive bell noise. He assisted with traffic signal preemption calculations, crossing design, and signal phasing design. The project involved several railroad operators (Trolley, Coaster, Amtrak, and BNSF); coordination with multiple agencies (CPUC, City, CCDC, FRA, and multiple adjacent property owners); and included $10-$15 million in improvements. At the close of the project, he continue to provide ongoing support and expertise.

Park Boulevard At-Grade Crossing, Civic San Diego, San Diego, CA
As Civil Engineer, Robert provided project coordination between the City of San Diego and FRA, CPUC, BNSF, NCTD, and MTS. Work included the development and processing of regulatory applications for the proposed crossing and quiet zone.

Metrolink Ventura County Sealed Corridor Project Manager, SCRRA, Ventura County, CA
Robert acted as interim project manager for the construction of safety improvements at three crossings in Simi Valley and one crossing in Moorpark in Ventura County, CA. Robert was responsible for overseeing the contractor and CM team work; managing budget, schedule, and scope; and coordinating with stakeholders, including Caltrans, design support staff, and regulatory agencies; and reporting to Metrolink management. The project included constructing improvements such as roadway modifications, repaving, medians, warning devices and gates, pedestrian treatments, including ramps, walkways, railing, gates and tactile warning, lane modifications, interconnected traffic signals, and signage and striping.

Santa Ana Quiet Zone 2, City of Santa Ana, CA
As Project Manager, Robert managed the implementation of a second quiet zone in the City of Santa Ana. He assisted the City with the preparation of documentation and implementation of a quiet zone over two crossings adjacent to the Santa Ana Train Station. He provided coordination with various stakeholders including Metrolink, BNSF, Amtrak, UP, CPUC, and FRA.

Hallock Drive Crossing, Limonera Company, Santa Paula, CA
As Civil Engineer, Robert coordinated with the developer, the City, CPUC, the railroad, and other stakeholders on feasibility and design requirements for a potential new crossing in the City of Santa Paula. He assisted in the preparation of preliminary design and cost estimates for at-grade, below and above grade crossing alternatives, working with stakeholders to define the impacts and feasibility of the alternatives and to gain CPUC approval of the new crossing.

Orange County Grade Crossings Safety Improvement Project, SCRRA, Orange County, CA
As Designer, Robert assisted in the development of preemption calculations, traffic signal phasing design, and phasing exhibits for 18 at-grade crossings on two Metrolink Subdivisions in Orange County. The project involved extensive coordination with eight cities, CPUC, and OCTA, as well as multiple operating railroads.

On-Call Engineering Services, NCTD, San Diego County, CA
As Project Manager, Robert managed projects such as:

- *Convention Center Station Platform Concept Alternatives Study* which developed and studied concept alternatives for track configuration, at-grade crossing improvements, and the installation of station platforms near the Convention Center in downtown San Diego.
- *PTC North Coaster Fiber Optic Crossings Project* which included design and inspection of fiber optic infrastructure to provide fiber optic access to signal facilities around and across tracks and bridge structures at multiple locations throughout the railroad corridor. This project for NCTD's Positive Train Control program extended from the Orange County line to the Oceanside Transit Center. Robert coordinated with NCTD, SANDAG, construction contractors, and utility inspectors; and managed design and inspection, schedule, and budget.
- *Oceanside Transit Center (OTC) Remodel and Wood Structures Studies Projects* consisted of managing the remodel design and installation of the building improvements at the OTC as well as the study and analysis of damage to the existing exterior wood structures at the OTC facility.

Laguna Niguel to San Juan Capistrano Passing Siding, OCTA, Orange County, CA
As Project Manager, Robert managed the development of 30% engineering plans and cost estimates to increase capacity by adding a passing siding track over roughly 1.8 miles of existing single track. The project extended from the existing mainline stub track, just south of the Laguna Niguel Metrolink Station, to just north of the Trabuco Creek Bridge in the City of San Juan Capistrano. He provided significant coordination with stakeholders, including the railroad, cities, and multiple utility agencies. The design included a spur track for maintenance and railroad layover operations, improvements to an existing private at-grade crossing and adjacent public road, bridge and drainage structures, and utility relocations.

Irvine Third Main Track, OCTA, Orange County, CA
As Project Manager, Robert managed the preparation of 5% engineering plans and cost estimates to increase capacity to three tracks over roughly eight miles of existing double track. The project ran through the Cities of Irvine and Tustin, interfacing with two stations, multiple at-grade and grade separated crossings, utilities, bridges, and drainage structures.

BOB MATTHEWS, PE, SE ▪ STRUCTURAL ENGINEERING LEAD

RAILPROS

EDUCATION

BS, Civil Engineering, Michigan State University

REGISTRATIONS

Registered Civil Engineer - California No. 44069
Registered Structural Engineer - California No. 3953

PROFESSIONAL AFFILIATIONS

- American Railway Engineering and Maintenance of Way Association (AREMA) - Committee 9 - Seismic Design for Railway Structures
- American Society of Civil Engineers (ASCE)
- American Institute of Steel Construction (AISC)
- National Society of Professional Engineers (NSPE)

SUMMARY OF QUALIFICATIONS

Mr. Matthews is a civil and structural engineer with extensive experience that includes planning, design, and construction support of railways, roadways, and buildings. His technical specialty is structural engineering and he has designed buildings, roadway bridges, railway bridges, retaining walls, and drainage and utility structures. He is actively involved with AREMA as former Chairman of Committee No. 9 (seismic design for railway structures) and prepared the seismic analysis procedures that are published in the AREMA Manual for Railway Engineering. He has developed several structural analysis computer programs, maintains technical websites and has prepared and instructed in-house classes on subjects ranging from construction specifications to structural analysis.

PROJECT EXPERIENCE

BNSF LA to Fullerton, BNSF Railway, California

Bob is lead structural engineer for the project and is responsible for adding new tracks on BNSF right of way for the California High Speed Rail system. Structures scope includes design of new and widened railroad bridges at 12 locations over roadways and waterways. Bridges consist of rolled steel beam, steel plate girder and precast concrete girder construction. Other structures include retaining walls and drainage culverts. Lead the structural design effort including developing basis of design document, configuring the structures, training engineers and coordinating efforts with the Client.

Via Princessa Park Access Study, City of Santa Clarita, Santa Clarita, CA

Bob is the Project Manager for this project to prepare conceptual design for a grade separation of the railroad tracks used by Metrolink and Union Pacific Railroad. The grade separation is located at the existing Via Princessa Metrolink station to access a park on the other side of the tracks. The grade separation provides pedestrian and emergency/maintenance vehicle access to the park. Bob led the design and performed quality control review of the study documents including a writeup, conceptual plans and cost estimate.

Development of the Vista Canyon Multi-Modal Center (Metrolink Station), City of Santa Clarita, Santa Clarita, CA

Bob was the Lead Structural Engineer on this project to develop a new passenger rail station with center platform, grade separated pedestrian access and related track work. Responsible for all structural design for the project. Station structures include platform, pedestrian underpass, sound walls and canopies. Track structures include replacement of existing railroad underpass with new double track precast concrete double box girder bridge on piles and addition of pier protection walls at an existing overpass structure.

CHSRA Plan and Spec Review, BNSF Railway, Fresno to Bakersfield, CA

As the Lead Structural Reviewer for BNSF, Bob is responsible for reviewing grade separation structures, intrusion barriers, adjacent California High Speed Rail Authority (CHSRA) facilities, and providing comments. This contract covers CHSRA contract packages 1, 2&3, and 4 which are three segments from Fresno to Bakersfield California. Bob attends meetings with BNSF and CHSRA and leads review of structures submittals.

Larkspur Extension, Sonoma-Marin Area Rail Transit (SMART), San Rafael, CA
Bob is serving as the Structural Lead responsible for developing preliminary engineering for bridges, culverts, walls, and the Larkspur Station platform. The project provides preliminary design for the Larkspur Extension. This includes preparing 30% PS&E for design-build bridging documents. Railroad bridges are needed at San Rafael Creek, Unnamed Channel, and at Auburn Street (Roadway underpass). The box culvert under Irwin Street is to be extended and a new retaining wall is needed from Irwin Street to Rice Drive. Bob produced preliminary design calculations for a steel through girder with open deck and cast in place trough girder with direct fixation track at San Rafael Creek. He advised and guided the bridge layouts, developed the Design-Build specifications, and performed quality control reviews of the structures.

Van Nuys North Platform Project, Los Angeles County Metropolitan Transportation Authority (LACMTA), Los Angeles, CA
Bob served as the Quality Assurance/Quality Control Manager for this project and performed quality assurance reviews of plans, specifications, and calculations. This project is to modify the passenger platform configuration by adding a new center platform with pedestrian underpass and removing the current side platform. Bob verified all submittals, followed RailPros' quality procedures, and checked the structural work on the project. The structural work included railroad underpass with ramps, stairs and walls, existing culvert retrofit for railroad surcharge loads, and existing railroad bridge modification to accommodate track realignment. Project challenges include avoiding costly bridge improvements, meeting FRA level boarding requirements as Union Pacific Railroad has operating rights over all tracks, avoiding impacts to a major fiber booster station, fiber relocations, and coordination with more than 30 stakeholders and third parties.

Nogales Street Grade Separation Project (LA Subdivision), SGVCOG (formerly ACE), Industry, CA
Bob was the Lead Structural Engineer on this project to grade separate the Union Pacific Rail Road and Metrolink railroad tracks by lowering Nogales Street. The structural work included a new PC/PS concrete box girder railroad bridge, a new roadway bridge, drainage structures, and several types of retaining walls. He supervised the structural work, designed the railroad bridge and retaining walls, wrote the specifications, and performed quality control reviews.

Sound Transit, Mukilteo Commuter Rail Station, Mukilteo, WA
Bob was the Technical Director for the commuter rail station in Mukilteo, responsible for implementing and auditing the QA/QC program of this multidisciplinary project, including scheduling discipline and interdisciplinary reviews, and for signing off on all deliverables to the client. He provided technical guidance and quality control review of the work.

Oceanside-Escondido Rail Project, North County Transit District (NCTD), San Diego County, CA
Bob worked as Project Engineer on the $224 million, 22-mile Sprinter passenger rail project in San Diego County. The project included new ballasted track, signals, 15 stations/platforms, systems, retaining walls, and bridges. The rail system converted an existing freight rail corridor along Highway 78 to passenger rail. He delivered this project to construction after it experienced various budget/schedule and quality control issues. Bob assumed lead of the maintenance facility design effort and led preparation of project specifications. As structural engineer he designed a unique clock tower ticket vending machine facility, various retaining walls, and provided support during construction services. As Technical Director, he provided technical guidance on the bridge design. As Quality Manager Bob updated the project-specific quality manual, provided training, led quality control activities and provided quality assurance reviews of the submittals.

CARRENE GILBERT, PE ▪ SIGNAL DESIGN/ENGINEERING LEAD RAILPROS

EDUCATION

BS, Electrical Engineering, Georgia Institute of Technology

REGISTRATIONS

Registered Electrical Engineer- Texas No. 88498
Registered Electrical Engineer- California No. 20387
Registered Electrical Engineer- Colorado No. 508322
Registered Electrical Engineer- Utah No. 8811253-2202
Registered Electrical Engineer- Washington No. 50838
Registered Electrical Engineer- Louisiana No. 40091
Registered Electrical Engineer- North Dakota No. 10540
Registered Electrical Engineer- New York No. 93470
Registered Electrical Engineer- New Jersey No. 24GE53827
Registered Electrical Engineer- Massachusetts No. 50614
Registered Electrical Engineer – Florida No. 83546
Registered Electrical Engineer – Ohio No. PE 84378
Registered Electrical Engineer – Ohio No. PE 84378

PROFESSIONAL AFFILIATIONS

Member, AREMA – Committee 37

SUMMARY OF QUALIFICATIONS

Ms. Carrene Gilbert is an Electrical Engineer with over 30 years experience in the rail and transit industry. Her experience has involved signals, systems, and communications elements. For the last seven years at RailPros, she has led the signals and systems team. Carrene understands the design and integration of systems and is able to review and inspect existing systems to provide comments to eliminate service interruptions. She has worked extensively with rapid transit authorities on a number of systems engineering projects. She has experience with fare collection; traction electrification; OCS; Automatic Train Control; and management of fare collection and signal contracts. She is adept in contractor coordination and has worked on projects throughout design, installation, testing, and operation phases. Carrene coordinated the interface between agencies; railroads; departments of transportation (DOTs); cities; and developers throughout design, installation, testing, and operation as required by individual contracts. She reviews electrical, electronic, mechanical, and control systems computations; designs and analyses; and reviews and prepares cost estimates, reports, special studies, and technical specifications.

PROJECT EXPERIENCE

At-Grade Crossing Safety Improvement Project, San Gabriel Valley Council of Governments (SGVCOG), Pomona, CA
Carrene participated in the At-Grade Safety Improvements Project by evaluating the proposed at-grade safety improvements and assessing the impact to the railroad crossing signal system for the project. She also provided design estimates for the 35% design effort.

Oceanside Quiet Zone, City of Oceanside, CA
Carrene is the Systems Project Manager responsible for the railroad signal and PTC design modifications required by the addition of pedestrian treatments and gates to establish a quiet zone through the City.

Van Nuys North Platform Project, Los Angeles County Metropolitan Transportation Authority (LACMTA), Los Angeles, CA
Carrene is the Systems Project Manager responsible for the railroad signal and PTC design modifications required by the station platform reconstruction. The project provided operational and passenger improvements by eliminating the narrow center island platform, replacing it with a center island platform with under-grade access. The operational improvements facilitated by the project included elimination of the hold-out rule, elimination of delayed-in-block provisions by addition of signals near the ends of the new platform, and also increased speeds for through trains (those not stopping at the platform) by revision of existing curvature, superelevation, and tangents between reverse curves. Track revisions

also allowed speed improvements for freight trains entering/exiting the main at the adjacent Gemco yard. The increased train speeds required subsequent signal re-spacing, as well as modifications to grade crossing warning devices. The platform improvements include customer information display systems and new ticket machines, as well as the associated communications equipment, as well as relocation of existing third-part fiber optic.

St. George Interlocking Constructability Review, Staten Island Railroad, NY
Carrene performed a signal System Constructability Review of design modifications due to Hurricane Sandy.

West Jordan 7000 S Crossing Design, West Jordan, UT
Carrene was the Signals Designer providing the crossing equipment layout and performance specifications for the bidding process. The project includes a new at-grade crossing to improve vehicular movement in the City of West Jordan. Coordination with the following agencies was required: Utah Department of Transportation, Union Pacific Railroad, and the City of West Jordan; as construction documents were required to meet their standards.

Pier T Lead Grade Crossing Relocation, Port of Long Beach, CA
Carrene was the Signal Design Manager responsible for the relocation of the highway-rail grade crossing warning equipment at the Pier T lead due to the Pier T lead and Highway 710 realignment.

Positive Train Control, Southern California Regional Rail Authority (SCRRA/Metrolink), Rancho Cucamonga, CA
Carrene was the Project Manager managing the work of the Vendor/Integrator, including reviewing submittals, invoices and schedule to ensure proper construction, installation, and testing of the PTC system according to the contract, overall schedule and budget. She was also the Training liaison between SCRRA and Vendor/Integrator. RailPros provided Program and Project Management responsibilities include staffing and managing Project Controls functions, including costs and schedules with team members from multiple consultant and contractor firms as well as Agency staff. RailPros is also responsible for the advanced design, preparing the RFP documents for procurement of a Designer Vendor Integrator team to develop and implement the various facets of the PTC System and managing the Development and Implementation team through the design, testing, and implementation of the PTC System.

MBTA Fitchburg Commuter Rail Line Improvement Project, JF White, Boston to Fitchburg, MA
The project consisted of work on the Fitchburg Commuter Rail Line's existing track alignment, construction of new tracks through select segments, new or improved interlockings, a second track through the South Acton Station area, a new train control signal system, replacement of Automatic Grade Crossing Warning Systems (AGCWS), upgrade of existing at-grade highway crossing track and roadway surfaces, the retirement of portions of the existing train control signal systems and AGCWS, and the demolition of select existing turnouts, crossovers and track segments. These improvements will be made while the existing commuter line service and freight line service continue to function. Carrene served as the Lead Signal Engineer and was responsible for preparing test procedures and time line for tests for the signal improvements.

