WILSON & COMPANY

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October 16, 2015

Steve DeGeorge
Ventura County Transportation Commission
950 County Square Drive, Suite 207
Ventura, CA 93003

RE: Ventura County Transportation Commission (VCTC) Request for Proposal – Bridge Inspections Bridge Load Ratings on the Santa Paula Branch Line

Dear Mr. DeGeorge and Members of the Selection Committee:

Just recently, the FRA announced upcoming changes increasing the requirements of inspections of track and railroad structures. The specific knowledge required to successfully complete and manage railroad inspections is an asset that cannot be substituted. VCTC values experience, safety, expertise, and communication as successful traits of the inspection personnel. Our inspection team presented in this proposal represents that unique knowledge base.

- **Understanding Your Project**. Our team has extensive experience in both inspection and rating of Rail structures per FRA and AREMA Standards. In recent years, our team has worked on several significant bridge inspection and load rating projects for various clients. Because of this experience, we have a keen understanding of your project. Our most recent experience included the 2015 annual inspections for Caltrain, a commuter and freight line that runs between San Francisco and San Jose. We've been performing the Annual Bridge Inspections for both Caltrain and Rail Runner in New Mexico for the past several years. As part of those projects our tasks have included inspections, load ratings for all types of structures represented in the Santa Paula Branch Line, and repair recommendations and estimates. Our recent experience would allow us to hit the ground running to give VCTC an expedited product, allowing more time for any additional coordination before the final due dates.

- **Higher Relationships.** Project success is all about Higher Relationships. Through discipline, intensity and collaboration, we foster an environment of shared ownership, and tailor the right solutions unique to your specific goals and needs. We exercise Discipline by focusing on the details without exceptions. Our Intensity is expressed in our passion to meet and exceed expectations. Collaboration produces the best results; our vast network of professional experts and the expertise of our clients and project stakeholders combine for broader insight and wisdom. We Share Ownership by adopting your missions, visions, goals, and objectives as our own. The typical outcome to Higher Relationships is finding the right Solutions; always valuing your needs and the potential implications to the broader community.

Our mission for excellence distinguishes us as a firm: We listen carefully; We pay attention to details; We recognize the importance of providing quality, timely, and cost-effective solutions to you.

As Principal-In-Charge, I can assure you of the responsiveness and commitment required to provide quality services in a timely manner. I can be reached via phone at (303) 501-1216 or email at andy.leifheit@wilsonco.com.

We look forward to working with you.

Sincerely,
WILSON & COMPANY

Andrew Leifheit, PE
Principal-in-Charge

HIGHER Relationships
SHARED OWNERSHIP • COLLABORATION
INTENSITY • DISCIPLINE • SOLUTIONS

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Structural Inspection Expertise

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FIRM INTRODUCTION

Qualifications and Capabilities

Wilson & Company is qualified to perform your bridge inspection and bridge load rating calculations project based on our technical expertise and recent experience with similar projects. Our team is well versed in both AREMA and FRA 49 CFR Part 237 Bridge Safety Standards inspection and rating requirements, as well as techniques for rehabilitation of existing aging structures. Our most recent experience includes inspecting 260 structures for the Caltrain Corridor running from San Jose to San Francisco and 101 structures for NMDOT Rail Runner running from Belen to Santa Fe. These projects are very similar to your project in the fact that both lines were former class 1 railroads purchased by local entities. Our project manager, **Todd Kelley, PE, SE**, managed both projects this past year and also performed all the bridge inspections.

Wilson & Company was founded in 1932, and is a multi-disciplinary engineering, architecture, surveying, mapping, environmental, and planning firm. Established in 1998, our Southern California office is comprised of design professionals with extensive experience in providing a variety of engineering and inspection services. Our engineers will work closely with you to ensure schedules are met and the scope of work is within specifications and in compliance with contract documents. Over the past 17 years we've established relationships and provided ongoing service to several California agencies, including Caltrain (TASI) and both the BNSF and UP.

Wilson & Company is licensed to do business in the State of California - C2454943.

Our staff of 450 professionals includes civil, mechanical, electrical and structural engineers; architects; planners; biologists; surveyors; mappers; GIS specialists; pilots; right-of-way agents; financial analysts; program and construction managers; and inspectors. We provide services to a diverse client base including federal, state, municipal, and county governments, public transportation agencies, railroad companies, industrial and commercial corporations, private developers, institutional, primary and secondary education, healthcare, and renewable energy companies.

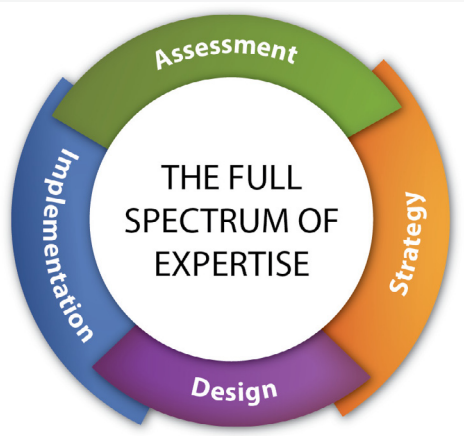
Wilson & Company is led by a board of directors and shareholders that share a common interest in establishing higher relationships with each of our clients. All of our owners are practicing professionals, which means the company leadership, project managers, and staff will go beyond the ordinary to share ownership with the client; to induce collaboration, intensity and discipline; and to develop innovative and sustainable solutions into every project.

Our culture begins at strengthening and building a relationship with you that goes beyond the day to day tasks of a specific project and moves to creating shared goals and common successes. We view relationships as a vital element for any given project regardless of size, cost, and scope. With this culture of building partnerships and valued standings, we are confident that our experience and coordination abilities will help you accomplish your objectives.

Project success is all about Higher Relationships. Through discipline, intensity and collaboration, we foster an environment of shared ownership, and tailor the right solutions unique to our clients' specific goals and needs. Our staff exercises Discipline by focusing on the details without exceptions. Our Intensity is expressed in our passion to meet and exceed expectations. Collaboration produces the best results; our vast network of professional experts and the expertise of our clients and project stakeholders combine for broader insight and wisdom. We Share Ownership by adopting our partners' missions, visions, goals, and objectives as our own. The typical outcome to Higher Relationships is finding the right Solutions, whether innovative or practical, daring or resourceful, and always valuing the needs of stakeholders and the potential implications to the broader community. Higher Relationships is the core of our business philosophy and drives project success.

Experience Working with Railroad Bridge Inspections & Ratings

Our leadership team has been working diligently to understand your project and VCTC current and future needs as it relates to the Santa Paula Branch Line Bridge Management. The members of our team have been specifically selected based on technical expertise and their experience to complete your project both economically and quickly.



Since 2010 we've inspected hundreds of bridges annually for Caltrain and the NMDOT Rail Runner. We have held these contracts for several consecutive years, demonstrating our level of commitment and service. We have also rated many of those structures as part of the inspection project. Please refer to our similar projects on **PAGE 4**. We are knowledgeable in the requirements of 49 CFR 237 and the requirements for compliance. All inspections and ratings performed are in compliance with the AREMA standards.

We pride ourselves on our safety and that starts with the proper training. All staff that may be on or near railroad property are given annual training in Road Worker On Track Safety Training per 49 CFR part 214. In addition, our bridge inspectors receive annual training on fall protection, rescue techniques, and climbing inspections.

Experience Coordinating Multiple Projects

Sometimes referred to as the trio of project management, managing scope, schedule, and budget of multiple concurrent projects are critical to a firm's success. Selecting a proven project manager, as well as, an experienced team is beneficial to the overall management of your project, while not forgetting about quality. We've selected **Todd Kelley** to manage your project as he strives to achieve excellence in managing projects by assigning all contracts to a detailed schedule and task specific budget. Our approach to project success depends upon frequent interaction and effective dialogue with your personnel to ensure that we fully meet all your expectations by instilling those expectations in the scope, schedule and budget.

