

ATTACHMENT A PROPOSAL COVER SHEET

RFP# 25134; Oregon Department of Transportation

This Proposal is for: PE/Design Services , (OR) Both PE/Design and CA/CEI Services

Legal Name of Firm as provided to IRS: H.W. Lochner, Inc. ; a/an Wisconsin Corporation; DBA Name (if different than legal name): _____

Corporation Professional Corporation Ltd. Liability Company Partnership or Joint Venture
 Limited Partnership Ltd. Liability Partnership Sole Proprietorship Other _____

Mailing Address 2001 Front Street NE, Suite 120
Salem, OR 97301

Type name of primary Contact for this Proposal Aaron Geisler, PE

Email address ageisler@hwlochner.com

Telephone (503) 586-0100 Fax (503) 589-9538

Type name of person(s) authorized to sign Contract/Price Agreement: Steve Lewis, AICP

“PASS/FAIL” - PROPOSAL SUBMISSION CHECKLIST (for Proposer use)

- Submission Deadline Date and Time met
- Proposal Does Not Include Conditional Language about Terms and Conditions

“REQUIRED” ITEMS – PROPOSAL SUBMISSION CHECKLIST (for Proposer use)

- Proposal Cover Sheet Included and authorized original signature obtained
- Minimum Qualifications met and indicated on Proposal Cover Sheet
- Proposal Format and Page Length Requirements met
- Correct number of Proposals included along with CD for electronic submittals
- Reference Questionnaire forms
- Subcontractor/Supplier Solicitation and Utilization Form, completed and signed
- Checked off appropriate Conflict of Interest Disclosure certification on Proposal Coversheet (and included COI Disclosure Form(s) if there are required disclosures).

RESPONSES TO MINIMUM QUALIFICATIONS (See RFP Section 1.5.2)

➤ Registered Professional Engineer

Proposers must provide information below for at least one Registered Civil Engineer intending to perform civil engineering services under the Contract/Price Agreement.

Name	Registration Number	Jurisdiction of Registration
Aaron Geisler, PE	64486	State of Oregon
Scott Liesinger, PE	15507	State of Oregon
Tanarat Potisuk, PE, SE	65541	State of Oregon
Randy Hinderer, PE	61440	State of Oregon
David Thielen, PE	12598	State of Oregon
Bill Greene, PE	77399	State of Oregon

➤ Registered Professional Land Surveyor (PLS)

Proposers must provide information below for at least one PLS intending to perform surveying services under the Contract/Price Agreement.

Name	Registration Number	Jurisdiction of Registration
Rob Lennox, PLS	2886	State of Oregon

CERTIFICATIONS. By signature below, the undersigned Authorized Representative on behalf of Proposer certifies that:

1. Agency shall not be liable for: a) any claims or be subject to any defenses asserted by Proposer based upon, resulting from, or related to, Proposer's failure to comprehend all requirements of the RFP; or b) any expenses incurred by Proposer in either preparing and submitting its Proposal, or in participating in the proposal evaluation/selection or Contract/Price Agreement negotiation process, if any.
2. Neither the Proposer, a major partner or a major shareholder, (defined as a partner or shareholder owning 10% or more of your firm), a major subcontractor (defined as receiving 10% or more of the total Contract/Price Agreement amount), nor any principal officer of a Proposer, major partner, a major shareholder or major subcontractor:
 - a) is presently debarred, suspended, disqualified, proposed for debarment or declared ineligible for the award of contracts by any federal agency or agency of the State of Oregon, and is not listed on GSA's Excluded Parties List System which is available at <http://epls.gov>.
 - b) has, within the last 3-year period, been convicted of or had a civil judgment rendered against them for commission of fraud or a criminal offense in connection with obtaining, attempting to obtain, or performing a public (Federal, state, or local) contract or subcontract; violation of federal or state antitrust statutes relating to the submission of bids or Proposals; or commission of embezzlement, theft, forgery, bribery, falsification or destruction of records, making false statements, tax evasion, or receiving stolen property? {A "principal officer of a Proposer, major partner or major subcontractor," means an officer, director, owner, or partner and any person having primary management or supervisory responsibilities within a business entity (e.g., general manager; plant manager; head of a subsidiary, division, or business segment, and similar positions)}.
3. Proposer has made all required **Conflict of Interest (COI) disclosures**, if any.
The ODOT COI Guidelines and COI Disclosure Form are available at the following link: <http://www.oregon.gov/ODOT/CS/OPO/AE.shtml#Forms> (under "Misc. Procurement Related Forms")

(Check one of the following two certifications as applicable)

- Proposer understands and has provided to all Associates (which includes subcontractors) the COI Guidelines and COI Disclosure Form. Proposer and, to the best of the undersigned's information, knowledge and belief, Proposer's Associates (as defined in the COI Guidelines) are in conformance with the COI Guidelines, have no employees that were employed by ODOT within the last one-year period, and have no conflicts of interest or other disclosures required per the COI Guidelines. The response to each question on the COI Disclosure Form was "no".
- Proposer understands and has provided to all Associates (which includes subcontractors) the COI Guidelines and COI Disclosure Form. Proposer and, to the best of the undersigned's information, knowledge and belief, all Associates (as defined in the COI Guidelines) have provided on the COI Disclosure Form(s) submitted with this Proposal all disclosures required per the ODOT COI Guidelines.
4. Proposer has available (and can furnish to Agency upon request) the appropriate financial, material, equipment, facility and personnel resources and expertise, or ability to obtain the resources and expertise, necessary to indicate the capability of the Proposer to meet all contractual responsibilities.
 5. Proposer recognizes this is a public document open to public inspection. Any portion(s) of the Proposal that Proposer considers exempt from disclosure under Oregon Public Records Law is/are clearly designated in the Proposal and listed on a separate sheet attached to this Proposal Cover Sheet with justification and citation to the authority relied upon.
 6. Proposer does not discriminate in its employment practices with regard to race, creed, age, religious affiliation, sex, disability, sexual orientation or national origin. Nor has Proposer or will Proposer discriminate against a subcontractor in the awarding of a subcontract because the subcontractor is:

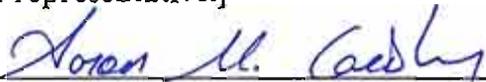
- a minority, women or emerging small business enterprise certified under ORS 200.055, or
- a business enterprise that is owned or controlled by or that employs a disabled veteran, as defined in ORS 408.225.