Manager of Signals and Fare Collection, Dallas Area Rapid Transit (DART), Dallas, TX
Carrene managed all the requirements of the Signals and Fare Collection Systems from project inception through contract closeout. She provided insight regarding signal system needs based on proposed route and service during the planning process. After project turnover from Planning, she managed design consultants to ensure required design components progress within budget and to meet required milestones. Carrene assisted in the preparation of contract documents and evaluated proposals and managed design consultants during contract final design, manufacturing, factory testing, installation, field testing and integrated testing of the system. She also coordinated with Rail Transportation, Operations, and Maintenance to ensure the designs met their requirements. She coordinated the interface between DART, Denton County Transportation Authority, Dallas Garland and Northeastern Railroad, TxDOT, cities, and developers throughout design, installation, testing, and operation as required. She reviewed electrical, electronic, mechanical, and control systems computations, designs, and analyses; reviewed cost estimates, reports, special studies, and technical specifications as required. Lastly, she managed Design-Bid-Build, Design Build, and Construction Manager-General Contractor contracts and filled in for the Assistant Vice President, Systems Engineering and Integration in his absence.

EDUCATION

BS, Civil Engineering, California State University, Sacramento

REGISTRATIONS

Registered Civil Engineer - California No. C72290
Registered Civil Engineer - Texas No. 100737

SUMMARY OF QUALIFICATIONS

Mr. Dan Nagy has over 18 years of experience in construction management, civil engineering, product detailing, and project management. Recently, he managed an annual budget of over $60 million in Capital Improvement projects involving trackwork, structures, and drainage for a major freight railroad, as well as on a number of steel industrial facility projects. He has effective team leadership in project scheduling, cost savings, production, and efficiency, while also demonstrating strengths in recognizing, analyzing, and implementing simple solutions to complex problems, all in an operating railroad environment and with a high focus on safety. He is able to perform well in fast paced environments while handling multiple facets of operational responsibilities and managing multiple high dollar projects, providing maximum cost savings and profit. Dan has successfully led and managed three different territories (Stockton, Indio, West Colton) prior to his Project Manager assignment with UPRR.

Currently, Dan is in charge of the State of Good Repair (SOGR) projects for Metrolink. Dan oversees multiple employees who help devlier the track construction projects and their inspections including rail, tie, turnout, grading, culvert, bridge, and crossing replacements. Dan is involved with the planning, scheduling and execution of current and future SOGR projects. Dan is also involved with the asset evaluation team determining the health of various assets and infrastructure. Depending on the health rating, rehab or replacement is recommended. Dan has also recommended maintenance systems such as the Track Renewal Train be implemented and is currently analyzing the feasibility of such systems on various Metrolink territories. Dan is involved with the Safety assessment team at Metrolink and takes part in safety audits, inspector audits and equipment evaluations. Most recently, Dan was heavily involved with the complete revision to the Metrolink Track Maintenance Manual (TMM), Continuous Welded Rail (CWR) procedures, and Roadway Worker Protection (RWP) rules. Dan, a qualified trainer, provided "Train the Trainer" classes for the TMM to Metrolink and its contractors.

PROJECT EXPERIENCE

Los Angeles Union Station (LAUS) Rehab Project, Metrolink, Los Angeles, CA

Dan is currently acting as Construction Manager on this critical rehab project, part of Metrolink's most critical hub. The project totals over $67 million and consists of both track and signal rehabilitation work. Dan and his team provided the evaluation of all track assets at LAUS and made recommendations for their rehabilitation. The current scope of work includes the upgrade of all turnouts at CP mission to concrete turnouts; the replacement of the rail on the five leads leading into CP Terminal; the rehabilitation of all the turnouts in CP Terminal; and the upgrade of the remaining aging platform tracks to concrete tie large rail. This project involves close coordination with Los Angeles MTA and Amtrak for funding and scheduling. The complex phasing plan was developed to allow for service to LAUS to continue with minimal interruption.

High-Priority State of Good Repair Projects, Metrolink, Los Angeles, CA

Dan is acting as Construction Manager on this more than $50 million program for the overall rehabilitation of all track-related facilities on the system, including rail, turnouts, ties, undercutting, drainage, road crossings, bridges, systems, and station upgrades. To date, 27 projects totaling $45 million in construction have been assigned to five different construction contractors. Another 20 to 30 projects are planned in future years based on funding availability. As the Construction Manager, Dan is responsible for conducting constructability reviews of design documents, managing construction projects in the field, and checking project work for adherence to Metrolink, FRA, PUC, and contract documents/standards. He has a field staff of up to nine at any time. As the owner's representative, he protects Metrolink's interests and manages cost, schedule, and quality of work, dealing directly with the construction contractors, third parties, and Metrolink staff. Safety adherence and minimizing impacts to operations and maintenance were top priorities.

Manager of Track Projects, Union Pacific Railroad (UPRR), Bloomington , CA

Dan was in charge of over $60 million dollars of capital infrastructure improvements in the Greater Los Angeles area. He oversaw nine managers and five supervisors who were responsible for the operations and support of 160 employees. Dan also supervised employees and contractors to assure maximum productivity and efficiency while performing their duties safely and fostered employee engagement by involving employees in the decision-making process. His quality corrective coaching resulted in a 70% reduction in reportable personal injuries over the last four years. As part of an A3 team, Dan assisted in developing multiple standard work documents to increase efficiency and reduce operations variability. He reduced unit costs of projects by 10% by identifying and eliminating waste and managed the budget covering all payroll, materials, tools, and equipment for the Los Angeles Service Unit. Dan managed and designed multiple large-scale slope stability projects within a budget of $15 million dollars. He also made sure that strict compliance with CEIs, FRA, and PUC and all regulatory government standards were met. He provided training to employees to assure compliance with company rules, policies, and standard work procedures, and developed a safety action plan for multiple locations identifying risks and ways to mitigate the concerns to promote safety throughout the territories. He also performed all responsibilities for the position of Director of Track Maintenance while the position was vacant.

Penn Tunnel Rehabilitation Project, UPRR, Portland, OR

As an Engineering Associate at UPRR, Dan was involved in the planning and execution of a new method of rehabilitating large tunnels. This project involved a seven-day shutdown with a round-the-clock operation to completely demolish the existing track structure down to the concrete floor of the tunnel and rebuild it to standard. This required the monitoring of air quality on an hourly basis with temporary ventilation fans installed to provide air flow through the tunnel. Lighting was installed throughout the tunnel to provide illumination to the work taking place.

West Colton Yard Rehabilitation, Phase 5, UPRR, Los Angeles, CA

Project manager for 18 months. Dan oversaw the complete replacement of 8.1 miles of yard track including two critical leads that were upgraded from wooden track to concrete track. The project also included eight bowl tracks in one group of the bowl, five crossings, ten turnouts, and two power derails. He managed the planning, scheduling, budget and execution of Phase 5 of the project.

Bridge Rehabilitation, UPRR, San Bernardino, CA

Project manager for 16 months. This project included completely removing the wood tie track structure on the three back to back ballast deck bridges and removing the ballast to the bridge decks to allow for bridge repairs. Completed necessary repairs to bridge and relayed bridge with new concrete track to tie into the existing concrete track structure.

Road Crossing Rehabilitation, UPRR, Los Angeles, CA

Project manager for 18 months. Dan was responsible for the rehabilitation or replacement of over 3800 linear feet of crossings on the Los Angeles Service Unit. This included the replacement and upgrade of the SR-78 crossing in Glammis, CA, which required intense coordination with Imperial County, Caltrans for the closure of the highway, and the UPRR operating department to prevent delays to freight traffic. 19 crossings were also upgraded or replaced in conjunction with Metro in downtown Los Angeles which also required coordination with the City and County of Los Angeles. This was a state-funded project which included widening or upgrade of all crossings and required the installation of pedestrian gates for the increased protection of the public.

Alegria Bridge Pier and Slope Stabilization, UPRR, Long Beach, CA

Project manager for three months. Dan worked in conjunction with the design team to quickly develop a plan to stabilize a failing embankment in an environmentally sensitive area on the California coast that supported two critical bridge piers. The embankment failure was a result of unusually high tides and harsh weather that eroded the existing pier supports. The solution was auguring 22 piles into the bedrock and extending the existing sea wall by 200 feet to prevent further erosion and rock bolting the face of the embankment to stabilize the slope.

Slope Stabilization, UPRR, Tehachapi, CA

Project manager for two months. The failure of a 60-inch culvert caused the development of a large sink hole that resulted in water backing up and causing the fill material supporting the track structure to fail. This project required immediate emergency response to prevent the loss of the track structure. It involved a 24/7 pumping operation to prevent further failure until the site was stabilized. The final solution involved a more than 2-million-cubic-yard dirt work project with two 60-inch jack and bore pipes that were installed as a final drainage solution.

DAN THOMPSON, EIT ▪ SENIOR PROJECT MANAGER

RAILPROS

EDUCATION

BS, Civil Engineering, United States Military Academy at West Point

REGISTRATIONS

Engineer in Training
Commercial UAS Certificate

SUMMARY OF QUALIFICATIONS

Mr. Thompson has over 19 years of high level, front line leadership; 11 years of project detailing, scheduling, safe execution, and cost control, while also demonstrating strengths in recognizing, identifying, and implementing solutions to complex problems. During seven years in the U.S. Army, Dan served as an aeroscout platoon leader, logistics platoon leader, and troop executive officer during two tours in Operation Iraqi Freedom, and one tour in the Republic of South Korea. It was there that he learned to hone his sound decision making skills, and he has built upon that skill set through ten years of Class 1 railroad leadership, including five years serving as a Track Director.

PROJECT EXPERIENCE

Redlands Passenger Rail Project (RPRP), San Bernardino County Transportation Authority (SBCTA), San Bernardino, CA
Senior Project Manager for the Redlands Passenger Rail Project (RPRP), a 9-mile progressive regional passenger transportation project between the San Bernardino Transit Center and the University of Redlands. The RPRP encompasses construction and restoration of a 9-mile corridor including track work, signals, communications, three new bridge replacements, one bridge reconstruction, relocation of utilities, construction of 26 grade crossing improvements, and four new passenger stations. The RPRP also includes design and manufacture/fabrication of three Diesel Multiple Unit (DMU) bi-directional vehicles, as well as the design and construction of a Rail Maintenance Facility.

Director of Track Maintenance, Los Angeles Service Unit, Union Pacific Railroad (UPRR), Los Angeles, CA (2014 - 2018)
Responsible for the detailing, planning, and safe execution of over $180 million in capital improvement work in the Greater Los Angeles area from 2015 through 2017. Responsible for the planning, scheduling, and coordination of the work with various departments. Directly supervised nine managers and five supervisors who were responsible for the operations and support of 160 employees. Supervised employees and contractors to assure maximum productivity and efficiency while performing their duties safely. Responsible for track maintenance and network service availability over 1,160 track miles of main line territory, which included Metrolink and Amtrak routes, two intermodal yards, one auto facility, and one network hump yard. Part of the first responders' team that handled major emergencies such as derailments, mud slides, sink holes, wash outs, and track stability issues. Reduced unit costs of projects by identifying and eliminating waste and by properly utilizing the resources available. Projects included:

- *$450K Road Crossing Rehab – Lompoc, CA.* Personally secured funding through EVPO UPRR to rehabilitate 1,300' of an "in-street" Road crossing within Laurel Ave, and a 240' Road XING at Chestnut Ave (eight-degree curve) in Lompoc, CA
- *$378K Tunnel Renewal Project.* Complete replacement of 1600 LF of track through two tunnels on the UPRR's Mojave subdivision, both of which required laying track with 10-degree curvature. Managed the planning, scheduling, budget and execution.
- *$12.5M West Colton Yard Rehab Project (Phase 5).* Complete replacement of 8.1 miles of yard track including two critical leads that were upgraded from wooden track to concrete track, eight bowl tracks in group one of the bowl, five crossings, ten switches and two power derails. Managed the planning, scheduling, budget and execution of Phase 5 of the project.
- *1800LF Bridge Rehab Project.* Completely remove the wood tie track structure on the three back to back ballast deck bridges over a major Los Angeles highway and a protected waterway. Removed the ballast to the bridge decks to allow for bridge repairs. Completed necessary repairs to bridge and relayed bridge with new concrete track to tie into the existing concrete track structure.
- *Slope Stabilization Project – Mojave Sub, CA.* Due to the Blue Cut Fire that took place in the San Bernardino Mountains, the vegetation along the UPRR right of way was eliminated. This resulted in unstable slopes and multiple slope failures during the winter of 2016 that resulted in multiple service interruptions. Responsible for restoring tracks to service, restoring the track structure, restoring of the drainage facilities, and the grading of the right of way roads.

- *Bridge Reconstruction – Mojave Sub, CA.* Due to the Blue Cut Fire, one of the ballast deck bridge structures on the Mojave Sub located in the middle of a curve was severely burned to the point that only the steel structure remained. This project included the complete replacement of the approaching steel bridge spans to concrete spans, the replacement of the bridge deck, the replacement of the concrete track structure with pre-bent concrete track panels, restoration of walkways on the bridge, installation of new hand rails, and restoration grading of the surrounding areas.
- *$3.2M Road Crossing Rehab.* Responsible for the rehabilitation or replacement of over 3,800 linear feet of crossings on the LA Service Unit. This included the replacement and upgrade of the SR-78 crossing in Glammis, CA which required intense coordination with Imperial County, Caltrans for the closure of the Highway, and the UPRR operating department to prevent delays to freight traffic. 19 crossings were also upgraded (Ongoing) or replaced in conjunction with METRO in downtown Los Angeles which also required coordination with the city and county of Los Angeles. This was a state funded project which included widening or upgrade of all crossings and required the installation of pedestrian gates for the increased protection of the public.
- *Loma Linda Crossover Upgrade.* This project consisted of upgrading five #14 wooden turnouts to #15 concrete turnouts and over 1,000ft of wooden track to concrete track to reduce maintenance costs and was part of a broader speed increase initiative on the Yuma Sub. Due to the change in switch sizes, the switch locations and track centers were redesigned to accommodate the added switch lengths. As a result of these changes, both the PTC group and signal group were involved in the planning and execution of this project.
- *$136K Seawall Stabilization Project – Santa Barbara Sub.* On short notice secured funding to stabilize seawall with toed-in Rip Rap at Emma Wood State Beach. Coordinated with US Army Corp of Engineers, California Coastal Commission, and UPRR Environmental to secure permitting and monitor activities. Planned, executed, and ensured cost effectiveness.
- *$9.5M West Colton Yard Rehab Project (Phase 4).* Complete replacement of 4.2 miles of yard track including two critical leads that were upgraded from wooden track to concrete track, new construction of Group 6 lap switches on the West Colton hump yard. Managed the planning, scheduling, budget and execution of Phase 5 of the project.
- *$5.9M Track Construction Project Granite City, IL.* Responsible for track extension of three interchange tracks on the Alton & Southern Gateway Subdivision (Track and Signal Capital) to extend all three tracks to 9,000'. This project enabled handling of crude oil trains from three different class 1 railroads.
- *$4.1M Track Construction Project, East St. Louis, IL.* Responsible for planning, executing within cost track extension of "third rail" yard lead by 6,000' feet in East St. Louis, IL. As this location was an active superfund site (Alcoa Steel Works), this project required continuous coordination with the United States Environmental Protection Agency and numerous track and environmental contractors for safe compliance.

Various Projects, Central Engineering, UPRR, Omaha, NE

As Director Track Maintenance Rail, Dan was directly responsible for strategic Capital rail replacement strategy, fleet management for 35 UP-Owned Ultrasonic Detector Cars, out of face rail grinding operations, and rail lubrication for the entire Union Pacific Track Network. Coordinated with all three Regions in managing the New Rail, Second Hand, and Curve Rail capital projects. Served on the UPRR's "Go-Team" for derailment investigations, cause-finding, and prevention. Interacted with VP Engineering on Strategic Rail initiatives, DC Testing strategy, and Capital allocations.

Various Projects, Alton & Southern Railway (fully-owned subsidiary of UPRR)

As Director Track Maintenance Rail, Dan was directly responsible for track, signal & bridge/building maintenance and Capital project planning and execution at the A&S Gateway Hump yard (East St. Louis, IL) consisting of 72 Bowl tracks and 23 miles of Main Line track. Supervised 23 track, 26 signal, and three B&B employees.

Various Track Projects (Denver Service Unit), UPRR, Denver, CO

As manager, Dan was responsible for detailing, planning, and executing within budget a $125 million capital project plan between 2011 and 2012. The largest geographic service unit within Union Pacific, the Denver Service Unit spanned between Topeka, KS, and Mounds, UT, and from Walsenburg, CO to Cheyenne, WY to Granger, WY.