Our repeat client rate exceeds 75%, which is a testament to client satisfaction with our work and our consistent fit with our client's values. Project success depends on understanding your needs and preferences, while providing open communication, attention to detail, follow- through, and an exceptional attitude of client service. We commit our best team to you, and will deliver a successful project.

OUR TEAM COMPRISED OF STRUCTURAL DESIGNERS AND INSPECTORS, ACTIVELY COLLABORATING WITH YOU, WILL DEVELOP EFFECTIVE, ECONOMICAL, AND APPLICABLE SOLUTIONS FOR THE VENTURA COUNTY TRANSPORTATION COMMISSION!

Similar Project Experience

Caltrain Bridge Inspections

Transit America Services Inc. (TASI)

Wilson & Company performs annual bridge inspections on the Caltrain Rail Corridor. The Caltrain ROW consist of former Southern Pacific and Union Pacific ROW. The corridor has been converted to mostly a commuter line that connects San Jose to San Francisco, although Union Pacific still runs freight along the corridor occasionally. The project includes inspection of 260 structures ranging from small pipe culverts to multiple span elevated structures requiring fall arrest equipment. Bridge types include timber trestles, steel thru plate girders, steel deck plate girders, steel thru trusses, precast concrete box girders, cast in place concrete and precast girders and slabs, and reinforced concrete culverts. As part of this project, we also performed load ratings for several bridges including timber trestles and steel deck plate girders. The inspections and load ratings are per the FRA and AREMA standards.

Rail Bridge Inspections

Colorado Springs Utilities (CSU)

Wilson & Company is contracted with CSU to perform the annual rail bridge inspections and ratings for the (6) structures located within the CSU right of way. The CSU rail lines allow BNSF trains to deliver loads of coal as needed to two separate power plants. The structures include (1) steel deck plate girder bridge spanning over an interstate and BNSF ROW, (2) hopper bridges for coal dumping, (1) precast concrete box girder bridge, and (2) reinforced concrete box culverts. Our scope of work includes inspecting, updating annual reports, and rating for all structures. The inspections and load ratings are per the FRA and AREMA standards.

Rail Runner Bridge Inventory and Inspection, New Mexico

New Mexico Department of Transportation (NMDOT)

Wilson & Company contracted with the NMDOT and Herzog to perform the inventory and inspection of railroad bridges owned by the state's Rail Runner lines. The rail lines are former BNSF Railway Company (BNSF) lines that were purchased by the state of New Mexico for the creation of a commuter rail line between Belen and Santa Fe, New Mexico. The program includes plans to extend the rail line from its current ownership in Lamy, New Mexico, and north to Raton. The project consists of developing forms and records in order to create working files for NMDOT that conform to its requirements for inventory, inspection, and record-keeping.

Our services included full inspection of the structure to ensure that it conforms to the recommendations of the American Railway Engineering and Maintenance-of-Way Association (AREMA), as well as to ensure that the rating of individual bridge members conform to FHWA inspection criteria. The records are being developed in a format that allows input into the Pontis bridge management soft ware used by state DOTs. Standard forms used by NMDOT for its highway bridge inventory and inspection were modified to meet the needs of railway bridges, while maintaining the ability to store and retrieve the records in a manner that is consistent with its own internal procedures.

We continue to provide qualified bridge inspectors trained in both highway and railway bridges for this on-going project with NMDOT and Herzog. Our broad expertise in both disciplines has proven invaluable in the entire inventory and inspection process. In total, we have inspected the following structures: 30 steel bridges, 24 timber trestles, 27 culverts, and 20 concrete bridges.

Russian River Railroad Bridge Study and Rehabilitation, California

Sonoma-Marin Area Rail Transit (SMART) District

Wilson & Company was contracted with the Sonoma-Marin Area Rail Transit (SMART) District to study the Russian River crossing to evaluate the existing structure and recommend alternatives for rehabilitation and/or replacement. The crossing currently consists of three steel through truss bridges with timber trestle approach spans, constructed in the 1920s. A thorough inspection and load rating was conducted by our staff to assess the current condition and the capability to support passenger rail traffic and compliance with current CPUC and AREMA standards.

Using the data gathered during the field investigation and the load rating, a structure selection report was provided to SMART presenting various replacement and rehabilitation options, estimated construction costs for each alternative, and a recommended alternative.

KEY PERSONNEL QUALIFICATIONS

Providing experience, commitment, accountability, and efficiency, our key personnel were selected to offer you the most technically capable group of individuals with the knowledge related to bridge inspection, repair, and rehabilitation, coupled with the ability to provide bridge load rating calculations. Our team offers extensive resources drawing from local and national experience with expertise in engineering, inspection and construction. We are leaders in the industry. Our staff has the innovative knowledge and a thorough understanding of your project requirements and processes.

You will have direct access to our Project Manager **Todd Kelley, PE, SE** and our key personnel regarding issues that are pertinent including reviews, updates, concerns, field related issues, and personnel.

Strength & Stability

We recognize that strong project management is the key to successfully delivering high quality engineering services under this contract. Todd has a proven record in performing at a high level both technically and collaboratively with transportation agencies. He embraces our Higher Relationships culture and understands that open lines of communication are vital to meeting your expectations.

Staff Resources & Availability

Our Key Personnel are senior engineers/staff members with a vast range of engineering experience. They will focus on facilitating the day-to-day completion of the project(s) and providing a quality end product to meet your policies, procedures, and preferences. Our approach will allow our team to focus exclusively on the technical issues at hand, while Todd will be dedicated to coordination and administrative duties associated with the project. From the beginning through the completion of an assignment, we will serve as an extension of your staff and will be at your disposal to ensure the success of the project.

Personnel	Availability
Andrew Leifheit, Principal	50%
Todd Kelley, Project Manager & Field Inspections	80%
Ali Rigeb, Field Inspection & Bridge Rating	80%
Joey Holste, Bridge Rating	80%
Evan Anderson, Bridge Rating	80%

Professional Qualifications and Experience

Principal-in-Charge: **Andrew Leifheit, PE**

Andrew will be responsible for the overall coordination of the contract and quality control, and he will ensure that you receive the necessary resources from our Team. He has extensive experience managing and providing bridge construction engineering services including the design of false work, excavation shoring, temporary structures, and structures demolition. Andrew's formal technical training is in bridge engineering and construction engineering. He has provided engineering services to the Union Pacific Railroad, BNSF Railway, Kansas City Southern Railroad, Alaska Railroad Corporation, various short line railroads, industry clients, and shippers. Andrew is a licensed Professional Engineer in the State of California.

Andrew's Safety Training
FRA 214 October 12, 2015

Andrew's similar project experience includes the following:

- Principal-in-Charge, **Colorado Springs Utilities Railroad Bridge Inspections**, Colorado Springs, CO, 2014-2015
- Principal-in-Charge, **NMDOT Rail Runner Bridge Inspection/Rating Project**, Albuquerque, NM, 2014-2015
- Project Manager, **Caltrain Bridge Inspection Project**, San Francisco, CA, 2012-2014
- Project Manager, **Minor Structures Inspection**, Arapahoe County, CO, 2012
- Structures Task Manager, **SMART Major Bridges - Russian River Railroad Bridge Study and Rehabilitation**, Healdsburg, CA, 2010

Project Manager/Bridge Inspector: Todd Kelley, PE, SE

Todd's Safety Training	
FRA 214	May 26, 2015
Fall Protection	March 5, 2015

Todd will be responsible for Project Management and will be designated as the Railroad Bridge Engineer and Railroad Bridge Inspector in charge of inspection management. He is a qualified Railroad bridge Engineer per 49 CFR 237.51 and a qualified Railroad Bridge Inspector per 49 CFR 237.53. Todd has over eight years of experience in the design and inspection of structures which includes evaluating bridges in accordance with the AREMA Inspection Guidelines and 49 CFR 237. He also has extensive experience in the inspection, structural rating, and retrofit of existing structures including masonry arch bridges, reinforced concrete box culverts, reinforced concrete and steel bridge superstructures and substructures, and timber trestle bridges. This experience provides a solid background in structural rating and rehabilitation construction techniques allowing him to develop creative and effective solutions to complex problems. Todd has completed the AREMA Bridge Inspection and Streambed Scour course and is a certified FHWA Inspection Team Leader. He has attended the two-week training for the FHWA National Highway Institute Safety Inspection of In-Service Bridges and a 4 day course for the FHWA Fracture Critical Techniques for Steel Bridges. He is dedicated to the success of the projects he undertakes and the success of his clients. Todd has taken the Professional Engineer exam for the State of California, and his status is currently pending.

Todd's similar project management and inspection experience includes the following:

- Project Manager/Inspection Team Leader, **Caltrain Bridge Inspection Project**, San Francisco, CA, 2013/2015
- Project Manager/Inspection Team Leader, **NMDOT Rail Runner Bridge Inspection/Rating Project**, Albuquerque, NM, 2014-2015
- Project Manager/Inspection Team Leader, **Colorado Springs Utilities Railroad Bridge Inspections**, Colorado Springs, CO, 2015
- Project Manager/Inspection Team Leader, **Musket Corporation Terminal Bridge Inspection/Rating Project**, Dore, ND, 2015
- Inspection Team Leader, **MetroLink Inspections Program**, St. Louis, MO, 2013

Project Engineer / Field Inspections / Bridge Rating: Ali Rigeb, PE

Ali's Safety Training	
FRA 214	May 26, 2015
Fall Protection	March 5, 2015

Ali has been involved in the inspection of numerous highway and railroad bridges for DOT's and other private clients. Particular types of structures in his inspection work include, but are not limited to, reinforced concrete slab, post tensioned concrete slab, prestressed concrete girder, steel beam, thru-plate girder, deck plate girder, timber structures, thru-trusses and culverts/pipes. He has also performed ratings for both highway and railroad bridges utilizing AASHTO LRFD and AREMA design codes along with applicable timber, steel and prestressed concrete concepts.

Ali's similar inspection experience includes the following:

- Inspector/Data Evaluation/Bridge Rating, **Caltrain Bridge Inspection Project**, San Francisco, CA, 2012-2015
- Inspector/Data Evaluation/Bridge Rating, **NMDOT Rail Runner Bridge Inspection/Rating Project**, Albuquerque, NM, 2013-2015
- Bridge Rating, **Musket Corporation Terminal Bridge Inspection/Rating Project**, Dore, ND, 2014

Project Engineer / Bridge Rating: Evan Anderson, EI

Evan's Safety Training	
FRA 214	March 31, 2015
Fall Protection	March 5, 2015

Evan has design, review, inspection, and rating experience on a variety of bridge projects including: steel deck plate girder, through plate girder, and composite deck bridges, precast concrete girder, box girder, beam slab bridges, and timber bridges. He has also spent time in the field observing and inspecting the construction of various structures including: bridges, tunnels, box culverts, and various retaining wall types.

Evan's similar inspection experience includes the following:

- Inspector/Bridge Rating, **NMDOT Rail Runner Bridge Inspection/Rating Project**, Albuquerque, NM, 2013-2015
- Bridge Rating, **Musket Corporation Terminal Bridge Inspection/Rating Project**, Dore, ND, 2014

Project Engineer / Bridge Rating: **Joseph Holste,EI**

Joseph's experience includes designing structures based on the International Building Code, ASCE 7, AASHTO, and AREMA standards and has experience working in the field as an inspector as an engineering intern. Most recently while working with the City of Colorado Springs, he was able to increase his inspection background while inspecting structures that ranged from culverts to prestressed concrete girders. He also was in charge of keeping the City's database program up to date with structural information from each inspection.

Joseph's Safety Training	
FRA 214	March 31, 2015
Fall Protection	March 5, 2015

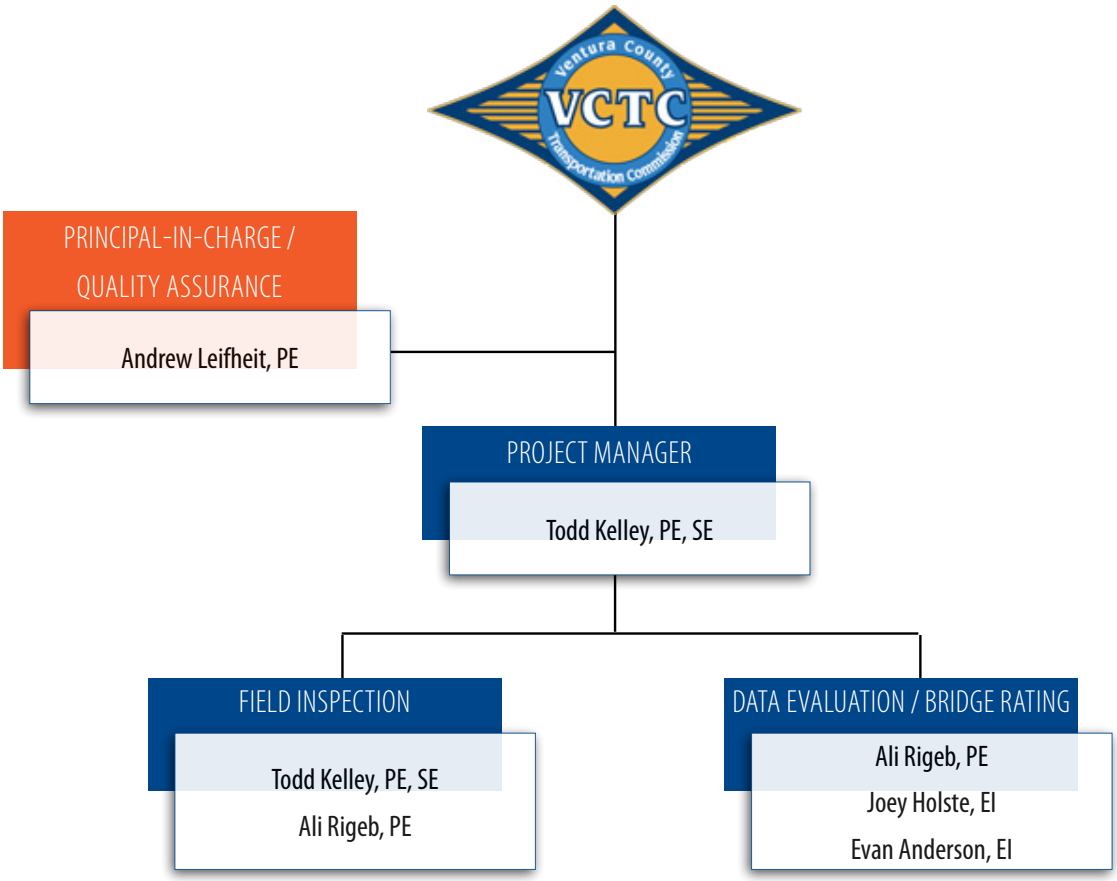
Joseph's similar inspection experience includes the following:

- Bridge Rating, **Colorado Springs Utilities Railroad Bridge Inspections**, Colorado Springs, CO, 2014
- Bridge Rating, **NMDOT Rail Runner Bridge Inspection/Rating Project**, Albuquerque, NM, 2014

Organizational Chart

We have organized our personnel to provide you with the support necessary to manage the assessment projects effectively. The below Organizational Chart shows the functional structure of our organization and identifies critical support elements and relationships.

We have supplied resumes highlighting our key personnel's qualifications and experience starting on **Page 9**.