Mountain (Moffat Tunnel Route), UPRR, Denver, CO

As roadmaster, Dan was in charge of all the track inspection and maintenance activities from Denver, CO to Winter Park, CO on the UPRR Moffat Tunnel subdivision. This route is one of the most challenging on the UPRR network consisting of 56 miles of back to back curves up to 12 degrees through 2% grade and 17 tunnels including the 6.3-mile Moffat tunnel. Maintenance to the highest standards to prevent speed restrictions and service outages was critical.

DANIELLE LIBRING, PE, TE ▪ PLATFORM DESIGN LEAD

RAILPROS

EDUCATION

BS, Civil Engineering, California Polytechnic University, Pomona

REGISTRATIONS

Registered Civil Engineer - California No. C82012
Registered Traffic Engineer - California No. 2784

PROFESSIONAL AFFILIATIONS

NCEES Record 56585 Operation Lifesaver Volunteer

SUMMARY OF QUALIFICATIONS

Ms. Libring is a registered civil and traffic engineer with over ten years of experience in program and project management; rail design; stations; traffic engineering and analysis; grade crossings; construction management; quiet zone design and implementation; preemption calculations; and interconnection. Her expertise encompasses railroad stations trackwork; traffic signals; traffic analysis; signing and striping; drainage; civil improvements; traffic control; grade crossings; station customer information and security systems; and street improvements with SBCTA, SCRRA, UPRR, BNSF, SANDAG, LACMTA, NCTD, and OCTA. Her participation in various rail, transit, and traffic engineering projects in California and across the Unites States expands her knowledge and experience in the rail and traffic engineering industry. Ms. Libring has a high attention to detail, uses in-house tools for tracking cost/schedule/quality, is highly responsive in meeting project deliverables, and an excellent player. She is also an Operation Lifesaver Authorized Volunteer, providing crossing safety throughout the community and region.

PROJECT EXPERIENCE

Van Nuys North Platform Project, Southern California Regional Rail Authority (SCRRA/Metrolink)/Amtrak/Union Pacific Railroad (UPRR), Los Angeles, CA

As Project Manager, Danielle is overseeing the final design of this $35 million station project delivered under LACMTA's Regional Rail team. A new center platform with grade-separated pedestrian access provides operational flexibility as trains on both of the main tracks will simultaneously utilize the station. This station is served by multiple passenger lines, including Metrolink and Amtrak where UPRR has a major stake in this project as a key freight operator over this line and owns the northern right- of-way. Other stakeholders include the owners of the station building; platform; adjacent spur and parking lot including: Caltrans, Los Angeles Department of Transportation (LADOT), and the Los Angeles Department of Water & Power (LADWP). Project challenges to overcome include avoiding costly adjacent Van Nuys Blvd. underpass improvements; meeting Federal Railroad Administration (FRA) level boarding requirements as UPRR has operating rights over all tracks; avoiding impacts to a major fiber booster station; eliminating costly fiber splicing; avoid impacts to a major 24' box culvert; and coordination with more than 30 stakeholders and third parties. Danielle is responsible for personally managing the project because she was able to reduce and/or eliminate these key risks and constraints. Through her custom risk management plan this was a proven success on this project saving more than $35 million in bridge retrofit and fiber splicing, while simultaneously obtaining stake-holder approval. Danielle was responsible for taking the design from 5% to Bid level Ready within 21 months on this large project and was able to deliver this by 18 months, which saved three months off the schedule and allowed for Metro to make the California Transportation Commission construction funding allocation deadline.

Vista Canyon Multi-Modal Center, City of Santa Clarita/SCRRA, Santa Clarita, CA

As Project Manager for the Development of the Vista Canyon Multi-Modal Transit Center (Rail Station) Project by the City of Santa Clarita, in partnership with the Los Angeles County Metropolitan Transportation Authority (LACMTA) and Vista Canyon Ranch, LLC, Danielle will develop a new Metrolink passenger rail station for a grade-separated center platform including all amenities which will require major track and signal improvements. RailPros is responsible for managing the project and specifically designing these components: track; signal; structural; customer information system; video surveillance system; and construction phasing. Located within the eastern Santa Clarita Valley, the installation of the Transit Center may involve the relocation of the existing Via Princessa Metrolink Station to the Vista Canyon development. The Transit Center will serve as a regional hub for numerous modes of transportation, including commuter rail, local and commuter bus transit, and bicycle and pedestrian trails in the Santa Clarita

Valley. Danielle is successfully delivering this project both on-time and on-budget and was able to innovate a key design modification to avoid approximately $5 million in fiber relocation costs.

13th Street At-Grade Crossing Improvements/Dockweiler Road Extension, City of Santa Clarita, CA
On the City's behalf, Danielle is managing the SCRRA (Metrolink) at-grade crossing improvements for this roadway widening and connection to an existing roadway (Dockweiler Dr) on the other side of town with the purpose to improve circulation and access in this community and in connection with the City's General Plan would provide a through connection from Sierra Highway to Railroad Avenue. Danielle is responsible for building stakeholder consensus, the grade crossing design, as well as developing the General Order 88B documents for CPUC review and approval. Danielle is overseeing the at-grade improvements, including an interconnected traffic signal with the railroad signal (pre-signal), signing updates, striping modifications, and developing advanced preemption calculations in conformance with both CA MUTCD, SCRRA, and AREMA standards.

Foothill Gold Line Extension Phase 2B: Glendora to Montclair, Gold Line/ Los Angeles County Metropolitan Transportation Authority (LACMTA)/SCRRA/BNSF Railway, Los Angeles/San Bernardino Counties, CA
Supporting SCRRA as staff augmentation, Danielle is overseeing project coordination with SCRRA on this $1.5 billion Design-Build project. The 12.3 mile LRT extension modifies Metrolink tracks in order to accommodate the extension of Metro's Gold Line from Glendora to Montclair. The project will add LRT stations in each of the six cities of Glendora, San Dimas, La Verne, Pomona, Claremont, and Montclair, and modify Metrolink Stations at Pomona, Claremont, and Montclair. The project consists of 28+ at-grade vehicle crossings, 14+ pedestrian crossings (at-grade or grade-separated), and 14+ other grade separations. Gold Line Construction Authority has established a schedule to open in revenue service in approximately late 2026. The project follows the alignment of the existing Metrolink Pasadena Subdivision then merges onto Metrolink's San Gabriel Subdivision as it approaches Montclair. Danielle is responsible for supporting design reviews, CPUC application reviews, PTC coordination, agreements support, performance specification input, requests for special design consideration reviews, CPUC applications, and any elements that affect SCRRA on this project. The project proposes a unique shared corridor between Metro and Metrolink, which will be the first of its kind, with these agencies sharing up to five critical at-grade crossings on more than four heavily utilized tracks.

Gold Line Eastside Transit Corridor Phase 2 Extension, LACMTA, Los Angeles County, CA
Metro is further studying the three LRT alternatives in a revised/supplemental Draft EIS/EIR. This phase includes additional environmental analysis and coordination with third party agencies, engineering analysis and refinements, and continued outreach to key stakeholders and communities. Supporting Metro on this, Danielle is managing the SR 60 NSDV Alternative At-Grade Segment Design Study on this ultimately $6 billion Measure M project through five to seven cities.

Via Princessa Park Access Study Project, City of Santa Clarita, CA
As Deputy Project Manager for the feasibility of grade-separated access to a future park on the opposing side of the Via Princessa Metrolink station, Danielle oversaw the feasibility analysis and conceptual design of various overcrossing and undercrossing alternatives. RailPros successfully delivered this study on time and on schedule to the client and client was very happy with the product RailPros provided. RailPros provided a number of innovative suggestions, options, and cost saving solutions for the City to consider further in the next phase of project including the structure type, structure location, and connectivity to existing station. RailPros is responsible for managing the project and specifically designing the conceptual structures, civil, drainage, parking lot layout modifications, and conceptual renderings.

California High Speed Rail, BNSF Railway, Fresno, CA (CP1-4)
As a construction field engineer, Danielle oversaw many pre-cast concrete girder sets at several highway-rail grade separations in connection with high speed rail including Avenue 12 over BNSF and Avenue 27 over BNSF. This encompassed reviewing the superstructure workplan and enforcing it on site during the girder erection. Danielle's role was to protect the BNSF railway during the girder erection work windows and overseeing the contractor's work. This included inspecting the rigging/shackles/slings/girders/cranes, inspecting the girder bracing, verifying all rigging against the approved plans and calculations, verifying contractor certifications, and protecting the safety of the personnel and railroad.

Burbank Airport North Station – Hollywood Way Project, SCRRA, Los Angeles, CA
As Project Manager, Danielle oversaw the final design and design support during construction of the station communications delivered under LACMTA's Regional Rail Team. The station communications design includes fiber backbone and MPLS connections, Customer Information System, a Video Surveillance System, and Communications Shelter. The design of these station components requires close coordination and interdisciplinary checks with the electrical team and site layouts for a seamless design without gaps or overlaps.

KAREN HANKINSON, PE, TE ▪ TRAFFIC LEAD

RAILPROS

EDUCATION

BS, Civil Engineering, California State University, Fullerton

REGISTRATIONS

Registered Civil Engineer - California No. C54175
Registered Traffic Engineer - California No. TR1864
Registered Civil Engineer - Arizona No. 57428
Registered Civil Engineer - Colorado No. 48707
Registered Civil Engineer - Illinois No. 62.066212
Registered Civil Engineer - Iowa No. 22973
Registered Civil Engineer - Louisiana No. 38729
Registered Civil Engineer - Maryland No. 05-52104
Registered Civil Engineer - Minnesota No. 55683
Registered Civil Engineer - Nebraska No. E-15685
Registered Civil Engineer - Nevada No. 23185
Registered Civil Engineer - New York No. 96157
Registered Civil Engineer - Ohio No. 83064
Registered Civil Engineer - Oregon No. 88943PE
Registered Civil Engineer - Texas No. 116680
Registered Civil Engineer - Utah No. 8927936-2202
Registered Civil Engineer - Washington No. 51745
Registered Civil Engineer - New Mexico No. 24603
Registered Civil Engineer - New Hampshire No.15332
Registered Civil Engineer - Oklahoma No. 31117

PROFESSIONAL AFFILIATIONS

NCEES Record No. 55544
Member, ASCE
Member, ITE

- ITE Grade Crossing Committee
- ITE Railroad Committee Task Force for the Recommended Practice for Traffic Signal Preemption

Member, WTS
Operation Lifesaver Volunteer
Member, NCUTCD

SUMMARY OF QUALIFICATIONS

Ms. Karen Hankinson is a Registered Civil Engineer in over 12 states nationwide and a registered Traffic Engineer in California. Karen leads RailPros' Traffic Engineering group, managing a wide variety of grade crossing related projects in multiple states. Current projects include reviewing interconnected grade crossings for Union Pacific Railroad (UPRR) and BNSF Railway, lead consultant to UPRR's Crossing Assessment Program systemwide, supporting SCRRA (Metrolink) in the shared corridor technical review of Metro's Gold Line Extension Project, and the City of Santa Paula's East Area One Project. Recently completed projects include updating the Colorado Department of Transportation's Railroad Manual, developing Utah Department of Transportation's Statewide Railroad Preemption Standards, and designing the State of Colorado's first two queue cutter traffic signals. Karen is also involved in providing grade crossing traffic engineering training to UPRR. Other current projects include the new Park Boulevard Grade Crossing in Downtown San Diego, City of Fremont Quiet Zone, Shaffer Road Section 130 Project in Merced County, Atlantic Boulevard Grade Crossings in Vernon, and the ACE Pomona Grade Crossing Enhancement Project. Major completed projects include the Orange County Grade Crossings Safety Enhancement project, which included designing and providing construction support for queue cutter and presignals at 20 grade crossings countywide, as well as the San Diego Quiet Zone Project which included design and construction support for traffic engineering improvements at 12 grade crossings. Karen also serves on the National Committee of Uniform Traffic Control Devices and the ITE Grade Crossing Committee. Karen was a featured speaker on updated Preemption of Traffic Signals Near Railroad Crossings Recommended Practice Guidelines at the ITE National Conference in Toronto in August 2017, as well as a speaker at the League of Railway Women Conference in September 2018 on Public Agency Partnering Opportunities at Grade Crossings.

PROJECT EXPERIENCE

Interconnected Grade Crossing Reviews, Union Pacific Railroad (UPRR), 23 U.S. States

Karen is currently serving as Project Manager on an interconnected grade crossings contract with UPRR, reviewing agency requests for interconnection, studying crossings for closure feasibility, and reviewing existing UPRR grade crossings. RailPros is one of two firms providing these services to UPRR in their 23-state territory.

Interconnected Grade Crossing Reviews, BNSF Railway, 22 U.S. States

Karen is currently serving as Project Manager on an interconnected grade crossings contract with BNSF, reviewing agency requests for interconnection, studying crossings for closure feasibility, and reviewing existing BNSF grade crossings. RailPros is one of three firms providing these services to BNSF in their 22-state territory.

Orange County Grade Crossings Safety Enhancement Project, Southern California Regional Rail Authority (SCRRA/ Metrolink), Orange County, CA

In charge of analyzing existing traffic conditions and designing traffic signals at 20 roadway intersections at or near at-grade crossings. This includes pre-signals, queue-cutter signals, traffic signal modifications, and the implementation of advanced preemption. Karen was also involved in the SCRRA preemption standards for interconnected grade crossings, offering her expertise as part of a collaborative team effort. Karen also provided design support during construction, working with the construction team, coordinating with City Staff, contractors, SCRRA, and OCTA in the implementation of RailPros' design.

Downtown San Diego Quiet Zone Grade Crossing Improvement Project, Centre City Development Corporation (CCDC), San Diego, CA

Karen was the Lead Traffic Engineer, serving CCDC, Karen was responsible for the field analysis of existing traffic conditions and design of all necessary traffic improvements (including pre-signals and queue-cutter signals) at 12 grade crossing locations in downtown San Diego. Her project design work also included signing and striping improvements and traffic control plans for vehicular and pedestrian traffic. Karen also provided design support during construction.

Buena Vista Grade Separation, SCRRA, Burbank, CA

Responsible for designing the traffic control plans, final signing and striping plans, as well as final and interim interconnected signal plans for the relocation of the Buena Vista Grade Crossing in the City of Burbank. The interconnected signal design incorporated advance railroad preemption and transition and limited service signal operations in order to safely control pedestrians and vehicles during construction. Working closely with the City and the entire project team, Karen developed traffic control plans to maximize vehicular traffic capacity while providing safe vehicular and pedestrian crossings of the temporary track alignment while the new railroad overcrossing was built. A traffic management plan was also prepared to help the City minimize the impacts to motorists and increase public awareness of rail safety during the construction period. Karen is currently providing design support during construction.

Park Boulevard Crossing, CCDC/Civic San Diego, San Diego, CA

Karen is designing traffic signal improvements (including a pre-signal), signing and striping improvements, pedestrian crossing, and traffic control for this grade crossing in downtown San Diego adjacent to PETCO Park. The project is being designed in conjunction with the pedestrian overpass recently constructed south of the grade crossing to encourage pedestrians away from the grade crossing. Both pedestrians and bicyclist features are being incorporated into the design. The railroad tracks are used daily by the trolley and freight trains. This new grade crossing project involves extensive coordination with BNSF, MTS, NCTD, FRA and CPUC as well as the city, and other design consultants.

Interconnected Grade Crossing Standards Development and Training Experience

RailPros is a recognized industry leader in the field of interconnected grade crossings. We have worked on a variety of interconnected grade crossing projects and understand the needs and constraints of both the highway and rail agencies. Karen had an integral role in standards development and training for the following public and private entities:

- *UPRR:* Since 2013, RailPros has conducted training seminars for Union Pacific Railroad (UPRR) to educate employees on interconnected grade crossings and traffic engineering guidelines.
- *California Public Utilities Commission (CPUC - California's crossing regulation agency):* In early 2014, CPUC met with RailPros to discuss RailPros preemption experience and insight to consider as part of CPUCs new standards development on preemption. Karen continues to coordinate with them on interconnection standards development.
- *National Committee on Uniform Traffic Control Devices (NCUTCD)*: Since 2013, RailPros provided review comments through the Institute of Traffic Engineers to the proposed NCUTCD changes regarding rail crossing standards. Karen has attended multiple NCUTCD committee conferences, provided design-experienced discussion for consideration, and currently serves as a member of the Rail and Light Rail Committee.