ANDREW LEIFHEIT, PE

Service Unit Manager

YEARS OF EXPERIENCE	TOTAL 17 WITH FIRM 8
EDUCATION	MS, Civil Engineering, University of Colorado, 2001 BS, Civil Engineering, Colorado State University, 1997
LICENSES AND REGISTRATIONS	Professional Engineer Arkansas #15379, California #72783, Colorado #36797, Illinois #062-062280, Kansas #21387, Texas #97787, Utah #7353870-2202, Missouri #PE-2012032393, New Mexico #20225, New York #092488, Pennsylvania #PE080392, Washington #48554 Professional Structural Engineer: Alaska #SE 13304, Illinois #081-007032
ORGANIZATIONS, TRAINING, PUBLICATIONS, AWARDS	American Railway Engineering and Maintenance-of-Way Association (AREMA)

Andrew is responsible for engineering, inspection, and construction management personnel located in the Denver and Albuquerque offices. His role includes ensuring the quality, schedule, and budgets of the diverse projects are being met and maintained within the organization. He is also responsible for business development, client relations, and large scale, multi-discipline project management and coordination. Andrew's formal technical training is in bridge engineering and construction engineering. He has served such clients as the Union Pacific Railroad, BNSF Railway, Kansas City Southern railroad, Alaska Railroad Corporation, various short line railroads, industry clients, and shippers.

Relevant Experience

- CenterPoint Properties, Joliet Bulk Barge and Rail Crude by Rail Terminal, Project Manager, Joliet, IL | 2015
- Plains All American Pipeline, Niobrara Crude by Rail Terminal, Project Manager, Carr, CO | 2015
- Plains All American Pipeline, Tampa Crude by Rail Terminal Expansion, Project Manager, Tampa, CO | 2015
- LG Everist, Carr, CO Industry Track Expansion Project; Project Manager, Carr, CO | 2015
- BNSF Railway, Bridge 31.43 design and construction, Principal-in-charge, Spring Hill, KS | 2015
- BNSF Railway, Granada Bridge Inspections, Principal-in-charge, Granada, CO | 2015
- BNSF Railway, Federal Blvd. Bridge Inspections, Principal-in-charge, Broomfield, CO | 2015
- BNSF Railway, 120th Ave. Bridge Inspections, Principal-in-charge, Broomfield, CO | 2015
- BNSF Railway, Bridge 4.42 design and construction, Principal-in-charge, Denver, CO | 2014
- Colorado Springs Utilities, Railway Bridge Inspection Services, Principal-in-charge, Colorado Springs, CO | 2014-2015
- BNSF Railway, Fullerton Grade Separation Project, Structural Engineer of Record, Fullerton, CA |2014
- Tesoro Petroleum Corporation, Anacortes Crude by Rail Terminal, Structural Task Lead, Anacortes, WA | 2012
- New Mexico Dept. of Transportation, Rail Runner Bridge Inspections, Project Manager, New Mexico | 2010-2013
- Caltrain, TASI Rail Bridge Inspections, Project Manager, Bay Area, CA | 2012-2014
- BNSF Railway, AECI Industry Track Bridge, Structural Task Lead, New Madrid, MO | 2012
- El Paso County, Oil Well Road Bridge Replacement, Project Manager for Bridge Replacement Design, El Paso County, Colorado | 2012
- Arapahoe County, Yosemite Street Improvements, Project Manager for Roadway Design Improvements, Arapahoe County, Colorado | 2012
- SMART Major Bridges, Russian River Railroad Bridge Study and Rehabilitation, Structural Task Manager, Healdsburg, California | 2010

- Arapahoe County, High Line Canal Trail at Illiff Avenue Pedestrian Underpass, Project Manager for Design of a 200-foot box culvert, Arapahoe County, Colorado | 2010
- Arapahoe County, Minor Structures Inspection, Project Manager, Arapahoe County, Colorado | 2010
- CDOT, US 85/C-470 Interchange Improvements Phase I, Structures Task Manager, Douglas County, Colorado | 2010
- City of Barstow, Lenwood Road over the BNSF Grade Separation, Structures Task Manager, Lenwood, California | 2010
- City & County of Denver, Central Park Boulevard Interchange with I-70 Design-Build, Structures Task Manager, Denver, Colorado | 2010
- CDOT, 4th Lane at Farmington Hill Interchange Design-Build, Structures Task Manager, Durango, Colorado | 2009
- Mesquite Regional Landfill, Rail Structures Task Manager, Mesquite, California | 2009
- UPRR Bridge Improvements in Los Angeles Subdivision, Rail Structures Task Manager, City of Industry, California | 2009
- City & County of Denver, Leetsdale/Mississippi Interchange Widening, Box Culvert Extension Designer, Denver, Colorado | 2009
- Kansas City Southern Railway, Bridge 159.9, Design Engineer, Bossier City, Louisiana | 2007
- BNSF/Martin Marietta Materials Siding Bridge, Concrete Bridge Trestle and Associated Retaining Walls, Frisco, Texas | 2007
- CDOT, Colorado Springs Metro Interstate Expansion (COSMIX) Design-Build, Structural Designer, Colorado Springs, Colorado | 2006
- UPRR over Titan Road, Structural Designer, Douglas County, Colorado | 2005
- CDOT, Ramp K (I-25 to EB 270), Designer, Denver, Colorado | 2005
- Galveston Causeway, Designer, Galveston, Texas | 2005
- The Knolls at Wellington South, Client Relations, Wellington, Colorado | 2005
- Oakland Bay Bridge, Consultant, San Francisco, California | 2004
- City of Golden, Washington Avenue over Clear Creek, Designer, Golden, Colorado | 2004
- City of Northglenn, Community Center Drive over I-25, Structural Designer, Northglenn, Colorado | 2002
- Weld County, Sheep Draw Bridge & St. Vrain Bridge Replacements, Preliminary and Final Designs, Weld County, Colorado | 2002
- McWhinney Development, Boyd Lake Avenue - Structures and Retaining Walls for Roadway Crossings and Irrigation Canals and Bike Paths, Loveland, Colorado | 2001
- City & County of Denver, East Broncos Parkway Extension, Preliminary and Final Design, Denver, Colorado | 2000
- CDOT, C-470 Widening – Morrison Road to I-70/SH 470, Designer, Denver, Colorado | 1999
- CDOT, SH 14 over Pawnee Creek, Structural Engineer, Sterling, Colorado | 1998
- CDOT, US 550 New Mexico State Line North, Preliminary and Final Design, Durango, Colorado | 1998
- Arapahoe County, Replacement Bridge over Little Dry Creek (Brook Valley Way), Designer, Arapahoe County, Colorado | 1998
- CDOT, Construction Engineering Services, Value Engineering and Construction Engineering Services, Colorado

TODD S. KELLEY, PE, SE

Senior Structural Engineer

YEARS OF EXPERIENCE	TOTAL 8 WITH FIRM 2
EDUCATION	MS, Civil Engineering – Structural, Southern Illinois University, 2011 BS, Civil Engineering, Southern Illinois University, 2006
LICENSES AND REGISTRATIONS	Professional Engineer Missouri #2012000770, Colorado #47917, Washington #51312, New Mexico #22793, North Dakota #PE-10045, California PE - Pending Structural Engineer Illinois #081007447
ORGANIZATIONS, TRAINING, PUBLICATIONS, AWARDS	FHWA NHI Course 130055 – Safety Inspection of In-Services Bridges; FHWA NHI Course 130078 – Fracture Critical Inspection Techniques for Steel Bridges; Member ASCE AREMA – Bridge Inspection & Streambed Scour Seminar

Todd has become proficient in the area of design and inspection of bridges, building structures, and industrial structures over his six plus years of experience. Design experience during this time has consisted of the design of bridge superstructures and substructures; low rise building structures up to 30,000 ft2; and numerous reinforced concrete and structural steel industrial structures. Inspection experience includes routine and fracture critical inspections of light rail and highway bridges.