LUIS FLORES, PE ▪ CIVIL ENGINEERING LEAD

RAILPROS

EDUCATION

BS, Civil Engineering, California State University, Long Beach

REGISTRATIONS

Registered Civil Engineer - California No. C62146
Registered Civil Engineer - Florida No. 81709

PROFESSIONAL AFFILIATIONS

Member, ASCE

SUMMARY OF QUALIFICATIONS

Mr. Luis Flores has over 25 years of increasing technical and managerial responsibility as a Lead Civil Engineer, Project Engineer, Deputy Resident Engineer, and Project Manager for the design and construction of civil infrastructure for major private and governmental clients. Luis' expertise in civil engineering includes projects for multi-modal transportation facilities, roadways and highways, transportation management centers, ports, airports, and military facilities. Luis has experience designing and managing the construction of site improvements, utilities, grading, drainage, parking, pedestrian and bicycle facilities, storm drains, curb and gutter, sewer and water lines, and retaining walls.

PROJECT EXPERIENCE

At-Grade Crossing Safety Improvements, San Gabriel Valley Council of Governments (SGVCOG), Pomona, CA

Lead Civil Engineer for the improvement of vehicular and pedestrian safety at five existing at-grade rail crossings in the City of Pomona, CA. The purpose of this project was to enhance existing conditions and provide new features to improve control and safety of vehicles and pedestrians crossing the rail road. Project features included enhanced quad gates and signalization, gates designed to control pedestrians, fencing designed to channel pedestrians to controlled crossing locations, signage, striping and pavement markings, signalization improvements for both the roadways and rail, and required street improvements including sidewalk, curb and gutter, and associated utility modifications or relocations and drainage improvements. A special feature and challenge of the project was to design improvements to assure all crossings fully complied with the Americans with Disabilities Act (ADA). Existing conditions were not compliant with ADA and unique solutions at each crossing was provided. All work was performed according to San Gabriel Valley Council of Governments (SGVCOG), the City of Pomona, and Union Pacific Railroad (UPRR) requirements.

CHSRA Plan and Spec Review, BNSF Railway, Fresno to Bakersfield, CA

Lead civil reviewer for BNSF responsible for reviewing grade separation structures, intrusion barriers and adjacent California High Speed Rail Authority (CHSRA) facilities and providing comments. This contract covers CHSRA contract packages 1 and 2 & 3 which are two segments from Fresno to Bakersfield, California.

Golden Glades Multi-modal Transportation Facility (GGMTF), Miami, FL

Lead Civil Engineer for the site development of a new multi-modal transportation facility in Miami-Dade County, Florida. The project consisted of a new park-and-ride transit facility at the Golden Glades Interchange referred to as the Golden Glades Multi-modal Transit Facility (GGMTF). The proposed GGMTF included the construction of a parking garage structure with adjacent transit and inter-city bus bays and platforms, a covered 4,500 square foot Transit Hub, kiss & ride areas for passenger pick-ups and drop-offs, a taxi staging area, at-grade parking, pedestrian and bicycle facilities, utility services, and roadways. The project occupied a footprint of approximately 16 acres. Main tasks included the development of a conceptual site layout and the subsequent design of the facility including grading & drainage, striping & signing, sewer & water and fire protection systems.

LAX Midfield Satellite Concourse (MSC) Program – FAA Remote Transmitter Receiver (RTR) Relocation Project, Los Angeles International Airport (LAX), CA

Task Leader for the RTR relocation project. Delivered construction documentation on time meeting a very compressed project schedule while satisfying FAA standards and requirements. This project was part of a series of enabling improvements allowing for a new terminal construction and time was of the essence. The objective for the project was to relocate the existing FAA radio/remote transmitter receiver (RTR) to the most viable location in order to clear the area for the new improvements. The new RTR facility included a shelter building to house FAA radio

equipment, four free standing antenna towers, communication duct banks, jack & boring of communication conduits under a public highway, fencing, paving and electrical infrastructure required to provide a turnkey facility to the FAA. As the Task Leader working for Los Angeles World Airports (LAWA), managed the project team; including architectural, mechanical, electrical, structural and civil disciplines. Additionally, interfaced with all the stakeholder agencies to comply with their permitting requirements.

Salinas Valley Memorial Hospital - New Energy Center, Salinas, CA

Civil Design Lead. Delivered on time and budget construction plans for new $30 million energy center and services infrastructure tunnel to serve the hospital redevelopment. Challenges included establishing a design brief, coordinating with a separate design team undertaking the main hospital works, and liaison with statutory authorities to achieve design approval and managing the construction. AECOM was the general contractor for this project.

Los Angeles Regional Transportation Management Center, Department of Transportation and California Highway Patrol, Los Angeles, CA

Construction Support Lead of a 90,000-square-foot Transportation Management Center. Provided technical support during construction by monitoring compliance to the design, answering RFIs from the contractor and reviewing and advising client regarding contractor change orders. The Center is an essential facility designed to withstand a significant earthquake and remain functional. Civil work included, demolition, excavation, grading, 229 car parking lot, 700 linear feet of access roadway, 1,600 linear feet of onsite retaining walls, sub-grade drainage system, 2,200 linear feet of chain link and ornamental fencing, 1,200 linear feet of storm drain piping, 1,700 linear feet of onsite water distribution piping, 2,000 linear feet of offsite water supply line, 300 linear feet of sanitary sewer piping, 400 linear feet of natural gas piping and landscaping.

Riverside County, Hub Jail, Riverside, CA

Design Manager responsible for leading an eight member civil team tasked with the design of a new jail facility to house 7,000 inmates. Delivered detail design for the new jail facility which was a "greenfield" project that occupied an area of 150 acres. A self-sufficient (island concept) facility, requiring its own power plant, water wells, water treatment facility, water storage facilities and sewage treatment plant. The civil design included all infrastructure necessary to support the new jail and related facilities such as on-site/off-site streets, security fencing, fire protection, storm drainage, detention basins, water & sewer systems, storm water quality mitigation, grading, etc.

Inland Empire Management Center (ITMC), Fontana, CA

Lead Engineer managing the civil work including on-site and off-site improvements to support the new 50,000 SF Traffic Management Center for the State of California. Designs were delivered on time, scope and budget and successfully constructed. On-site work included the development of plans to accommodate the Police and CALTRANS vehicles. Off-site work included the construction of new storm drains, sewer lines, and water lines to bring services to the building site.

Various Land Development Projects

Lead Civil Engineer responsible for delivering plans, specifications and estimates for all site and public right-of-way work associated with private Land Development and local Public Works projects. Successfully led the design of a wide array of civil projects while acquiring a strong and broad technical base. Civil Engineering services included:

- Project Due Diligence
- Topographic Surveys
- Parcel and Tract Maps
- American Land Title Association (ALTA) Surveys
- Grading Plans
- Hydrology and Hydraulic Studies
- Storm Drain Improvement Plans
- Water and Sewer Improvement Plans
- Street Improvement Plans
- Earthwork Calculations
- Permit/Plancheck Processing
- Construction Support

NATHAN ORTEGA, PE ▪ TRACK ENGINEERING LEAD

RAILPROS

EDUCATION

BS, Civil Engineering, University of Arizona

REGISTRATIONS

Registered Civil Engineer - California No. C69534
Registered Civil Engineer - Arizona No. 48275
Registered Civil Engineer - Florida No. 75700
Registered Civil Engineer - Alabama No. 33525
Registered Civil Engineer - Georgia No. PE037932
Registered Civil Engineer - West Virginia No. 20220
Registered Civil Engineer - Tennessee No. 116803
Registered Civil Engineer - North Carolina No. 040473
Registered Civil Engineer - South Carolina No. 32214
Registered Civil Engineer - Pennsylvania No. PE083307
Registered Civil Engineer - Virginia No. 0402055036
Registered Civil Engineer - New York No. 092930
Registered Civil Engineer - Oregon No. 88068PE
Registered Civil Engineer - Washington No. 48566

PROFESSIONAL AFFILIATIONS

Member, AREMA

SUMMARY OF QUALIFICATIONS

Nathan Ortega is a Registered Civil Engineer in 14 states. Nathan leads RailPros' Rail Engineering group and has managed design and construction of a wide variety of rail related programs and projects in multiple states. Projects include commuter and freight rail projects across the country for Metrolink, MTS, Sunrail, SFRTA, CSX Transportation, Union Pacific Railroad, and BNSF Railway. Recently completed projects include completion of the 18-mile design-build Sunrail South Phase 2, 12-mile CSX double track design in North Carolina, and 6-mile CSX double track design in Alabama.

With over 17 years of construction, design, and management experience in primarily Commuter and Freight Rail, Land Development, Commercial and Roadway projects, Nathan has extensive knowledge and skilled experience in Microstation™ and RailTrack™ design software, with a keen understanding of how design translates to construction. Nathan has managed and designed projects and programs that include both horizontal and vertical alignments for mainline, siding, and yard tracks; roadway design; culverts; grading; at-grade crossings; grade separations; sewer, water, and storm drain plans; hydrology and hydraulic analysis; and storage and intermodal facilities for Class 1 railroads, Commuter Rail, and Light Rail/Transit clients, as well as for various Departments of Transportation and municipalities. Additionally, Nathan is well-versed in leveraging design software to create existing surfaces using provided survey and grading data, utilizing Roadway Modeler through RailTrack Design.

PROJECT EXPERIENCE

Van Nuys North Platform Project, Los Angeles County Metropolitan Transportation Authority (LACMTA), Los Angeles, CA
Nathan is currently the Rail Director of the final design of this $35 million station project delivered under Los Angeles County Metropolitan Transportation Authority's Regional Rail team. A new center platform with grade-separated pedestrian access will provide operational flexibility as trains on both of the main tracks will be able to simultaneously utilize the station. This station is served by multiple passenger lines including Metrolink, Amtrak-Coast Starlight and Amtrak-Pacific Surfliner. Project challenges to overcome include avoiding costly improvements to the adjacent Van Nuys Boulevard underpass, meeting FRA level boarding requirements as Union Pacific Railroad has operating rights over all tracks, avoiding impacts to a major fiber booster station, eliminating costly fiber splicing and coordination with more than 30 stakeholders and third parties. Nathan is leading the design effort, rail team management and assists with cost and schedule performance. He personally leads the development of the rail design that has helped eliminate both the widening and seismic retrofit of the adjacent Van Nuys Boulevard underpass as well as impacts to the fiber optic booster station, saving the project $20 million.

Redlands Passenger Rail Project Program Management, San Bernardino County Transportation Authority (SBCTA), Redlands, CA

Program Manager. RailPros is currently the Program Management Consultant for the design, construction and implementation of the planned 9-mile long passenger rail service to be operated on the Redlands Subdivision between the San Bernardino Transit Center at Rialto Avenue and E Street to the University of Redlands. Nathan's duties include implementation and oversight of consultant scope and deliverables, overall project development schedule, identification of risk to the project and agency, agency document control, monitoring and reporting of cost, invoice and independent cost estimation, contract change management, RFP preparation and issuance, collocated office support, staff assistance, management of several consultants (environmental, engineering, construction management, site designers), full design review and management. The project is rehabilitating or replacing track, bridges, 27 at-grade highway-rail crossings, and related existing infrastructure; building a new wayside signal and communications system that includes positive train control (PTC); and five passenger loading platforms; procuring fare collection systems, rehabilitation of a maintenance facility; and procuring passenger train sets. Nathan leads the team in providing support of management and oversight of the project development, third-party agreements, engineering, and construction management. He is working with BNSF, Metrolink, SBCFCD, local cities, and utilities on right-of-way agreements, and with FRA and SBCTA in execution of cooperative agreements, ROE permits, and C&M agreements.

Los Angeles to Fullerton California High Speed Rail Improvements, BNSF Railway, Los Angeles, CA

Design Manager, Assistant Project Manager. RailPros is currently a design Consultant for the design, construction and implementation of the planned 33-mile long shared use freight and passenger rail service with multiple operators between Los Angeles and Yorba Linda, California. Nathan's duties include implementation and oversight of our engineering design consultant scope and deliverables. The project consists of major redesign and phasing of all existing rail tracks within the corridor to accommodate increase freight and passenger service. The project purpose is to accommodate and maintain BNSF operations through their owned corridor while phasing and planning for ultimate build out to eliminate continuation of operational impacts while meeting the needs of California High Speed Rail Authority, Amtrak, and SCRRA (Metrolink). In addition to the specialized phasing and stakeholder coordination typical engineering tasks that Nathan is leading include; rail alignment design, track roadbed grading, utility coordination, grade separations, at-grade crossing improvements, drainage, structural coordination, phasing plans, engineering plan production, quality assurance and quality control management, and railroad signal layout.

Sunrail Phase 2 South – Design-Build Engineering Services, Sunrail, Orlando, FL

Rail Engineer of Record. The Sunrail Phase 2 South Project is a recently completed design-build project located in Orlando, Florida. This project covers 18 miles and includes a combination of building a second mainline and upgrading an existing track to mainline in order to allow the existing freight corridor to be utilized for commuter rail.

After receiving the 30% contract documents from the owner, Nathan was instrumental in completing the 100% ready for construction plans, specifications, and estimates; obtaining approval of project specific shop drawings and material submittals; and proceeding to construction. Once approval of the ready for construction plans was achieved with the Joint Venture construction team – including Middlesex and Herzog – Nathan provided the details of the required field survey data requested field survey and the project plans were reviewed and confirmed. Prior to and during construction, Nathan and his team provided continuous back check of existing conditions and proposed construction. Improvements and revision of the project plans were continuously refined and adjusted to meet the project's needs and purpose. The team successfully finished the project on schedule and below budget.

CSX - General Engineering Consultant Services, CSX Transportation, Jacksonville, FL

Nathan served as Program Manager for over 40 capacity improvement projects while providing General Engineering Consultant Services for CSX. These projects ranged in size from set out tracks to 12-mile double track projects. Nathan's involvement included all aspects of railroad engineering, railroad coordination, structural design, and civil engineering. Tasks included coordination with clients and agencies while managing design teams in the efficient preparation of various project plans including railway, roadway, utility, grading, and drainage designs, in support of the Project Management team.

RENAY ROBISON ▪ UPRR RIGHT-OF-WAY SPECIALIST

RAILPROS

EDUCATION

The University of Nebraska, BS in Political Science
John F. Kennedy School of Government, Harvard University- Leadership for the 21st Century

CERTIFICATIONS / PROFESSIONAL DEVELOPMENT

National Development Council, 1999- Certified Economic Development Finance Professional

Economic Development Institute, University of Oklahoma, 1995

SUMMARY OF QUALIFICATIONS

Renay has been involved in real estate and economic development for over 25 years. She has in-depth knowledge of railroads, having worked for one of the largest railroad companies in the nation. She has extensive knowledge and experience in pursuing federal, state, and local funding for economic development activities, including the funding of a three-mile railroad extension in Davenport, Iowa. She provides leadership, management, and advanced sales expertise in all areas of her work.

PROJECT EXPERIENCE

Assistant Vice President, Real Estate and Development, RailPros (2018 - Present)
Renay works to develop and oversee RailPros' real estate and development services in the national railroad market including application and occupancy permitting process; contract preparation and management; rental management; acquisition and property sales oversight; negotiations and fair market value pricing of railroad real estate; proposal writing; grant administration; and planning facilitation.

Union Pacific Railroad, Omaha, NE (2008 - 2018)
North America's premier railroad franchise, covering 23 states in the western two-thirds of the United States.

Director/Assistant Director – Real Estate
In this position, Renay:

- Provided leadership to real estate contract managers for negotiation and preparation of contracts with utilities, public and private entities, and individuals who wished to access or occupy the Railroad's property
- Advised or represented Contracts Group in negotiations with public and private utilities in contract revisions and disputes, complex projects and litigation
- Developed internal and external systems and procedures to ensure licensee and lessees where compliant with Railroad's engineering and safety standards
- Managed annual rent collection, rental redeterminations and rental dispute resolutions
- Supported Government Affairs by providing written responses and oral testimony on pending legislation that affected the Railroad's real estate interests

Manager – Real Estate (May 2008 - July 2010)
As manager of real estate, Renay:

- Marketed and sold Union Pacific surplus real estate
- Established relationships with developers, realtors, adjacent property owners and other potential buyers
- Conducted market research, reviewed comparable sales, appraised and set property value
- Structured and negotiated sales contracts
- Prepared letters of understanding, purchase and sales agreements, and deed documents
- Oversaw internal and external sales closing processes

Davenportone, Davenport, IA (2005 - 2008)
$2.8 million chamber of commerce and economic development organization with over 1,200 member businesses.

Senior Vice President, Economic Development:

- Provided leadership for DavenportOne economic development initiatives and directed efforts to improve the city's competitive advantages for business development

Executive Director, Greater Davenport Redevelopment Corporation

- Managed all aspects of the Eastern Iowa Industrial Center, a 300-acre industrial park
- Conducted in-depth research on trends and target industry analysis to develop new marketing plan, pricing strategies and administrative policies
- Oversaw the replatting and infrastructure development on new rail served lots and 3-mile rail right of way acquisition process and public meetings
- Secured grant and legislative earmark proposals to local, state, and federal agencies and private foundations for funding of a three-mile railroad extension from Eldridge, Iowa to the EIIC
- Represented the GDRC in all property sales and lease negotiations
- Prepared property comparable research and in-house appraisal for board of directors
- In just 18 months, had recruited and sold more parcels than had been sold in the previous ten years combined

Executive Vice President, NewVentures Initiative

- Managed the NewVentures Center, an 18,000 sq ft, $4 million technology accelerator and business incubator
- Rewrote standard lease agreement and set lease rates and structure
- Within six months as EVP, increased the number of clients by 200%, achieved 93% occupancy, and reduced the operational cost per job created from $87,000 to $17,000

Northeast Nebraska Economic Development District, Norfolk, NE (1992 - 2005)
85-community member economic development organization.

Executive Director

- Oversaw creation of business, economic and housing development initiatives for the Northeast Nebraska Economic Development District (NENEDD), a 16-county region with 85 units of local government
- Prepared and oversaw operating and annual program budget of $1.8 million while managing a staff of 14
- Provided leadership and support for recruitment of business and industry to northeast Nebraska
- Packaged and structured local and state incentives for business, creating 2,500 FTEs
- Oversaw the preparation of grant applications, resulting in $80 million in grants for its members
- Created a $5.5 million business revolving loan fund

Executive Director – Northeast Economic Development, Inc. (CDFI)

- A nonprofit affiliate of the NENEDD
- Oversaw annual operating budget of $2.1 million and four staff
- Developed and implemented $2.5 million housing rehabilitation and down payment assistance loan programs for low income families in a 19-county region in northeast Nebraska

High Point Ventures, LLC, Omaha, NE (1998 – Present)
Co-owner in a residential real estate development company.

- Developed a residential subdivision
- Acquired residential properties in Nebraska and Arizona for lease
- Oversaw construction renovation of rental properties

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KING CITY MULTIMODAL TRANSPORTATION CORRIDOR – TEMPORARY RAILROAD PLATFORM PROJECT PROFESSIONAL ENGINEERING SERVICES

SCOPE OF WORK

Overview, Background and Basis of Design

RailPros has previously provided conceptual engineering services to develop railroad, platform and grade crossing exhibits as part of a larger overall Multimodal Transportation Center for King City. King City is now requesting engineering, coordination and professional support services to assist with advancing design and stakeholder reviews of select portions of the project described as the King City Multimodal Transportation Corridor – Temporary Railroad Platform Project (Project). The Project does not include full development of the Multimodal Transportation Center at this time, but includes certain minimal elements identified by the City, County and State agencies in anticipation of providing a new station stop for Amtrak's existing Coast Starlight long-distance service in King City. The Project scope of work includes the following basic elements:

- Project Management, Stakeholder Coordination and Meetings
- Data Collection, Site Inspection and Survey
- Geotechnical Investigation and Reporting
- Design of a new "Temporary" Amtrak Platform on existing UPRR Property with basic required access, amenities and conduit runs for future communications infrastructure needs
- Design of new temporary parking area on existing warehouse storage yard property adjacent to UPRR Property, including minimal demolition, paving for ADA access and protection of existing lighting.
- Design of railroad track alignment modifications to mainline and siding track for service to new platform, replacement/extension of existing siding length north of town and associated railroad elements.
- Roadway Design including, closure of Pearl Street, development of new Broadway Street At-Grade Crossing, temporary roadway extension of Jayne Street with connection to Broadway Street.
- UPRR ROW Coordination and Support, including assistance in preparing/updating, reviewing and coordinating plans, agreements, easements, permits and licenses with UPRR
- CPUC Coordination and Formal Application development and support

The Project scope of work is outlined below in Tasks for simplicity in describing the anticipated general phases and deliverable submittal intervals. This also allows flexibility for the City in authorizing and managing or adjusting the task scopes based on actual project requirements as they develop.

Task 1 Preliminary Engineering 30% Submittal

The purpose of this Task is to study and develop the design of key features and identify key impacts at the preliminary engineering level. The specific scope of work for Task 1 will include the anticipated elements outlined below.

<u>Project Management and Coordination</u>

This effort includes ongoing regular management, progress reporting, Project meetings, internal and subconsultant coordination, stakeholder coordination for approximately 6.5 months.

Anticipated Task 1 meetings include:

- Kick-off meeting
- Monthly PDT Meetings, up to 1 in King City up to 5 via Conference/Video Call
- Up to 1 stakeholder Diagnostic/Workshops in King City
- Regular ongoing coordination and conference calls as needed

Data Collection, Site work, Studies and Reporting

Upon NTP we will schedule a project Kick-off meeting with the City to review project goals, requirements, documents and other Project information. We will use this time to begin our site investigation for the project. The data collection and site evaluation will establish the base for moving the project forward. We anticipate the following elements as part of this effort to update the concept and develop the Preliminary Engineering Deliverable:

- Data Collection and Document Review
- Site Investigation
- Aerial Mapping and Field Survey (See RSE Scope of Work)
  Survey collection will be completed as shown in the previously prepared project study reports. Processing of survey data will only be completed as needed and is dependent on siding length and improvements required by UPRR. The current assumption is that UPRR will only require to be made whole without betterment and the final siding configuration will provide a storage capacity equal to the storage capacity of the existing siding track. The survey scope also assumes UPRR flagging and access to the UPRR ROW will be available for timely completion of field work. If UPRR flagging or operations do not allow for completion based on the anticipated schedule, additional field work may be required. If additional site work or processing is required, it will require additional scope.
- Geotechnical Borings, Testing Analyses and Reporting (See Leighton Scope of Work)
  Geotechnical borings are anticipated based on the "replacement in-kind" length of siding described previously. Where possible, borings are planned to be performed adjacent to, but outside of UPRR ROW to conserve time and cost in developing the study and report. Where access to UPRR ROW is required, borings will be performed outside of the foul zone, where possible. This approach is intended to minimize time and cost impact from UPRR right of entry (ROE) and flagging requirements. UPRR ROE and flagging requirements are determined solely by UPRR staff at the time of application and can vary greatly from a few thousand dollars to hundreds of thousands. The ROE application can also require several months to process and is at the discretion of UPRR staff, based on staff availability and current project workloads. UPRR requirements may result in additional costs to complete the analysis and delays in the anticipated schedule. RailPros ROW staff will work closely with our team and UPRR staff to facilitate this process as much as possible.

- Identify ROW Impacts, begin coordination with UPRR ROW staff to identify any necessary easements, agreements, licenses or other permits and develop draft documents, exhibits and anticipated costs
- Utility Research and Coordination
- Hydrology/Hydraulics Study - for Broadway extension connection to Storm Drain System
- Broadway Street Extension Preliminary Lighting Analysis Report and Pole/Fixture Selection - for determining optimal pole spacing and lumen output, based on City's qualified product list

30% Preliminary Engineering Plans and Estimates

The 30% Preliminary Engineering submittal will include development of plans, cost estimates and a specification draft table of contents. The anticipated plans and documents to be developed include the following:

- Demolition Plans - Pearl Street closure and onsite improvements to accommodate the new temporary platform on UPRR ROW, new temporary parking lot, and the new Jayne Street to Broadway connection (demolition of existing Smith Monterey building facilities are anticipated to be performed by Smith Monterey or their contractors, based on previous discussions and understanding of agreements)
- Street Improvement Plans - Jayne Street temporary road extension to Broadway Street, and Broadway street extension, including plan and profile, sections and details (improvements to Lyons Street/Bitterwater Street and San Antonio Drive crossings are not anticipated based on revised track alignment assumptions)
- New At-grade Crossing Plans – Broadway Street Crossing, pedestrian treatments, panels, gates
- New Temporary Parking Lot Plans –ADA parking and access to platform ramp and minimal grading, paving and striping.
- Temporary Platform Plans – platform, stairs and ramps, grading, and details
- Accessible Path of Travel and Passenger Egress Plans – up to two sheets
- Fire Line Improvement Plans – for new Broadway extension of fire hydrants (assumes connection to existing facilities will provide sufficient pressure and capacity)
- Storm Drain Improvement Plans
- Preliminary Signing and Striping Plans – for Broadway and Jayne Street extensions, 1st Street between Pearl and Broadway (up to 2 Sheets)
- Broadway Preliminary Lighting Electrical Plans (up to 1 Sheet)
- Track Alignment Engineering
    - The current assumption is that UPRR will only require to be made whole without betterment and the final siding configuration will provide a storage capacity equal to the storage capacity of the existing siding track. If additional capacity is negotiated or required by UPRR those efforts will require additional scope.
- Track Grading Model
- Track Plans
- Cost Estimate – Rough Order of Magnitude (ROM) Cost Estimate for 30% Design

- Specifications – Outline specifications for 30% design
- Comment Matrix, Comment Review and Responses

Task 1 Deliverables

The deliverables listed below will be submitted for City review and will be provided to appropriate stakeholders for their concurrent reviews (if applicable):

- Monthly Invoices and Progress Reporting
- Meeting Agendas and Minutes
- Diagnostic/workshop Agenda and Minutes
- Geotechnical Report
- List of Identified UPRR easements, agreements, licenses or other permits
- Draft ROW Exhibits
- Utility Matrix
- Hydrology/Hydraulics Study
- Post Construction BMP Report (WQMP)
- Broadway Street Extension Preliminary Lighting Analysis Report
- 30% Preliminary Engineering Plan Submittal Package
- 30% ROM Cost Estimate
- Draft Specification List
- Comment Matrix

Task 2 90% Plans Specification and Estimate (PS&E) Draft Submittal

The purpose of this Task advance and further define and develop the Project elements that were begun in the previous phase for the PS&E submittals for review by the City and stakeholders. With the Project Reports and 30% Preliminary Engineering completed and stakeholder comments provided, the PS&E will be advanced to 90% level.

Barring any unforeseen circumstances or significant stakeholder feedback that would alter the proposed project approach, the specific scope of work for Task 2 will include the anticipated elements outlined below.

<u>Project Management and Coordination</u>

This effort includes ongoing regular management, progress reporting, Project meetings, internal and subconsultant coordination, stakeholder coordination for approximately 4 months.

Major coordination efforts for this phase include coordinating draft license, agreements, easements and other Permits with UPRR and the City and coordinating crossing diagnostic meetings and the Draft CPUC Formal Application for the new Broadway Street Crossing. it is also anticipated that Amtrak will provide a draft station management/operation agreement for review and coordination with the City.

Anticipated Task 2 meetings include:

- Monthly PDT Meetings, up to 1 in King City up to 3 via Conference/Video Call

- Up to 1 stakeholder Diagnostic/Workshops in King City
- Regular ongoing coordination and conference calls as needed

Data Collection, Site work, Studies and Reporting

Additional data collection is anticipated to be minimal and based on site investigation and feedback from the City and Project Stakeholders. Additional survey, report updates or revisions are not anticipated, but may be added if required.

90% Draft Final PS&E Package

The 90% Draft Final PS&E will include advancement of all the plans, estimates and specifications previously developed (see 30% Preliminary Engineering Plans and Estimates Scope under Task 1 for complete list of anticipated plan sets) to the Pre-final level for City and Stakeholder review and comment. Advancement will include incorporation of stakeholder comments and additional data, information and direction collected.

Task 2 Deliverables

The deliverables listed below will be submitted for City review and will be provided to appropriate stakeholders for their concurrent reviews (if applicable):

- Monthly Invoices and Progress Reporting
- Meeting Agendas and Minutes
- Diagnostic/workshop Agenda and Minutes
- Revised ROW Exhibits
- Coordination of draft railroad Agreements, Licenses, Permits and Easements (optional based on construction schedule and base documentation provided by railroads)
- Draft CPUC Formal Application for Broadway Street At-Grade Crossing (optional based on construction schedule)
- 90% Pre-Final Design Plans
- 90% Cost Estimate
- 90% Draft Specifications
- Comment Matrix

Task 3 Final 100% Plans Specification and Estimate (PS&E) Submittal

The purpose of this Task is to finalize the PS&E documents prior to construction. The scope will include completing design based on stakeholder feedback and any new information collected.

The specific scope of work for Task 3 will include the anticipated elements outlined below.

Project Management and Coordination

This effort includes ongoing regular management, progress reporting, Project meetings, internal and subconsultant coordination, stakeholder coordination for approximately 3 months.

If the City has acquired funding for construction the UPRR/Amtrak agreements and CPUC Formal Application for Broadway can be completed. This will require significant coordination and railroads may be unwilling to sign or agree to these documents if construction is not anticipated to begin or if funding

for construction or ROW is unavailable. Additionally, the CPUC application typically expires after 3 years and construction must be completed at that time unless an extension is granted.

Anticipated Task 3 meetings include:

- Monthly PDT Meetings, up to 3 via Conference/Video Call
- Regular ongoing coordination and conference calls as needed

Data Collection, Site work, Studies and Reporting

Additional data collection is anticipated to be minimal and based on feedback from the City and Project Stakeholders. Additional site investigation, survey, report updates or revisions are not anticipated, but may be added if required.

100% Final PS&E Package

The 100% Final PS&E will include advancement of all the plans, estimates and specifications previously developed (see 30% Preliminary Engineering Plans and Estimates Scope under Task 1 for complete list of anticipated plan sets). Advancement will include incorporation of stakeholder comments and additional data, information and direction collected.

Task 3 Deliverables

The deliverables listed below will be submitted for City review and will be provided to appropriate stakeholders for their concurrent reviews (if applicable):

- Monthly Invoices and Progress Reporting
- Meeting Agenda and Minutes
- Revised ROW Exhibits
- Coordination of Final railroad Agreements, Licenses, Permits and Easements (optional based on construction schedule)
- Final CPUC Formal Application for Broadway Street At-Grade Crossing (optional based on construction schedule)
- 100% Final Design Plans
- 100% Cost Estimate
- 100% Specifications
- Comment Matrix

Optional/Additional Services

We have prepared our approach to the scope and fee with the intent to accommodate potential additional services that may arise as a result of the City's discretion to exercise optional services or due to other unforeseen or unanticipated circumstances or project requirements. Additional services may include, but may not be limited to, additional studies, reports or engineering services (traffic, geotechnical, haz-mat, environmental, structural, rail civil, drainage etc.), additional ROW services and support, additional railroad fees or flagging requirements, additional station or parking area modifications or amenities, additional meetings, management or support services, additional modifications to crossings and associated agreements and applications (for example, if additional improvements were desired at San

Antonio or Bitterwater crossings), or other additional site work or other design and support services. This list is not intended to be comprehensive, however it should be stated that there is some potential for both cost and schedule impacts due to railroad and CPUC involvement, coordination and requirements that are outside City and RailPros control and this approach will allow us to account for some of these circumstance, should they arise, while still remaining within the grant funding budget.

Assumptions

1. Total meeting, coordination and participation hours are per the fee breakdown. Staff participation in meetings will be limited to key staff or crucial elements to minimize and conserve costs. Meetings, diagnostic meetings, workshops and site investigation will be coordinated, where possible, to conserve travel, lodging and other associated costs.
2. Meeting hours, coordination, UPRR/Amtrak agreement support, CPUC coordination and support, ROW coordination and support are based on assumptions regarding meetings, number and type of submittals, funding receipt and other elements and may need to be revised based on identification of actual project requirements.
3. The City will provide copies of all existing data, plans, documentation, and any other pertinent information related to the Project to RailPros.
4. The scope of work and associated fee are based on assumptions developed with City input and additional services not specifically identified in the scope of work can be provided under a separate or amended scope of work.
5. The Temporary Platform development does not include any canopies, furniture, buildings, communications, surveillance, ticket vending or other amenities or architectural features or elements typically included at Amtrak stations. Amtrak may require certain elements, such as canopies, lighting, benches or other features such as station communications be included. Temporary platform and parking area lighting are improvements are not included. Existing warehouse storage area lighting is anticipated to be protected in place for the use of the temporary parking and platform area. Station platform will include provision of future conduit raceways for potential lighting, security camera and communication systems to be incorporated later by others and identification of proposed future conduits will be based on information available at the concept level.
6. No detailed structural engineering plans or plans signed by a licensed structural engineer are anticipated. Pavement, including platform concrete paving and other details are anticipated to be of simple, standard design, based on existing City or other Agency Standards and the results of the geotechnical findings.
7. Anticipated stakeholder review submittal intervals will include 30%, 90% and 100% Final documents, eliminating the typical 60% phase in order to conserve costs. UPRR, Amtrak or other stakeholders or City departments may require additional or alternative submittal reviews for all or some portions of the project. At the City and stakeholder discretion the actual required intervals may be adjusted up or down based on project and agency needs and the scope and fee may be revised scope accordingly.
8. New temporary parking plans will anticipate the use of existing access and driveways. No modifications to 1st Street are included, such as driveways, acceleration/deceleration lanes, changes to grades, widening or addition of medians.