Relevant Experience

- TASI, Caltrain Bridge Inspection Project, Project Manager/Engineer of Record, San Francisco, California | 2015
- NMDOT, NM Rail Runner Bridge Inspection/Rating Project, Project Manager/Engineer of Record, Albuquerque, New Mexico | 2014-2015
- Crude Oil Facility, Joliet Bulk Barge & Rail Facility, Structural Task Manager, Joliet, Illinois | 2014-2015
- Crude Oil Facility, 4th Street Bridge Shell Puget Sound Refinery, Structural Task Manager, Anacortes, Washington | 2014
- Crude Oil Facility, PAAP Niobrara Crude Oil Loading Terminal, Structural Task Manager, Weld County, Colorado | 2014
- City of Colorado Springs, Austin Bluffs Widening, Structural Task Manager, Colorado Springs, Colorado | 2014
- TASI, Caltrain Bridge Inspection Project, Bridge Inspector, San Francisco, California | 2013
- Ridge Road Bike and Pedestrian Improvements, Structural Designer, Arvada, Colorado | 2013
- MetroLink Light Rail, Inspections Program, Team Inspection Leader, St. Louis, Missouri | 2011-2013
- Village of Granite City, Rehab/Retrofit of Six Mile Library, Lead Structural Engineer, Granite City, Illinois | 2013
- City of Des Peres, Claychester Drive Bridge Replacement, Structural Designer, Des Peres, Missouri | 2012
- Madison County Transit, Heritage Bike Trail, Bridge Inspector/Structural Designer, Glen Carbon, Illinois | 2010-2012
- Alberici Constructors, Bunge-SCF Grain Facility Design-Build, Lead Structural Engineer, Fairmount City, Illinois | 2011
- Jefferson County, Sandy Church Road Bridge Replacement, Structural Designer, Jefferson County, Missouri | 2011
- Southern Illinois University, Charles and Mary Lucas Athletic Annex, Lead Structural Engineer, Edwardsville, Illinois | 2010
- Village of Bethalto, Bethalto Water Treatment Plant Expansion, Lead Structural Engineer, Bethalto, Illinois | 2010
- Prairie Farms, Tank Addition and Building Expansion, Lead Structural Engineer, Granite City, Illinois | 2009
- City of Desoto, Dewitt Road Bridge Replacement, Structural Designer, Desoto, Missouri | 2009
- Village of Granite City, Horseshoe Lake Control Structure, Lead Structural Designer, Granite City, Illinois | 2009
- Suncoke Plant, Spark Box Addition to Pusher-Charger, Structural Designer, Granite City, Illinois | 2009

ALI RIGEB, PE

Bridge/Structural Engineer

YEARS OF EXPERIENCE	TOTAL 5 WITH FIRM 3.5
EDUCATION	MS, Structural Engineering, Georgia Institute of Technology, 2010 BS, Civil Engineering, University of Colorado, 2009
LICENSES AND REGISTRATIONS	Professional Engineer, Colorado
ORGANIZATIONS, TRAINING, PUBLICATIONS, AWARDS	American Society of Civil Engineers (ASCE), American Concrete Institute (ACI), LRFD for Highway Bridge Superstructures (NHI sponsored course), ASCE Seismic Design of Highway Bridges

Ali has five years of experience working as a structural engineer. During this time, he has designed and checked bridge superstructure and substructure components along with various retaining walls, foundations and excavation shoring. He has inspected numerous irrigation canals, railroad/highway bridges and culverts around the western U.S. and has also conducted on-site construction inspections for many projects. He has worked extensively with multiple design codes including AASHTO LRFD, AREMA and ASCE 7 and is proficient in Microstation.

Relevant Experience

- Transit American Services, Caltrain Bridge Inspection – Commuter Rail between San Francisco and San Jose, Inspector and rating for 266 Railroad Bridges, Culverts, and Pipes, San Francisco, California | 2012-2015 (Three Annual Inspections)
- BNSF Bridge 4.42 over Clear Creek Replacement, Independent Design/Plan Check, Adams County, Colorado | 2014
- Shell East Gate Crude Unloading Facility – 4th Street Bridge, Superstructure Designer, Anacortes, Washington | 2014
- New Mexico Rail Runner Bridge Inspection and Rating – Commuter Rail Between Santa Fe and Albuquerque, Inspector and rating for Railroad Bridges, Culverts, and Pipes, New Mexico | 2013-2015 (3 Annual Inspections)
- Plains All American Pipeline, Bakersfield Crude Unloading Facility, Designer of Foundations, Bakersfield, California | 2013-2014
- Montana Rail Link Railroad Underpass, Independent Design Check and Review, Belgrade, Montana | 2013
- City of Arvada, Ridge Road over Kipling Street, Performed Load Rating, Arvada, Colorado | 2013
- RTD, Gold Line and Northwest Corridor, Ensure Existing BNSF Operations were Not Effected through Construction, Denver, Colorado | 2012-2013
- AECI Bridge of I-55, Designer of Substructure, Marston, Missouri | 2012
- BNSF, Valley View Ave. Grade Separation Shoring, Independent Design Check, Santa Fe Springs, California | 2012
- El Paso County, Oil Well Road Bridge Replacement, Bridge Designer, El Paso County, Colorado | 2012
- CDOT, SH 101 Design-Build, Designer, Las Animas, Colorado | 2012
- Silverbullet Productions, Inc., Bridge over Willow Creek, Temporary Timber Trestle used in the Production of the Lone Ranger movie, Creede, Colorado | 2012
- RFTA Bus Rapid Transit System, Designed a Two-Tiered MSE Retaining Wall, Glenwood Springs, Colorado | 2011
- Bureau of Reclamation, Dry Canal Inspection of Urbanized Canals, Inspector and Report Writer of 31 Canals totaling 130 miles, Multiple Canals in Western US | 2010
- CDOT – FASTER Bridge Replacement, Federal Blvd. Bridge over Colfax Ave, Structural Independent Design Check, Denver, Colorado | 2010
- AECOM, Denver Union Station Underground Bus Terminal, Independent Design Check, Denver, Colorado | 2010
- RTD FasTracks Program, I-225 Corridor Segment 1, Design of Precast Concrete Panels and MSE Wall Internal Stability, Aurora, Colorado | 2010

EVAN ANDERSON, EIT

Structural Engineer in Training

YEARS OF EXPERIENCE	TOTAL 4 WITH FIRM 4
EDUCATION	MS, Civil/Structural Engineering, University of New Hampshire, 2011 BS, Civil Engineering George Washington University, 2009
LICENSES AND REGISTRATIONS	Engineer-in-Training New Hampshire #5559
ORGANIZATIONS, TRAINING, PUBLICATIONS, AWARDS	American Society of Civil Engineers, The American Railway Engineering and Maintenance-of-Way Association, Tau Beta Pi, ACI Award of Excellence,

Evan has been with Wilson & Company since 2012 and has design, review, inspection, and rating experience on a variety of bridge projects including: steel deck plate girder, through plate girder, and composite deck bridges, precast concrete girder, box girder, beam slab bridges, and timber bridges. Evan has also spent time in the field observing and inspecting the construction of various structures including: bridges, tunnels, box culverts, and various retaining wall types.

Relevant Experience

- BNSF Bridge 31.43 over 223rd Street, Bridge Superstructure Designer, Miami County, Kansas | 2015
- NMDOT, Rail Runner Bridge Inspection and Rating, Bridge Inspector and Rater, New Mexico | 2012-2015
- The Point Design-Build, Sign Structure Designer, I-15, Utah | 2015
- BNSF Bridge 4.42 over Clear Creek, Independent Reviewer and Field Inspector Denver, Colorado | 2014
- Colorado Springs Utilities Inspections, Bridge Rater Colorado Springs, Colorado | 2014
- Shell East Gate Puget Sound Refinery, Bridge Substructure Designer and Unloading Platform Designer, Anacortes, Washington | 2014
- Shell Feedstock Import Project, Structural Designer, Anacortes, Washington | 2014
- City of Arvada, Ridge Road Bridge Widening, Bridge Substructure Designer and Preliminary Engineering, Arvada, Colorado | 2013
- CDOT, Pecos Street over I-70 Bridge Replacement, Design of Falsework for Bridge Construction, Denver, Colorado | 2013
- Musket Corporation Bridge Safety Management Plan and Inspections, Program Drafter and Bridge Rater, Dore, North Dakota | 2013
- Montana Rail Link Railroad Underpass, Third-Party Reviewer, Belgrade, Montana | 2013
- Plains All American Pipeline, Bakersfield Unloading Facility, Structural Designer, Bakersfield, California | 2013
- Watco & Kinder Morgan, Greens Port Crude Oil Terminal/Facility, Designer of Ring Wall Foundations, Houston, Texas | 2013
- Chevron Chemical Company, Cedar Bayou, Structural Designer, Baytown, Texas | 2013
- UPRR, Puente Avenue Grade Separation, Third-Party Reviewer, Alameda, California | 2013
- Plains All American Pipeline, Tampa Crude Oil Loading Terminal, Structural Designer, Tampa, Colorado | 2013
- BNSF/URS, AECI Bridge I-55, Bridge Substructure Designer, Marston, Missouri | 2012
- RTD, Gold Line and Northwest Corridor, Third-Party Reviewer and Field Inspector, Denver, Colorado | 2012
- Tesoro Refining Corporation, Unloading Facility, Designer of Emergency Fire Monitor Platforms, Anacortes, Washington | 2012
- BNSF, State College Grade Separation, Retaining Structures Designer, Fullerton, California | 2012