9. Fire Line Improvement Plans scope of work assumes there are existing water lines at 1st Avenue and Broadway Street as well as on the opposite side of the tracks with enough pressure and flow available for connection. Water line improvement beyond the Project's limits or the design of pumping station is not included.

10. Catch basin and storm drain design will include connection to the existing drainage systems at the intersection of Broadway & 1st Street and Jayne and Pearl of for new Broadway extension, and no additional drainage system improvements are anticipated for the temporary parking lot. Storm drain design assumes that existing storm drain lines in Jayne, Pearl, 1st Street and Broadway have enough capacity to accommodate our project, no upgrading of storm drains is included in this scope and fee.

11. No BMP's or Low Impact Development (LID) Design is included.

12. Broadway Lighting Analysis will include a horizontal illuminance analysis for the project roadway using the Visual lighting analysis software and Illuminance guidance from the Illuminating Engineering Society (IES) RP-8-2000 report. The IES standards will be used to establish the target lighting levels for the roadway, intersections and sidewalks. The horizontal illuminance analysis will determine the optimal pole spacing and lumen output (lamp wattage) required to provide the specified lighting levels. The lighting fixtures used in the analysis will be based on the City's qualified product list and as directed by the City. Pole foundations will be per standard plans and no structural or foundation design is included. The new lighting will tie into the City's existing lighting system.

13. The platform is being designed within existing UPRR ROW. The temporary parking area is within existing private property outside of UPRR ROW. An existing building owned by a UPRR tenant is anticipated to be protected in place. Demolition of other adjacent properties, building etc. is not included and is anticipated to be performed by the private property owner, per discussion with the City and the owner's representative. ROW support services for non-UPRR properties are not anticipated but can be included as an optional scope element. ROW support services are "as needed" and are anticipated to include coordination with UPRR and the City and may also include cost evaluation, utility coordination or other support on an as needed basis.

14. Special Provisions for the various designs will be based on the City of King City's Special Provisions, the Greenbook (SSPWC), Caltrans Standard Specifications and Standard Special Provisions, UPRR Standard Specification and Amtrak Standard Specification.

15. Traffic Studies, Parking Analysis, Queuing Analysis and other traffic analysis and reporting are not included but may be required by other agencies for the development or modifications to the station area or crossings.

16. No new utilities (wet or dry) are anticipated to cross under or over the track as part of this scope of work. If utility crossings are necessary, it is anticipated that any utilities crossing under the railroad will be handled separately by the respective utility companies or City department. No UPRR utility crossings or coordination for utility license or other requirements are included in this scope of work.

17. It is anticipated that UPRR and Amtrak will originate or provide boilerplate templates or edits for agreements, licenses, permits, etc. RailPros will help review, edit and provide information to assist the City with preparing draft documents. Origination of agreements, licenses or permits (other than from UPRR/Amtrak provided templates) is not included in this scope of work. City and/or railroad staff and legal team reviews and comments are anticipated to dictate/drive the specific

agreement language details and schedule for completing these documents and are outside of RailPros' or the City's control. UPRR will require a Preliminary Engineering Agreement with a deposit from the City before reviewing any documents, providing information, comments or participating in meetings or site diagnostic visits. It is anticipated that Amtrak will require a similar agreement. RailPros can help coordinate these agreements.

18. CPUC Formal Application for the proposed new Broadway Street Crossing is anticipated but may not be completed if construction schedule is delayed or funding for construction is unavailable. A Form G will need to be submitted to the CPUC after completion of construction for the closure of Pearl Street and is not included in this scope. Modifications to Lyons Street/Bitterwater and San Antonio Crossings are not anticipated and CPUC General Order 88-b application for modifications to existing crossings are not anticipated to be required and are not included. If additional applications, coordination or support are identified during design, these can be provided as an addition.

19. Subsurface utility investigation is anticipated to be minimal and non-invasive investigation can be added to the scope and fee as an Other Direct Cost, if necessary. If additional investigation or potholing is required these services can also be added as necessary. It is anticipated that the construction contractor will perform a thorough subsurface investigation prior to beginning construction to verify and identify any and all subsurface utilities or facilities.

20. UPRR Flagging services requirements are undefined and will likely be required for survey, site investigation, geotechnical, environmental and other investigations and studies within the railroad ROW. UPRR will determine if RailPros Field Services staff (an authorized 3rd party flagging service provider) may provide these services or if UPRR forces will provide these. RailPros staff can provide these as an additional Other Direct Cost based on UPRR direction. Right of Entry fees are not typically necessary for non-invasive survey and investigation on UPRR ROW. Minimal ROE fees are included for geotechnical boring as part of the design scope but may not be sufficient based on UPRR discretion and additional fees may be required. Additional ROE fees and services can be included as an addition, if necessary.

21. RailPros subconsultants will be performing key scope of work elements as indicated in the scope of work above. Details of these scopes and their assumptions are included in the subconsultant scope documents.

22. Environmental documents will be prepared by City or other agencies. RailPros will coordinate the development of project design with the City to provide a clear depiction of the type and location of proposed improvements. RailPros does not anticipate providing any environmental services other than basic coordination, however additional services can be provided by our team, including subconsultants at the City's discretion.

23. The scope of work, including meetings, monthly reporting and other project management efforts are based upon the assumed project schedule and number and type of submittals and may require additional support based on schedule or submittal changes, particularly due to stakeholder review periods, requirements and other factors outside of RailPros control.

24. Bidding support, Design Support Services During Construction, Construction Management or other scope or work elements not specified are not included in this scope but can be provided under a revised scope of work.

25. Field work and associated flagging are anticipated to be performed during standard daytime working days and hours. Additional fees may apply for night, weekend or holiday work.

Fee

Tasks will be performed on a Time and Materials basis, billed monthly, in accordance with the current terms and conditions of the Contract. Tasks will be performed by RailPros based on the fee estimate in Attachment 1.

Summary Task Description	Estimated Cost
Task 1: Concept Update and Preliminary Engineering 30% Submittal	$ 588,471
Task 2: 90% Plans Specifications and Estimate (PS&E) Draft Submittal	$ 351,142
Task 3: Final 100% Plans Specifications and Estimate (PS&E) Submittal	$ 178,855
Estimated Project Total	**$ 1,118,468**
Optional/Additional Services and Support Budget	$ 160,855
Total Available Project Budget - Grant Funds	**$ 1,279,323**

Attachment 1 - Fee

RAILPROS FY 2020 Billing Rates	Project Manager	Civil Lead	Sr. Civil Engineer	Civil Designer	Sr. CADD	Rail/Track Lead	Sr. Rail Designer	Rail Designer	Jr. Rail Designer	Platform Design Lead	Traffic Lead	Sr. Traffic Engineer	Traffic Engineer	Traffic Designer	Signal/Com Lead	Signal Designer	ROW Lead	UPRR Coord.	Structures Lead	Sr. Structure Designer	Structure Designer	Technical Advisor/ QA/QC	Admin/ Intern	Total Hours	Labor Cost per task	Total Fee
	$ 211,43	$ 272,31	$ 196,34	$ 127,69	$ 143,72	$ 311,22	$ 180,31	$ 161,18	$ 123,05	$ 214,51	$ 295,99	$ 222,68	$ 215,53	$ 106,15	$ 277,12	$ 102,55	$ 290,48	$ 310,05	$ 351,10	$ 146,50	$ 102,65	$ 227,08	$ 87,90			
Task 1: Concept Update and Preliminary Engineering 30% Submittal																										
1.1	Project Management and Coordination																									
1.1.1	Project Management, Schedule, Monthly Progress Reports, Accounting	42	14			7						5										6	14	90	$ 18,032	
1.1.2	Stakeholder Coordination (including UPRR and Amtrak)	42	21			14						5					40	95						158	$ 36,649	
1.1.3	Kickoff Meeting, Project Development Team Meetings and Conference Call	36	26	4		12	6			4		5			4		10						12	121	$ 27,975	
1.1.4	CPUC Coordination and Site Diagnostic Meetings/Workshops, Application	40	10			10						6											10	76	$ 15,953	
1.2	Data Collection, Site Work, Studies and Reporting																									
1.2.1	Data Collection and Document Review	8	8		8		8																	32	$ 7,551	
1.2.2	Site Investigation	8	16			8																		32	$ 7,196	
1.2.3	Aerial Mapping and Field Survey Support, Coordination and Review	8	16	4		4	4	4																40	$ 9,376	
1.2.4	Geotechnical Testing and Reporting Support, Coordination and Review	4	8			6				4									4					26	$ 7,164	
1.2.5	Identify ROW Impacts, Preliminary List of UPRR ROW Requirements	10															40	10						60	$ 16,834	
1.2.6	Draft UPRR ROW Exhibits	10	4			8											10	4						36	$ 8,456	
1.2.7	Utility Research, Coordination and Utility Matrix		8		24	32											10							74	$ 12,747	
1.2.8	Hydrology/Hydraulic Study Report		16	80	8	8																		112	$ 22,236	
1.2.9	Broadway Street Extension Preliminary Lighting Analysis Report											20		8										28	$ 5,319	
1.3	30% Preliminary Engineering Plans and Estimates																									
1.3.1	Demolition Plans		16		16	16																		48	$ 8,700	
1.3.2	Street Improvement Plans	2	16		24	24																		66	$ 11,284	
1.3.3	New Broadway At-Grade Crossing Plans	16	16		20	40																		88	$ 14,774	
1.3.4	ADA Parking and Access to Platform	3	8		16	16																		42	$ 6,944	
1.3.5	Temporary Platform Plans	16	8		24	24				8									8	4	4			88	$ 15,828	
1.3.6	Accessible Path of Travel and Passenger Egress Plans	2	8			16				2														28	$ 5,330	
1.3.7	Fire Line Improvement Plans		20	10	20	10																		60	$ 11,401	
1.3.8	Storm Drain Improvement Plans		16		24	24																		64	$ 10,871	
1.3.9	Preliminary Signing and Striping Plans	2									2	6		25										35	$ 5,055	
1.3.10	Broadway Preliminary Lighting Electrical Plans										1	4	1	20										26	$ 3,685	
1.3.11	Track Alignment Engineering					16	30	16	4															66	$ 13,480	
1.3.12	Track Grading Model					8	42	20																80	$ 15,048	
1.3.13	Track Plans					20	40	64	135															259	$ 45,201	
1.3.14	Rough Order of Magnitude Cost Estimate	2	8	8	24	6	8					1		4			8							66	$ 12,929	
1.3.15	Draft Specification List (Table of Contents)	2		8		4						2	2											18	$ 4,115	
1.3.16	Comment Matrix, Comment Review, Responses and Resolutions	4	8	8		4	7	7				2		2										42	$ 8,892	
Subtotal		244	273	122	208	230	119	138	146	139	16	3	58	3	59	4	0	118	30	12	4	4	8	36	1971	$ 390,323	
Total RailPros Hours		244	273	122	208	230	119	138	146	139	16	3	58	3	59	4	0	118	30	12	4	4	8	36	1971		
RailPros Project Fee		$51,589	$74,342	$23,953	$26,568	$53,066	$37,036	$24,863	$23,632	$17,106	$3,432	$864	$12,918	$647	$6,351	$1,108	$0	$34,408	$9,302	$4,213	$586	$410	$1,817	$3,164			$390,323

Sub-consultants	
RSE - Topographic Surveying	$84,[illegible]
Leighton - Geotechnical	$57,[illegible]
AVA - Architectural, Mechanical, Electrical, Plumbing, Landscaping Support (Optional, As needed)	$5,000
Rincon - Environmental Support (Optional, As needed)	$3,000
CPC - ROW Support (Optional, As needed)	$1,000
Sub-Consultant Total	$1[illegible],345

Other Direct Costs	
Postage and Reproduction	$1,000
Travel, Lodging, Meals	$7,000
UPRR Right of Entry (additional fees may be required)	$5,000
Flagging (up to 12 days - additional flagging may be required)	$22,800
Non-Invasive Subsurface Investigation (optional - not included)	
Other Direct Costs Total	[illegible]

Total Project Fee	
	$[illegible],472

Attachment 1 - Fee

	RAILPROS FY 2020 Billing Rates	Project Manager $ 211.43	Civil Lead $ 272.31	Sr. Civil Engineer $ 196.94	Civil Designer $ 127.69	Sr. CADD $ 143.72	Rail/Track Lead $ 311.22	Sr. Rail Designer $ 180.31	Rail Designer $ 161.18	Jr. Rail Designer $ 123.06	Platform Design Lead $ 214.51	Traffic Lead $ 295.99	Sr. Traffic Engineer $ 222.88	Traffic Engineer $ 216.63	Traffic Designer $ 108.15	Signal/Com Lead $ 270.12	Signal Designer $ 102.68	ROW Lead $ 290.48	UPRR Coord. $ 310.05	Structures Lead $ 351.10	Sr. Structure Designer $ 145.60	Structure Designer $ 102.55	Technical Advisor/ QA/QC $ 227.08	Admin/ Intern $ 87.90	Total Hours	Labor Cost per task	Total Fee
Task 2: 60% Plans Specifications and Estimate (PS&E) Draft Submittal																											
2.1	Project Management and Coordination																										
2.1.1	Project Management, Schedule, Monthly Progress Reports, Accounting	32	5				5						4										5	16	73	$ 14,614	
2.1.2	Stakeholder Coordination (including UPRR and Amtrak)	24	5				5						4					16	5						55	$ 17,761	
2.1.3	Kickoff Meeting, Project Development Team Meetings and Conference Call	26	16	4			10	5			4		4			4		5						8	86	$ 20,137	
2.1.4	CPUC Coordination and Site Diagnostic Meetings/Workshops, Application	64	5				8						4											6	80	$ 17,504	
2.2	Data Collection, Site Work, Studies and Reporting																										
2.2.1	Data Collection and Document Review	4	4				4						4												16	$ 4,071	
2.2.2	Site Investigation	8	8			5	8																		32	$ 7,509	
2.2.3	Identify ROW Impacts and Draft Agreement Coordination	20																40	4						64	$ 17,063	
2.2.4	Draft UPRR ROW Exhibits	10	4		4	4												10							32	$ 7,194	
2.2.5	Utility Research, Coordination and Utility Matrix		5		15	15												45							80	$ 20,464	
2.2.6	Hydrology/Hydraulics		4	5		5																			20	$ 3,910	
2.3	90% Draft Final PS&E Package																										
2.3.1	Demolition Plans		5		16	45																			72	$ 11,125	
2.3.2	Street Improvement Plans	2	32		40	40																			114	$ 19,880	
2.3.3	New Broadway At-Grade Crossing Plans	12	24		32	32																			100	$ 17,758	
2.3.4	ADA Parking and Access to Platform	2	10		16	10																			50	$ 9,122	
2.3.5	Temporary Platform Plans	6	24		32	32					6									6	4	4			110	$ 21,561	
2.3.6	Accessible Path of Travel and Passenger Egress Plans	2	2			4																			8	$ 1,542	
2.3.7	Fire Line Improvement Plans		10		20	10																			40	$ 6,714	
2.3.8	Storm Drain Improvement Plans		24		32	32																			88	$ 15,227	
2.3.9	Signing and Striping Plans											2	8		32										42	$ 5,934	
2.3.10	Broadway Preliminary Lighting Electrical Plans											1	8	1	24										34	$ 4,860	
2.3.11	Track Alignment Engineering						11	20	11																42	$ 8,903	
2.3.12	Track Grading Model						8	25	16																49	$ 9,270	
2.3.13	Track Plans						17	29	57	87															190	$ 30,293	
2.3.14	Cost Estimate	2	16	16	40		4	8				1	1		4			5							80	$ 17,769	
2.3.15	Specifications	2	16	40			8	11				1	6	1											83	$ 18,332	
2.3.16	Comment Matrix, Comment Review, Responses and Resolutions	2	8	6			3	5	5																31	$ 6,813	
	Subtotal	209	248	76	248	250	90	101	91	87	10	5	43	2	60	4	0	125	12	6	4	4	5	30	1714	$ 335,142	
	Total RailPros Hours	208	248	76	248	250	90	101	91	87	10	5	43	2	60	4	0	125	12	6	4	4	5	30	1714		
	RailPros Project Fee	$43,977	$67,534	$14,922	$31,667	$35,925	$28,010	$18,212	$14,667	$10,705	$2,145	$1,480	$9,575	$431	$6,489	$1,108	$0	$36,310	$3,721	$2,809	$585	$410	$1,817	$2,637			$335,142