JOSEPH HOLSTE, EIT
Structural Engineer

YEARS OF EXPERIENCE	TOTAL 3 WITH FIRM 1
EDUCATION	PhD, Civil Engineering, Kansas State University, 2014 MS, Civil Engineering, Kansas State University, 2010 BS, Civil Engineering, Kansas State University, 2008
LICENSES AND REGISTRATIONS	Engineer in Training, Kansas # IE15870
ORGANIZATIONS, TRAINING, PUBLICATIONS, AWARDS	Holste, J.R., et al., "Application of Tensioned Pullout Tests to Investigate the effect of Prestressing Wire Indent Geometry on Bond and Splitting Characteristics." Proceedings to the 2014 PCI Conference. Washington, D.C. 2014. Holste, J.R., et al., "Transfer Bond Test used to Predict Transfer Length of Concrete Railroad Ties." Proceedings to the 2013 ASME RTD Conference. Altoona, PA. 2013.

Joseph holds a Doctoral degree in civil engineering specializing in structures and has over three years of experience. His experience includes designing structures based on the International Building Code, ASCE 7, AASHTO, and AREMA standards. Joseph has several summers of experience working in the field as an inspector as an engineering intern. He worked with the Kansas Department of Transportation on various roadway projects where he was exposed to many types on construction. While working with the City of Colorado Springs, he was able to increase his inspection background while inspecting structures that ranged from culverts to prestressed concrete girders. He also was in charge on keeping the City's database program up to date with structural information from each inspection. His education background provides him with a large knowledge base suited for understanding structural inspections and design. Relevant project experience includes rating of several railroad structures for the Colorado Spring Utilities and designing pipe support and trapezoidal channel structures in several oil unloading facilities.

Relevant Experience

- New Mexico DOT Rail Runner Inspections and Ratings, Bridge Capacity Rater, Albuquerque, New Mexico | 2015
- BNSF Bridge 4.42 Replacement, Construction Inspector and Third Party Reviewer, Adams County, Colorado | 2015
- RTD Eagle P3, Construction Observer and Third Part Reviewer, Denver, Colorado | 2014-2015
- Pin Oak Terminal, Bridge Designer, Mt. Airy, Louisiana | 2015
- US 50 over BNSF, Independent Reviewer and Field Inspector Granada, Colorado | 2015
- US 287 over BNSF, Independent Reviewer and Field Inspector Denver, Colorado | 2015
- Alaska Railroad Corporation, Structural Designer, Anchorage, Alaska | 2015
- Crude Oil Facility, PAAP Tampa Crude Oil Loading Terminal, Structural Designer, Weld County, Colorado | 2014-2015
- Puente Hills Intermodal Facility, Structural Designer, Los Angeles County, California | 2015
- Colorado Springs Utilities Bridge Inspections, Bridge Capacity Rater, Colorado Springs, Colorado | 2014
- Caltrain Bridge Inspection Project, Assistant Structure Inspector, San Francisco, California | 2014
- Puget Sound Refinery, Shell Oil Products, Structural Designer, Anacortes, Washington | 2014
- Centerpoint Joliet Terminal, Joliet Bulk, Barge & Rail, LLC, Structural Designer, Joliet, Illinois | 2014
- Crude Oil Facility, PAAP Niobrara Crude Oil Loading Terminal, Structural Designer, Weld County, Colorado | 2014
- City of Colorado Springs, Major and Minor Structure Repair Investigation, Assistant Structural Inspector, Colorado Springs, Colorado | 2011
- City of Colorado Springs, Structure Database Population, Database Entry Engineer, Colorado Springs, Colorado | 2011
- Cimarron and Tejon Bridge Polymer Overlay Project, Construction Inspector, Colorado Springs, Colorado | 2011
- KDOT, Highway 27 Realignment Project, Engineering Technician Intern, Goodland, Kansas | 2007
- Interstate 70 Overlay Project, Kansas Department of Transportation, Engineering Technician Intern, Brewster, Kansas | 2006

SCOPE OF WORK

Project Understanding

The Statement of Work consists of field inspections, inspection documentation, and load rating of 39 railroad bridges owned by the Ventura County Transportation Commission (VCTC). The VCTC owned rail corridor, known as the Santa Paula Branch Line (SPBL), is 32 miles long and runs from the Coast Main Line in the City of Ventura to the Community of Piru. The rail line is active with one (1) Union Pacific train per week to Santa Paula, excursion trains from Santa Paula to Piru, and movie train operations from MP 403.20 to MP 435.07 in Piru. Train traffic will be verified after Notice to Proceed is given to confirm no changes in traffic.

The 39 bridge structures are further subdivided into the following categories:

- (22) Timber Trestle Bridges
- (2) Steel Deck Plate Girder Bridges
- (2) Steel Thru Plate Girder Bridges
- (1) Steel Thru Plate Girder / (1) Steel Thru Truss Bridge
- (1) Steel Thru Truss Bridge
- (5) Steel Stringer/Steel I-beam Bridges
- (4) Concrete Box Girder Bridges
- (2) Concrete Box Culverts

Description of Bridge Inspections

Our bridge inspection team will consist of a qualified Railroad Bridge Inspector – **Todd Kelley, PE, SE**, an assistant inspector – **Ali Rigeb, PE**, and VCTC supplied on-track safety personnel (flagmen). Our team will review the existing bridge documentation (inspection reports, photos, etc.) prior to beginning the field work. The team will also review the existing Bridge Management Plan to ensure that inspection procedures and nomenclature are in conformance.

Our team will coordinate with VCTC for site access and on-track safety while on VCTC and railroad owned property. Prior to beginning the daily activities a safety briefing will be held on site and will describe general safety procedures, the type of track protection being provided, as well as the location to clear the tracks should it be necessary. Access to the structures will be mostly from the ground and through the use of ladders. Should an area of a structure not be able to be inspected; the location will be documented in the inspection report along with the reason for not inspecting.

A top down inspection will be performed at all structures, starting at the rails and ending at the foundations. Each structure will be thoroughly photographed supplemented by detailed notes and hand sketches to document its condition at the time of inspection and to note any deficiencies. Special attention will be paid to those structures crossing waterways for indications of scour. The inspection team will also inspect the stream condition directly upstream and downstream. The stream channels appear to be seasonal and it is not anticipated that any underwater work is required, therefore it is not included as part of this scope. A detailed approach for each structure type follows.

Mostly standard inspection and safety equipment will be needed. Safety equipment will include PPE - hard hat, safety vests, steel toed boots, safety glasses, and safety harnesses when required for fall protection. Inspection equipment will include tape measures, digital camera, probe, sounding line, remote camera, sounding hammer, and drill for possible use on timber piles.

All bridge inspections will begin with an inspection of the rail, ties, ballast, ballast retainers, walkways, and railing. The rail will be inspected for alignment variations in either the vertical or horizontal directions. The ties will be inspected for general condition, spacing, and tie plate attachments. Ballast will be checked for general condition, depth, and to ensure that no voids have formed in the ballast due to failed deck

members or ballast retainers. Ballast retainers will be checked to ensure they are in working condition and they are not failing in any locations and allowing ballast to leak. Walkways and railings will be checked for general condition and safety.

For the Timber Trestle bridges all structural members including deck, stringers, pile caps, piles, and bracing will be visually inspected for defects. Timber members will also be sounded to locate any suspected voids in stringers, caps, or piles. If a significant void is suspected during sounding, members may be drilled to measure the remaining shell thickness to determine the size of the void from decay. All deficiencies will be measured and locations noted for tracking purposes in future inspections.

The main concerns for steel structures is fatigue and deterioration due to rust. Signs of fatigue will manifest in cracking of the tension portion of members. Therefore, all tension areas of steel members, including connections, will be examined closely for signs of fatigue. Special attention will be paid to fracture critical members such as Through Plate Girders and Through Trusses. Our Inspector will make every attempt to gain access within arms reach of all tension areas of fracture critical steel members. Deterioration due to rust can be observed visually and locations will be noted. If the rust is severe, a measurement of estimated section loss will be determined and noted. A structural rating may be required based on the total amount of section loss.

Concrete structures suffer from many forms of deterioration including cracking, efflorescence, delamination, spalling, and exposed reinforcement. All structural concrete members will be visually inspected. Sounding may be performed to determine the extent of delaminated concrete. Measurements will be taken of all defects and noted in the report for future tracking purposes.

Most inspections can be performed from the ground or by use of ladders. However the through plate girders and trusses will likely require climbing to inspect all members. Our inspection team is experienced in climbing inspection and is trained annually in fall protection and rescue techniques.

Bridge Load Capacity Calculations/Bridge Ratings

In addition to the bridge inspections, VCTC is also requesting bridge load capacities or bridge load ratings. It is our understanding that VCTC does not have bridge plans, therefore detailed sketches and measurements will need to be performed during the inspections to obtain the information needed for rating. Sketches and details will need to include all member sizes, span lengths, and member conditions. All ratings will be performed per 49 CFR Part 237 and AREMA. Timber will be rated per chapter 7 – part 3, and steel structures per chapter 15 - part 7 of the current AREMA standards.

In general, rail concrete structures are rated per chapter 8 - part 19. However, since plans are not available to indicate the size and spacing of reinforcement a rating calculation cannot be performed. Instead the FRA allows a "visual rating" to be performed. The inspection is performed per the normal procedure taking note of all defects and their locations. As normal per all structures the inspectors will take note of any areas indicating overstress. The structure then will be observed under a known live load (such as a Union Pacific Locomotive or specific train car weight) at normal operating speed. The structure will be observed for any signs of overstress. If the structure does not show indications of overstress, the structure can be load rated based on the known live load and operating speed. We can assist you in acquiring Union Pacific locomotive loading and schedules. We do not anticipate interrupting the train schedule to perform these ratings, and will make our inspectors available as necessary.

If the structure does indicate sign of overstress, or VCTC requires a more detailed rating, we can provide these services under a separate task and fee. Due to the high cost of load testing with strain gauges and mapping reinforcement with ground penetrating radar, we do not believe these services are needed unless indicated by existing overstress damage to the structures.

The rating procedure and effort will be different per bridge type so a unit cost for rating per bridge type is provided in the estimate.

VCTC Requirements

Wilson & Company requests that VCTC provide the existing documentation on the structures prior to the bridge inspection. We also require a safe environment for the inspection personnel. This includes any specific VCTC safety training and providing on track safety (flagmen or watchmen/ lookout) during all inspections. We anticipate that all structures are accessible from the roadway or access roads along the rail. If access to a structure is not available via roadway, we anticipate that VCTC will provide highrailing as needed.

Quality Control and Quality Assurance

Prior to our submittal to the VCTC, each structure report will be reviewed for accuracy and consistency by Todd, and an internal quality assurance process will be performed by Andrew. All inspection reports and rating calculations will be reviewed by a Registered Professional Engineer in the State of California.

Deliverables

Inspection and rating deliverables will be provided as requested in the RFP.

Inspection Deliverables: For each structure (2) hard copies and (1) digital copy (thumb drive) of inspection reports including reports, photos, bridge sketches, and repair estimates. We will also include a summary of necessary actions for all structures. This is to be completed by January 15, 2016, per the RFP.

Rating Deliverables: For each structure (2) hard copies and (1) digital copy (thumb drive) of Summary of all Bridge Ratings, Rating Calculations, bridge sketches, and estimates for recommended repairs. We will also include a summary of ratings for all structures. This is to be completed by March 2017.

We have reviewed the current VCTC report format and we believe that the annual tracking of these structures could be improved by adding some additional data. We have reviewed example reports from our similar projects and believe the following information could be added to make the report more comprehensive:

- Add an appendix with photographs to the back of the form. Each sheet will show 2 pictures and a corresponding heading. Pictures will include 4 directionals (looking upstation, downstation, and the two transverse directions) and also any defects or items deemed worthy of monitoring. This will take the place of embedding pictures into the report that are difficult to view.
- Add rail alignment/condition section to form to track any dumping or cross levels of the track near the structures. This can indicate structural issues that are not visible otherwise
- Add walkway/handrail section to form. Safety of on track workers is paramount. The condition of the handrail and walkways should be tracked for worker safety, including the annual inspector.
- Record depth of ballast if applicable. The addition of ballast from year to year can be an easily diagnosed issue causing structure distress. This information should be tracked annually.
- Include track speed to structure information.

In addition to the above, bridge sketches can be updated based on the measurements recorded for load rating purposes. If VCTC agrees with the changes above, Wilson & Company will update the report formats. Otherwise, we will supply reports in the current VCTC format. Please see the example report for a Timber Trestle starting on **Page 19** that includes the additional information indicated above.

Project Schedule

Upon receiving notice to proceed, we will contact the VCTC project manager and schedule a kick-off meeting. At this kick-off meeting, the team will evaluate existing documentation, and develop a specific schedule based on site access and any train schedules.

Based on the schedule posted in the RFP a notice to proceed will be given on 11/9/15. Our inspection team can be on site either later that week or the week starting 11/16/15 to complete the inspection and field measurements for rating purposes. We are also available to work weekends if that is preferred by VCTC.

In general we would anticipate starting at either the east or west terminus of the line and working one direction completing the inspections. However, we would likely separate out the climbing inspection bridges into a separate day due to the specific equipment that will need to be utilized. We anticipate the onsite inspection to take a maximum of seven (7) 10-hour days and to be completed consecutively. The inspection reports will be completed, checked internally, and submitted for review no more that two (2) weeks after the inspections are complete.

Bridge Ratings would begin after the inspection reports are complete. The additional field work would be completed during the inspections, but for estimating purposes the field measurements for rating purposes is included in the unit cost rating fee and not included in the inspection fee. This way all the effort included in the fee for the rating is kept separate from the inspection effort. We anticipate approximately four (4) weeks to complete the ratings and QA/QC to ensure a quality product. The ratings are broken up into several different categories in the fee estimate with a unit cost provided for each type.

Client Commitment

We believe that success is achieved through the shared ownership of the challenges, problems, and missions of our partners—You. We work to find the right solutions by identifying your varied needs and understanding the implications to the wider community. We have built our business on relationships, and our commitment to building higher relationships with our clients is what separates us from other consultants. It is our culture. Our projects are successful when there are higher relationships that allow collaboration with our client, project management team, and all of the project stakeholders.