Sub-consultants	
RSE - Topographic Surveying	$0
Leighton - Geotechnical	$0
HVA - Architectural, Mechanical, Electrical, Plumbing, Landscaping Support (Optional, As needed)	$3,000
Rincon - Environmental Support (Optional, As needed)	$0
OPC - ROW Support (Optional, As needed)	$5,000
Sub-Consultant Total	$8,000

Other Direct Costs	
Postage and Reproduction	$1,000
Travel Lodging Meals	$7,000
UPRR Right of Entry (additional fees may be required)	$0
Flagging up to 12 days - additional flagging may be required	$0
Non-Invasive Subsurface Investigation (optional - not included)	$0
Other Direct Costs Total	$8,000

Total Project Fee	$351,142

Attachment 1 - Fee

RAILPROS FY 2020 Billing Rates	Project Manager	Civil Lead	Sr. Civil Engineer	Civil Designer	Sr. CADD	Rail/Track Lead	Sr. Rail Designer	Rail Designer	Jr. Rail Designer	Platform Design Lead	Traffic Lead	Sr. Traffic Engineer	Traffic Engineer	Traffic Designer	Signal/Com Lead	Signal Designer	ROW Lead	UPRR Coord.	Structures Lead	Sr. Structure Designer	Structure Designer	Technical Advisor/ QA/QC	Admin/ Intern	Total Hours	Labor Cost per task	Total Fee
	$ 211,43	$ 272,31	$ 190,34	$ 127,69	$ 143,72	$ 311,22	$ 180,31	$ 161,18	$ 123,06	$ 214,51	$ 295,99	$ 222,68	$ 215,63	$ 106,15	$ 277,12	$ 102,65	$ 290,48	$ 310,05	$ 351,10	$ 146,60	$ 102,65	$ 227,08	$ 57,90			
Task 3: Final 100% Plans Specifications and Estimate (PS&E) Submittal																										
3.1	**Project Management and Coordination**																									
3.1.1	Project Management, Schedule, Monthly Progress Reports, Accounting	15	6			2						2										4	6	35	$ 7,309	
3.1.2	Stakeholder Coordination (including UPRR and Amtrak)	10	6			6						2					5	5						34	$ 9,064	
3.1.3	Kickoff Meeting, Project Development Team Meetings and Conference Call	12	8	2		6	2			2		2			2		6						6	48	$ 11,035	
3.1.4	CPUC Coordination and Site Diagnostic Meetings/Workshops, Application	30																				2	4	36	$ 7,149	
3.2	**Data Collection, Site Work, Studies and Reporting**																									
3.2.1	Data Collection and Document Review	4	4			4						4												16	$ 4,071	
3.2.2	Identify ROW Impacts and Draft Agreement Coordination	20															30	4						64	$ 14,183	
3.2.3	Draft UPRR ROW Exhibits	10	4		4	4											10							32	$ 7,194	
3.2.4	Utility Research, Coordination and Utility Matrix		8														24							32	$ 6,160	
3.2.5	Hydrology/Hydraulics			4																				4	$ 785	
3.3	**100% Final PS&E Package**																									
3.3.1	Demolition Plans		8			8																		16	$ 2,828	
3.3.2	Street Improvement Plans	2	16		24	24																		66	$ 11,294	
3.3.3	New Broadway At-Grade Crossing Plans	4	16		20	40																		80	$ 12,869	
3.3.4	ADA Parking and Access to Platform	2	16		8	8																		34	$ 6,871	
3.3.5	Temporary Platform Plans	2	16		16	16				2									4	2	2			60	$ 11,454	
3.3.6	Accessible Path of Travel and Passenger Egress Plans	2	2																					4	$ 957	
3.3.7	Fire Line Improvement Plans		4		10	4																		18	$ 2,941	
3.3.8	Storm Drain Improvement Plans		16		16	16																		48	$ 6,700	
3.3.9	Signing and Striping Plans											4		8										12	$ 1,756	
3.3.10	Broadway Preliminary Lighting Electrical Plans											8		16										24	$ 3,512	
3.3.11	Track Alignment Engineering					3	8	3																11	$ 3,318	
3.3.12	Track Grading Model					2	6	4																12	$ 2,349	
3.3.13	Track Plans					8	11	23	34															76	$ 12,364	
3.3.14	Cost Estimate		8	8	8	1	2				1	1		4			5							38	$ 7,846	
3.3.15	Specifications		8	19		2	3				1	4	1											35	$ 7,686	
3.3.16	Comment Matrix, Comment Review, Responses and Resolutions		8	8		1	2	2																21	$ 4,743	
Subtotal		113	154	39	106	129	35	31	32	34	4	2	27	1	26	2	9	85	9	4	2	2	6	16	846	$ 171,655	
	Total RailPros Hours	113	154	39	106	120	35	31	32	34	4	2	27	1	26	2	0	85	9	4	2	2	6	16	846		
	RailPros Project Fee	$23,891	$41,906	$7,461	$13,535	$17,246	$10,893	$5,590	$5,158	$4,184	$294	$592	$6,012	$216	$3,524	$554	$0	$24,694	$2,790	$1,404	$293	$205	$1,362	$1,496			$171,655

Sub-consultants	
RSE - Topographic Surveying	$0
Leighton - Geotechnical	$0
AVA - Architectural, Mechanical, Electrical, Plumbing, Landscaping Support (Optional, As needed)	$2,000
Rincon - Environmental Support (Optional, As needed)	$0
OPC - ROW Support (Optional, As needed)	$3,000
Sub-Consultant Total	$5,000

Other Direct Costs	
Postage and Reproduction	$1,000
Travel, Lodging, Meals	$1,000
UPRR Right of Entry (additional fees may be required)	$0
Flagging (up to 12 days - additional flagging may be required)	$0
Non-Invasive Subsurface Investigation (optional - not included)	
Other Direct Costs Total	$2,000

Total Project Fee	
	$178,655

Rail Surveyors and Engineers, Inc.
The Village Plaza
250 West First Street, Suite 226
Claremont, CA 91711
(909) 398-7063 | www.rsecorp.com

October 8, 2019

Robert Williams, PE
RailPros
15265 Alton Parkway, Suite 140
Irvine, California 92618

Subject: Surveying Support Services – King City, CA

Dear Mr. Williams

RSE Inc. appreciates the opportunity to provide services for the above referenced project. The following scope of services with associated fees is based upon our understanding of the project, per the information you provided on a schedule, and our approach to this project as shown below.

Thank you for the invitation to submit this proposal. We look forward to the opportunity to provide surveying services on this project.

Sincerely,
Rail Surveyors and Engineers, Inc.

Cody Festa, PLS
Survey Manager
650.865.0172

PROJECT UNDERSTANDING

Client is requesting survey support services in association with proposed station construction and associated permits within King City, CA. The services will include aerial imagery, mapping, and traditional survey support services.

SCOPE OF WORK AND PROJECT EXECUTION

Based on the requirements outlined in the RFP, we propose the following:

1. **Aerial Mapping**
- Perform survey to establish aerial mapping control targets
- Aerial mapping services including mapping and compilation
  - 1"=40' scale topographic mapping with 1' Contours
  - 0.25 pixel resolution orthophotos
- Prepare topographic base mapping

2. **Field Survey**
- Review of existing documentation and information provided.
- Set project survey control
- Perform field survey for track corridor to support track design
- Perform field survey for roadways and station site to support roadway and station design
- Perform survey to obtain surface utility features
- Prepare project control drawings
- Update topographic base mapping

3. **Supplemental Survey**
- Perform supplemental field surveys to support final design
- Update topographic base mapping

ASSUMPTIONS

The following assumptions were made during preparation of this scope of services and fee estimate. If these assumptions do not prove correct, it may require the negotiation of a supplemental agreement.

- All documentation will be provided prior or at the time of NTP
- This proposal does not include any services related to Right-of-Way
- Client will coordinate all rail flagging services
- Training is available online through www.contractororientation.com
- All work will be completed on day shifts
- Access to rail right-of-way and impacted adjacent properties will be coordinated by client
- Site work cost are assumptions and may be impacted by UPRR processes, operations or requirements

PROJECT DELIVERABLES FOR SURVEYING SERVICES

- All point coordinates with feature codes provided as .TXT/.CSV file
- Survey Control Sheet
- CADD Basemap Containing Supplemental Survey and Aerial Mapping

FEE

See attached

Additional services may be provided or added to this scope and fee as they are identified

Agency
Project Name
STAFF HOUR and FEE PROPOSAL
Date

Rail Surveyors and Engineers, Inc.

	STAFF					RSE Total Hours	RSE Total $
	Project Manager	Survey Manager	2-Man Survey Crew	Office Engineer	Project Controls		
	$225.00	$195.00	$250.00	$120.00	$150.00		
Aerial Mapping	8	16	60	20	6	110	$ 23,220
Design Survey	24	48	80	80	12	244	$ 46,160
Supplemental Survey (Optional)	8	16	40	60	4	128	$ 22,720
						0	$ -
						482	92100
TASK 1 Total Hours	40	80	180	160	22	482	
TASK 1 Subtotal ($)	$ 9,000	$ 15,600	$ 45,000	$ 19,200	$ 3,300		$ 92,100
						482	92100

						RSE	
TOTAL HOURS	40	80	180	160	22	482	
TOTAL LABOR COST	$ 9,000	$ 15,600	$ 45,000	$ 19,200	$ 3,300		$ 92,100
ODC'S *(see breakdown below)*							$ 15,000.00
TOTAL FEE							$ 107,100.00

ODC Breakdown	**Cost**
Aerial Mapping	$ 15,000.00
Total ODC's	**$ 15,000.00**

Leighton has been working in California on light and heavy commuter railway stations for 58 years; with experienced California-licensed Civil and Geotechnical engineers who routinely work with AREMA and Caltrans requirements. They will address both geotechnical and geoenvironmental issues for this site in an integrated/cost-effective manner. Leighton Consulting, Inc. has three in-house Caltrans certified geotechnical and materials testing laboratories.

Station Platform Borings
As geotechnical and geoenvironmental subconsultant, Leighton Consulting, Inc. will drill six borings, 240-feet on-center along the proposed platform footprint, with the northernmost boring drilled 50-feet deep and the remaining borings drilled 20-feet deep below existing grade. Note that there was a leaking underground fuel tank (LUFT) just across First Street from this site; see:

https://geotracker.waterboards.ca.gov/esi/uploads/geo_report/7661579906/T0605300092.PDF

Therefore, we propose to cost-effectively drill once and obtain soil samples for both geotechnical and geoenvironmental (HAZMAT) laboratory testing. This Optional

If you need us to elaborate on this geotechnical insert, then let us know.

Our cost estimate is attached as Table1 Breakdown of Geotechnical Exploration and includes Optional project meeting participation ($4286) and geoenvironmental testing (for fuel hydrocarbons and metals - $4,525) are included in this Table 1; which can also be removed if not needed. This includes prevailing wage drilling.

Rail Corridor Borings
In addition to the Platform borings, Leighton will perform borings near the tracks along the proposed rail siding extension (Approximately 14,500-feet): For this option we would drill 30 borings 10-feet-deep, 500-feet-on-center (n+1), with a time-and-expense budget as outlined in the attached Table 2. Breakdown of Geotechnical Exploration Fee for Doubling-Track Alignment (14,500-feet)

Costs do not include railroad encroachment permitting (time and permit cost), flagger(s) and/or unusual railroad insurance costs. Those costs are additive (not included in the above estimates) and indeterminate at this time until we apply for a railroad encroachment permit (those costs would be required for anyone drilling with a permit within the railway). Permit costs, need for flagger(s) and/or insurance requirements will be stipulated by UPRR (Omaha, NE); and our experience is these could be highly variable based on their perception of risk to the railroad. This will also require months, unless there's a project advocate and/or "connection" at UPRR. We will attempt to locate borings far enough away from the active railway so that flaggers may not be required. However, our borings do need to be located reasonably close to the proposed alignments (to be representative), which are close to and parallel to active railway. Our proposed station

platform borings are a safe distance set back from active railway. But this work along the track will be much closer to the active railway.

We have conventional insurance including Railroad Protective Liability Insurance, but additional (high) coverage may be required by UPRR, which will need to be "bought-up" specific to this project; see:

https://www.up.com/real_estate/rrinsurance/index.htm

We will not be able to quantify project-specific insurance costs until we are actively in the UPRR permitting process and we receive specific determinations from UPRR. These overall UPRR required added costs (permit fee, flagger(s) and/or insurance) **could range from $5k to $75k** depending mostly on their insurance requirements (proportional to distance from an active railway).

Leighton Consulting, Inc.

Table 1. Breakdown of Geotechnical Exploration Fee

King City Temporary Rail Platform

Geotech Exploration (Final PS&E)

Proposal # SC19-133

TASK DESCRIPTION	RATE	UNITS	COST
Task 1: Site Reconnaissance and Utility Clearance for Borings			
Principal	$221.00 / hour	2	$442.00
Senior Project Engineer	$185.00 / hour	10	$1,850.00
Mileage	$0.58 / mile	400	$232.00
		SUBTOTAL	**$2,524.00**
Task 2: Geotechnical Exploration Borings (6 Borings)			
Leighton Labor			
Senior Staff Engineer	$149.00 / hour	22	$3,278.00
Senior Project Engineer	$185.00 / hour	2	$370.00
Mileage	$0.58 / mile	400	$232.00
Vehicle Usage	$17.00 / hour	22	$374.00
Subcontracted Drill Rig (Hollow-Stem-Auger) + Analytical (HAZMAT) Laboratory Testing			
Drilling (On-Site Prevailing Wage)	$2,360.00 / day	1.5	$3,540.00
Mobilization to King City	$1,600.00 / site	1	$1,600.00
Per Diem	$350.00 / day	2	$700.00
Photo-Ionization Detector (PID)	$110.00 / day	2	$220.00
EPA-8260B: TPH-gasoline and VOCs	$33.64 / sample	26	$874.64
EPA-6010B/7471A: Title 22 metals	$93.40 / sample	26	$2,428.40
EPA-5035: Terracore samplers	$12.00 / sample	26	$312.00
Mark-up		18%	$1,741.51
		SUBTOTAL	**$15,670.55**
Task 3: Geotechnical Laboratory Testing			
Moisture content (ASTM D2216)	$20.00 / each	15	$300.00
Moisture & density (ASTM D2937) ring samples	$30.00 / each	15	$450.00
Atterberg limits (ASTM D4318) 3 points	$150.00 / each	5	$750.00
Particle size - Sieve only 1½ inch to #200 (ASTM D6913/CTM 202)	$135.00 / each	5	$675.00
Modified Proctor compaction 4 inch diameter mold (Methods A & B ASTM D1557)	$220.00 / each	2	$440.00
Expansion Index (EI, ASTM D4829)	$130.00 / each	2	$260.00
Consolidation (ASTM D2435)	$195.00 / each	2	$390.00
R-Value (CTM 301) untreated	$310.00 / each	2	$620.00
Corrosion suite: minimum resistivity, sulfate, chloride, pH (CTM 643)	$245.00 / each	2	$490.00
		SUBTOTAL	**$4,375.00**
Task 5: Geotechnical Analyses and Reporting (Office)			
Principal	$221.00 / hour	8	$1,768.00
Senior Project Engineer — Assuming iterative review process with City and Caltrans.	$185.00 / hour	28	$5,180.00
GIS Analyst	$149.00 / hour	6	$894.00
Project Administrator/Word Processor	$72.00 / hour	6	$432.00
		SUBTOTAL	**$8,274.00**
Task 6: Meetings Budget			
Principal	$221.00 / hour	6	$1,326.00
Senior Project Engineer	$185.00 / hour	16	$2,960.00
		SUBTOTAL	**$4,286.00**
		TOTAL ESTIMATED COST	**$ 35,129.55**

Leighton Consulting, Inc.