Example Inspection Report

GENERAL INSPECTION FORM

DATE: 9/10/2015	INSPECTOR: TODD KELLEY, PE			DESCRIPTION OF BRIDGE: MULTI-SPAN CONCRETE								
SUBDIVISION	STATION	BRIDGE NO.	TRAIN SPEED	TYPE: 30" STANDARD CONCRETE BOX BEAM								
SIDNEY	68.26	68.26 SIDING #2	10 MPH	YEAR BUILT: 2011								
TOTAL LENGTH	CURRENT LOAD RATING	INTERSECT		GENERAL DESCRIPTION:								
84'-0"		CREEK		SPANS: 3 SPANS @ 27'-10"								
HEIGHT 14'-0"				OVERALL CONDITION: GOOD								

APPROACH CONDITION	
N/W	FAIR
S/E	FAIR

RAIL INFORMATION											
WEIGHT	136 LB.	GAUGE	N/W	4'-8.5"	CTR	4'-8.5"	S/E	4'-8.5"			
ALIGNMENT	TANGENT	DEGREE	N/W	N	CTR	N	S/E	N			
TYPE	JOINTED	SUPER	N/W	NONE	CTR	NONE	S/E	NONE			

NOTES/COMMENTS:

MILE POST SIGNS BROKEN AND ON GROUND AT SOUTH END OF BRIDGE

LINE CONDITION: GOOD

SURFACE CONDITION: 1/2" VERTICAL DIP IN TRACK AT SOUTH END OF BRIDGE

DECK INFORMATION

DECK WIDTH			
TYPE	CONCRETE		
FROM CENTER OF TRACK			
N/W-LS	7'-0"	RS	9'-6"
CTR LS	7'-0"	RS	9'-6"
S/E-LS	7'-0"	RS	9'-6"
TOTAL DECK WIDTH	16'-6"		

GPS LAT			GPS LONG		
DEG	MIN	SEC	DEG	MIN	SEC
47	54	10.25	104	2	3.34

BALLAST RETAINER HEIGHT			
TYPE	CONCRETE		
N/W-LS	17"	RS	17"
CTR LS	17"	RS	17"
S/E-LS	17"	RS	17"
BALLAST DEPTH			
N/W-LS	15"	RS	15"
CTR LS	15"	RS	15"
S/E-LS	15"	RS	15"
FLOORING HEIGHT			
FLOORING TYPE	CONCRETE		

WALKWAY INFORMATION			
TYPE	CONC	CONDITION	GOOD
WIDTH	2'-6"		
N/W-LS		RS	
S/E-LS		RS	
HAND RAIL			
TYPE	PIPE	CONDITION	GOOD
HEIGHT	42"		
N/W-LS		RS	
S/E-LS		RS	

NOTES/COMMENTS:

8'-6" TIES USED ON BRIDGE AND 10'-0" USED AT APPROACHES

DETECTORS

TYPE/LOCATION	NONE
OVER/UNDER	OVER CREEK
CLEARANCE	MAXIMUM OF 13'-0" UNDER SPAN 3
DRIFT CONDITION	CENTERED
SCOUR	NONE
FIBER OPTICS	(2) 2 1/2" CONDUITS ATTACHED TO WALKWAY ON EAST SIDE

PAST INSPECTIONS

7/1/2014

CONDITIONAL RATING GUIDE

PRIMARY RATINGS

RTG	CONDITION	DEFECTS	ACTION REQUIRED
6	GOOD	MINOR DEFECTS NO REPAIRS NEEDED	NO REPAIRS NEEDED
5	FAIR	MINOR DEFECTS MINOR REPAIR	MONITOR AND REPAIR (2 TO 5 YEARS)
4	ROUTINE	MODERATE DEFECTS MINOR REHAB	MONITOR AND REPAIR (1 TO 3 YEARS)
3	URGENT	MAJOR DEFECTS AND REPAIRS NEEDED	MONITOR AND REPAIR (30 TO 90 DAYS)
2	IMMEDIATE	MAJOR DEFECTS AND CRITICAL REPAIRS NEEDED	REPAIR AS SOON AS POSSIBLE (0 TO 30 DAYS)
1	CRITICAL	MAJOR DEFECTS MEMBER HAS FAILED	SHUT BRIDGE DOWN AND REPAIR

N = Not applicable
H = Hidden or unable to inspect
N/W = North/West
S/E = South/East

CTR = Center of span
LS = Left side from center of track
RS = Right side from center of track

CONCRETE INSPECTION FORM

SUBDIVISION	DESCRIPTION OF BRIDGE	DATE INSP.
SIDNEY	MULTI-SPAN 30" STANDARD CONCRETE BOX BEAM	9/10/2105
BRIDGE NO.	3 SPANS @ 27'-10"	LENGTH
68.26 SIDING #2		84'-0"
INSPECTOR		HEIGHT
TODD KELLEY, PE		14'-0"
OVERALL	OVER STREAM, RIVER, RAILROAD, HIGHWAY, DRAINAGE DITCH ETC.	YEAR BUILT
GOOD	OVER CREEK	2011

PILE NO

BENT NO	1	2	3	4	5	6
ABUT 1	H	H	H			
2	5	5	5			
3	5	5	5			
ABUT 4	H	H	H			

ABUT	CAP	PIER	PED
5	5		
	5	5	
	5	5	
5	5		

GIRDER L	GIRDER R	FW / HR
5	5	
5	5	
5	5	
5	5	

TIES	4	BACK WALLS	5

SCOUR	NONE

VEGETATION	NONE

NOTES AND RECOMMENDATIONS

SUPERSTRUCTURE

SPAN NO.	SPAN TYPE	

SUBSTRUCTURE

BENT 2	PILE 1 IS MISALIGNED 2" AND TWISTED 1/2". DIAGONAL AND SASH BRACING BENT/MISALIGNED AND SPLICED DUE TO PILE 1 MISALIGNMENT.

Figure 1: Looking North

Figure 2: Looking North

Figure 3: Looking South

Figure 4: Looking South

Figure 5: Looking Northeast

Figure 6: Looking Southeast

Figure 7: Looking West

Figure 8: Stream Condition – Looking Upstream

Figure 9: Stream Condition – Looking Downstream

SUBCONTRACTORS

At this time we do not anticipate needing to use any subcontractors.

REFERENCES

Caltrain Bridge Inspections

Client: Transit America Services Inc.
Contact: John J. Schiffgens
Phone: (408) 961-4365
Address: 93 Cahill St, San Jose, CA 95110

Rail Runner Bridge Inspections

Client: New Mexico Department of Transportation
Contact: Ray Trujillo
Phone: (505) 827-5448
Address: 1120 Cerrillos Rd, Santa Fe, NM 87502

CSU Rail Bridge Inspections

Client: Colorado Springs Utilities, Ray Nixon Power Plant
Contact: James Fischer
Phone: (719) 668-8934
Address: 6598 Ray Nixon Rd, Fountain, CO 80817

PRICE PROPOSAL

Our price is a cost plus maximum (not to exceed) proposal, including labor and expenses, for the scope described previously.

Task 1 - Annual Bridge Inspection

Flat fee to complete the inspection work as stated in the RFP and Scope of Work provide in this proposal.
Annual Bridge Inspections Fee = $29,750.00

Task 2 - Determination of Bridge Load Capacities

Unit cost to complete the Bridge Load Capacities as stated in the RFP and Scope of work provided in this proposal are presented in the table below.

Bridge Type*	Unit Cost	Quantity**	Total Fee
Open Deck Timber Trestle	$1,377.25	2	$3,554.50
Ballasted Deck Timber Trestle	$720.25	20	$15,205.00
Steel Girder (Deck Plate/Stringer/I-beam)	$783.50	7	$7,084.50
Steel Thru Plate Girder	$2,097.50	4	$9,990.00
Steel Thru Truss	$5,813.00	2	$14,026.00
Concrete Box Girders	$265.25	4	$1,461.00
Concrete Culverts	$265.25	2	$930.50
		Total Fee	**$52,251.50**

*The Bridge Type listed above is based off of Attachment 1 of the RFP titled, "VCTC Bridge Inventory List UPDATED 2014.

**The total quantity is greater than 39 due to the different span lengths for the Thru Plate Girders at MP 429.79b and having both Thru Plate Girder spans and a Thru Truss span at MP 415.59