Table 2. Breakdown of Geotechnical Exploration Fee for Doubling-Track Alignment (14,500-feet)

King City Doubling-Track Alignment (14,500-feet)

Geotechnical Exploration (Final PS&E)

Proposal # SC19-133

TASK DESCRIPTION		RATE	UNITS	COST
Optional Task 1: 30 Borings 10-feet-deep (excluding encroachment permit)				
Leighton Labor				
Senior Staff Engineer		$149.00 / hour	24	$3,576.00
Senior Project Engineer		$185.00 / hour	4	$740.00
Mileage		$0.58 / mile	800	$464.00
Vehicle Usage		$17.00 / hour	24	$408.00
Subcontracted Drill Rig (Hollow-Stem-Auger) + Analytical (HAZMAT) Laboratory Testing				
Drilling (On-Site Prevailing Wage)		$2,360.00 / day	2.5	$5,900.00
Mobilization to King City		$1,600.00 / site	1	$1,600.00
Per Diem		$350.00 / day	3	$1,050.00
Photo-Ionization Detector (PID)		$110.00 / day	3	$330.00
Mark-up			18%	$1,598.40
			SUBTOTAL	**$15,666.40**
Optional Task 2: Geotechnical Laboratory Testing				
Moisture content (ASTM D2216)		$20.00 / each	30	$600.00
Moisture & density (ASTM D2937) ring samples		$30.00 / each	30	$900.00
Atterberg limits (ASTM D4318) 3 points		$150.00 / each	15	$2,250.00
Particle size - Sieve only 1½ inch to #200 (ASTM D6913/CTM 202)		$135.00 / each	30	$4,050.00
Modified Proctor compaction 4 inch diameter mold (Methods A & B ASTM D1557)		$220.00 / each	2	$440.00
Expansion Index (EI, ASTM D4829)		$130.00 / each	2	$260.00
R-Value (CTM 301) untreated		$310.00 / each	15	$4,650.00
Corrosion suite: minimum resistivity, sulfate, chloride, pH (CTM 643)		$245.00 / each	2	$490.00
			SUBTOTAL	**$13,640.00**
Optional Task 3: Geotechnical Analyses and Reporting (Office)				
Principal		$221.00 / hour	8	$1,768.00
Senior Project Engineer	Assuming iterative review process with City and Caltrans.	$185.00 / hour	32	$5,920.00
GIS Analyst		$149.00 / hour	6	$894.00
Project Administrator/Word Processor		$72.00 / hour	5.05	$363.60
			SUBTOTAL	**$8,945.60**
Optional Task 4: Meetings Budget				
Principal		$221.00 / hour	8	$1,768.00
Senior Project Engineer		$185.00 / hour	8	$1,480.00
			SUBTOTAL	**$3,248.00**
			TOTAL ESTIMATED COST	**$ 41,500.00**

EXHIBIT 3

SUBCONSULTANT LIST

Proposed Subconsultants

Subconsultant Firm(s) Name and Address	Scope of Work	Dollar Amount of Work
Anil Verma Associates	Architectural engineering/design; mechanical/ electrical	$10,000
Leighton Consulting	Geotechnical engineering	$67,969
Overland, Pacific & Cutler	ROW acquisitions (optional)	$10,000
Rail Surveyors & Engineers	Surveying	$84,380
Rincon	Environmental support (optional, as needed)	$2,000

Name of Lead Firm:
RailPros

Printed Name and Title of Signatory:
Douglas B. Sawyer, Senior Vice President

Signature:

Date:
3/19/20

San Luis Obispo Council of Governments
GRANT AGREEMENT

Grant Number
SRA 2019-3

1. GRANT TITLE King City Rail Passenger Platform	
2. NAME OF RECIPIENT AGENCY (GRANTEE) King City, California	3. Grant Period From: 05/01/2019 To: 12/31/2021
4 AGENCY TO ADMINISTER GRANT San Luis Obispo Council of Governments (SLOCOG)	
5. GRANT DESCRIPTION The award provides funding for the engineering, design and pre-construction activities needed for a passenger rail station platform in King City, for use on the Coast Starlight Route.	
6. State Funds Allocated Under This Agreement Shall Not Exceed: $1,471,470.00	

7. TERMS AND CONDITIONS:

The parties agree to comply with the terms and conditions of this Agreement.

We, the officials named below, hereby swear under penalty of perjury under the laws of the State of California that we are duly authorized to legally bind the Grant recipient to the described Grant terms and conditions.

IN WITNESS WHEREOF, this Agreement has been executed by the parties hereto.

8. APPROVAL SIGNATURES

A. AUTHORIZING OFFICIAL OF RECIPIENT AGENCY	B. AUTHORIZING OFFICIAL OF SAN LUIS OBISPO COUNCIL OF GOVERNMENTS
NAME: Steve Adams PHONE: (831) 385-3281	NAME: Peter Rodgers PHONE: (805) 781-4219
TITLE: City Manager	TITLE: Executive Director
ADDRESS: 212 South Vanderhurst Avenue, King City, CA 93930	ADDRESS: 1114 Marsh St. San Luis Obispo, CA 93401
EMAIL: sadams@kingcity.com	EMAIL: prodgers@slocog.org
8/13/19 *(Signature) (Date)*	8/13/19 *(Signature) (Date)*

9. ACCOUNTING OFFICER, SAN LUIS OBISPO COUNCIL OF GOVERNMENTS
NAME: Robert Cone
ADDRESS: 1114 Marsh St.
San Luis Obispo, CA 93401

10. PROJECTED EXPENDITURES
Public Utility Code §99312.3

FUND	CFDA	ITEM/APPROPRIATION	F.Y.	CHAPTER	STATUTE	AUTHORIZED EXPENDITURES
Public Transportation Fund	NA	0521-601-0046	2017	86/2017	2017	$1,471,470.00
				AGREEMENT TOTAL		$1,471,470.00

	AMOUNT ENCUMBERED BY THIS DOCUMENT $1,471,470.00
I CERTIFY upon my own personal knowledge that the budgeted funds are available for the period and purpose of the expenditure stated above.	PRIOR AMOUNT ENCUMBERED FOR THIS AGREEMENT $0
ACCOUNTING OFFICER'S SIGNATURE ☒	DATE SIGNED 8/21/19
	TOTAL AMOUNT ENCUMBERED TO DATE

TERMS AND CONDITIONS

1. BACKGROUND

The Road Repair and Accountability Act of 2017, Senate Bill (SB) 1 provides increased funding to maintain and improve California's transportation system. SB 1 directs funding specifically to commuter rail and intercity rail through Public Utility Code §99312.3 which continuously appropriates the revenue received from a 0.5 percent sales tax on diesel fuel to State Rail Assistance. State Rail Assistance (SRA) projects benefit the public by improving rail service and maximizing the quality of the rail service in California, promoting connectivity, improving integration of intercity rail service, and efforts that have the greatest potential to grow rail ridership.

2. PROJECT DESCRIPTION:

Engineering, design and pre-construction activities for a new rail passenger platform in King City on the Union pacific Rail Road's (UPRR) Coast Subdivision. This project provides benefits as an investment in additional local stops on the Coast Route for immediate use by the long-distance Coast Starlight and longer-term use by intercity trains between Goleta and Gilroy. The City of King is leading a longer-term project to construct a new rail station and support facilities and on City-owned land adjacent to the rail corridor.

3. DELIVERABLES

Deliverables include;

a) Design for the King City Interim Station Platform.
b) Final Estimate, Schedule and Funding Plan for construction.
c) Service and Operations Agreements (drafts) with UPRR and Amtrak for platform use.

Evidence of Deliverables completion to be verified through ongoing reporting (Section 4 below), or upon request by SLOCOG

4. FUNDING & REIMBURSEMENT

SRA FUNDING AMOUNT $1,471,470.00, TOTAL PROJECT AMOUNT, $1,471,470.00

The Grantee agrees to account for all costs for the PROJECT to be reimbursed quarterly by SLOCOG pursuant to this Agreement and agrees to perform all the reimbursable work for the project according to the CalSTA quarterly payment schedule plus 30 days.

After the opening of bids, the Grantee shall notify SLOCOG of any cost overruns or underruns to the original cost estimate.

a) If less funding than what was programmed is required for the PROJECT, the cost savings will be made available for reprogramming by SLOCOG and CalSTA.
b) If more funding than what was programmed is required for the PROJECT, the Grantee will be solely responsible for providing the additional funding.

King City may submit an invoice for reimbursement of funds expended for the PROJECT no more than once per quarter, using the attached Reimbursement Request Form (Exhibit A). All invoices must contain the following:

a) PROJECT number and name.
b) A brief description of work accomplished during the billing period.
c) A copy of the consultant's bill to King City (if applicable).
d) Amount expended by King City during the billing period, with evidence of funds expended (e.g. copies

checks to consultant or accounting documentation, etc.).

e) Amount requested for reimbursement for the billing period.

Funds authorized under this agreement will be distributed on a quarterly basis by SLOCOG. SLOCOG agrees to reimburse the Grantee within 30 days of receipt of a completed reimbursement request form (Exhibit A) with all applicable attachments and signatures or as funds become available, an amount expended by King City during the invoices' billing period. SLOCOG's total cost obligation shall not exceed the amount awarded (*see Item 6 of Grant Agreement*).

The Grantee is responsible for the implementation of the project consistent with the funding plan submitted with the allocation request and ensuring all matching requirements are met. The Grantee is responsible for ensuring funds are only applied to approved expenditures in accordance with the guidelines.

5. PROJECT ADMINISTRATION:

The Grantee shall comply with the State Rail Assistance Guidelines (October 13, 2017).

The Grantee certifies that the required environmental documentation was complete before expending an allocation of SRA funds on construction. The Grantee assures that project complies with Public Resources Code §21100 and §21150.

The Grantee certifies that a dedicated bank account for SRA funds only will be established within 30 days of receipt of SRA funds.

The Grantee certifies that when SRA funds are used for a transit capital project, that the project will be completed and remain in operation for its useful life.

The Grantee certifies that it has the legal, financial, and technical capacity to carry out the project, including the safety and security aspects of that project.

The Grantee certifies that they will notify SLOCOG of pending litigation, dispute, or negative audit findings related to the project, before receiving an allocation of funds.

Any interest the Grantee earns on SRA funds must be used only on approved SRA projects.

The Grantee shall notify SLOCOG within 60 days of any changes to the approved project with a Corrective Action Plan (CAP) subject to approval and acceptance by SLOCOG and CalSTA.

Funds must be encumbered and liquidated within the time allowed under this agreement.

The Grantee shall be responsible for complete performance of the work described in this award. All work shall be accomplished in accordance with the applicable provisions of the Public Utilities Code, the Government Code, and other applicable statutes and regulations. Failure to complete the funded work could require repayment of any or all funds, plus any interest earned, as determined by SLOCOG and CalSTA.

6. REPORTING

The Grantee shall comply with the Reporting Obligations defined in the SRA Guidelines.

The Grantee is required to provide a Semi-Annual Progress Report on the activities and progress of this grant to ensure activities are performed timely, within approved scope and cost, and are achieving the intended purpose for which they are to be utilized. The Grantee must provide completed and signed progress reports every six months that covers information accrued from July 1st to December 31st and January 1st to June 30th. The reports will be due by February 15th and August 15th of each year the Grant Period, until the approved project is completed, and the final project report has been filed.

Final Project Report shall be completed once the project has been completed. The Grantee must notify SLOCOG by email or letter and submit a final project report within six months of completion. Please note, once an agency

has received all SRA funding for a particular project, the project must be fully expended within four years.

Corrective Action Plans shall be submitted to SLOCOG for approval for any changes to the originally approved scope, schedule, or costs of the approved Allocation Request or the SRA Award.

Agencies, with delinquent reports will NOT receive further State Rail Assistance allocations until SLOCOG has received reports. The Grantee is responsible for submitting these reports to SLOCOG, and SLOCOG will submit them to CalSTA.

7. RECORD RETENTION

The Grantee agrees and assures that its contractors and subcontractors shall establish and maintain an accounting system and records that properly accumulate and segregate incurred project costs and matching funds by line item for the project. All accounting records and other supporting papers of the Grantee, its contractors and subcontractors connected with SRA funding shall be maintained for a minimum of three (3) years after the "Project Closeout" report, and shall be held open to inspection, copying, and audit by representatives of the State and the California State Auditor. Copies thereof will be furnished by the Grantee, its contractors, and subcontractors upon receipt of any request made by the State or its agents. In conducting an audit of the costs claimed, the State will rely to the maximum extent possible on any prior audit of the Grantee pursuant to the provisions of federal and State law. In the absence of such an audit, any acceptable audit work performed by the Grantee's external and internal auditors may be relied upon and used by the State when planning and conducting additional audits.

For the purpose of determining compliance with Title 21, California Code of Regulations, Section 2500 et seq., when applicable, and other matters connected with the performance of the Grantee's contracts with third parties pursuant to Government Code § 8546.7, the project sponsor, its contractors and subcontractors and the State shall each maintain and make available for inspection all books, documents, papers, accounting records, and other evidence pertaining to the performance of such contracts, including, but not limited to, the costs of administering those various contracts. All of the above referenced parties shall make such materials available at their respective offices at all reasonable times during the entire project period and for three (3) years from the date of final payment. The State, the California State Auditor, or any duly authorized representative of the State, shall each have access to any books, records, and documents that are pertinent to a project for audits, examinations, excerpts, and transactions, and the Grantee shall furnish copies thereof if requested.

The Grantee, its contractors and subcontractors will permit access to all records of employment, employment advertisements, employment application forms, and other pertinent data and records by the State Fair Employment Practices and Housing Commission, or any other agency of the State of California designated by the State, for the purpose of any investigation to ascertain compliance with this document.

8. SPECIAL SITUATIONS

The State may terminate the grant for any reason at any time if it is determined by the State, that there has been a violation of any State or federal law or policy by the Grantee during performance under this or any other grant agreement or contract entered into with the State. If the grant is terminated, the Grantee may be required to fully or partially repay funds.

The State may perform an audit and/or request detailed project information of the project sponsor's SRA funded projects at SLOCOG and CalSTA's discretion at any time prior to the completion of the SRA funded project.

Under extraordinary circumstances, The Grantee may terminate a project prior to completion. In the event the Grantee terminates a project prior to completion, the Grantee must (1) contact SLOCOG and CalSTA in writing and after receipt of such notice; (2) pursuant to verification, submit a final report indicating the reason for the termination and demonstrating the expended funds were used on the intended purpose; (3) submit a request to reassign the funds to a new project within 180 days of termination.

9. OTHER PROVISIONS

All obligations of State under the terms of this Agreement are subject to the appropriation of resources by the Legislature and the encumbrance of funds under this Agreement.

All obligations of the Grantee under the terms of this Agreement are subject to authorization and allocation of resources by the Grantee.

Nothing in the provisions of this Agreement is intended to create duties or obligations to or rights in third parties not parties to this Agreement or affect the legal liability of either party to this Agreement by imposing any standard of care imposed by law.

Neither State nor any officer or employee thereof is responsible for any injury, damage or liability occurring or arising by reason of anything done or omitted to be done by the Grantee under or in connection with any work, authority, or jurisdiction delegated to the Grantee under this Agreement. It is understood and agreed that, pursuant to Government Code Section 895.4, the Grantee shall fully defend, indemnify, and save harmless the State of California, its officers, and employees from all claims, suits, or actions of every name, kind, and description brought for or on account of injury (as defined in Government Code Section 810.8) occurring by reason of anything done or omitted to be done by the Grantee under or in connection with any work, authority, or jurisdiction delegated to the Grantee under this Agreement.

Neither the Grantee nor any officer or employee thereof is responsible for any injury, damage, or liability occurring or arising by reason of anything done or omitted to be done by State under or in connection with any work, authority, or jurisdiction delegated to State under this Agreement. It is understood and agreed that, pursuant to Government Code Section 895.4, State shall fully defend, indemnify, and save harmless the Grantee, its officers, and employees from all claims, suits or actions of every name, kind, and description brought for or on account of injury (as defined in Government Code Section 810.8) occurring by reason of anything done or omitted to be done by State under or in connection with any work, authority, or jurisdiction delegated to State under this Agreement.

Correspondence related to CalSTA should go to:
Bruce Roberts
915 Capitol Mall, Suite 350B, Sacramento, CA 95814
(916) 801-3321

10. LIABILITY

IF the Grantee transfers its risk connected with design or construction of this project to independent contractors, the Grantee agrees to use its best efforts to obtain the independent contractor's inclusion of SLOCOG and CalSTA as an indemnitee and in any insurance procured by such independent contractor(s) for the project, to name SLOCOG and CalSTA as an additional insured.

11. This Agreement shall terminate on 12/31/2021 or upon receipt of all deliverables and the final report, whichever occurs first.

FUND NUMBER	CATALOG NUMBER	FUND DESCRIPTION	TOTAL AMOUNT
2019-3	SRA 2019-3	State Rail Assistance	$1,471,470.00

The Grantee Agency officials named on the grant agreement, certify by way of signature on the grant agreement signature page, that the Grantee Agency complies with all applicable State rules, guidelines, policies and laws in effect with respect to the periods for which it receives grant funding.