7. Proposer has an operating policy supporting equal employment opportunity. If proposing firm has 50 or more people, Proposer also has a formal equal opportunity program.
- Does Proposing firm have 50 or more employees? Yes, No.
 - Does Proposing firm have a formal equal employment opportunity program? Yes, No

Agency is an equal-employment-opportunity employer and values diversity in its work force. Agency requires its Contractors to have an operating policy as an equal employment opportunity employer. Firms of 50 people or less do not need to have a formal equal employment opportunity program, but shall have an operating policy supporting equal employment opportunity. Firms of 50 people or more shall also have a formal equal employment opportunity program.

8. The Proposal submitted is in response to the specific language contained in the RFP, and Proposer has made no assumptions based upon either (a) verbal or written statements not contained in the RFP, or (b) any previously-issued RFP, if any.
9. Proposer, acting through its authorized representative, has read and understands the RFP instructions, specifications, and terms and conditions contained within the RFP (including the sample contract) and all Addenda, if any. Failure to provide information required by the RFP may ultimately result in rejection of the Proposal.
10. Proposer agrees to and shall comply with, all requirements, specifications and terms and conditions contained within the RFP (including the sample contract) and all Addenda, if any.
11. Proposer and Proposer's employees and agents are not included on the list entitled "Specially Designated Nationals and Blocked Persons" maintained by the Office of Foreign Assets Control of the United States Department of the Treasury and currently found at <http://www.treas.gov/offices/enforcement/ofac/sdn/t11sdn.pdf>.
12. All contents of the Proposal (including any other forms or documentation, if required under this RFP) and this Proposal Cover Sheet, are truthful and accurate and have been prepared independently from all other Proposers, and without collusion, fraud, or other dishonesty. **False Claims.** Proposer understands that any statement or representation it makes, in response to this solicitation, if determined to be false or fraudulent, a misrepresentation, or inaccurate because of the omission of material information could result in a "claim" {as defined by the Oregon False Claims Act, ORS 180.750(1)}, made under the resulting PA/WOC being a "false claim" {ORS 180.750(2)} subject to the Oregon False Claims Act, ORS 180.750 to 180.785, and to any liabilities or penalties associated with the making of a false claim under that Act.
13. The signatory of this Proposal Cover Sheet is a duly authorized representative of the Proposer, has been authorized by Proposer to make all representations, attestations, and certifications contained in the Proposal document and to execute this Proposal document on behalf of Proposer.

[Note: Any alterations or erasures to the proposal shall be initialed in ink by the undersigned authorized representative.]



Date 12/12/12

Authorized Signature

Aaron Geisler, PE – Salem Office Manager
(Print Name and Title)



PE-Design Services

Introduction

Since opening our Salem office in July of 2003, Lochner has worked hard to be a trusted and reliable consultant to serve the needs of the people of Oregon. We have forged relationships around the State, invested in our local communities, and are prepared to assist Oregonians in removing transportation barriers, improving infrastructure resiliency, and helping position the State and local communities for Oregon’s economic resurgence.

Selecting the Lochner Team will provide Oregon Department of Transportation (ODOT) and local agencies with the necessary local expertise for State and Local Agency assignments. Our team structure and project management methods, tools, and resources will result in ahead of schedule performance within the budget limitations of individual assignments. This is achieved by providing:

- Staff with local agency and ODOT experience;
- A single point of contact for overall contract management;
- Separate Project Managers for ODOT and Local Agency projects;
- Discipline Managers in each key discipline area; and
- Utilization of local, qualified subconsultants for each assignment.

The Lochner Team is highly experienced and qualified to provide the services requested, including project management or oversight, structural engineering, roadway design, land survey, geotechnical engineering, hydraulics, utility design and coordination, environmental and NEPA processes, right-of-way acquisition, public involvement, construction engineering and inspection, and construction contract administration. Our multi-disciplinary team has the capacity to provide full services for project assignments from inception to completion with minimal oversight from ODOT.

Lochner has provided a variety of services to ODOT over the past 9 years, including bridge design, roadway design, tunnel design, hydraulic analysis, load rating, and bridge inspection services, among others.

Lochner has held the following ODOT contracts:

- ODOT Full-Service On-Call
- Local Agency Bridge Inspection Services
- ODOT Bridge Inspection
- Statewide Load Rating
- Local Agency Load Rating
- Local Agency On-Call

2.2.1 Proposer’s Project Management for PE-Design Services

A. Describe Proposer’s management and organizational structure, and how that structure aids the delivery of project services – including chain of command. Describe how subcontractors will be selected for specific WOC assignments, utilized and managed to complete the projects.

Project Management Structure

Lochner’s proposed project management structure includes three distinct elements:

- A Contract Manager to oversee all work and contracts, and to serve as the primary point of contact.
- Two primary Project Managers, one focusing on ODOT Work Order Contract (WOC) assignments and another dedicated to Local Agency assignments.
- Eight Discipline Managers, each experts in their field to manage and oversee all technical work.

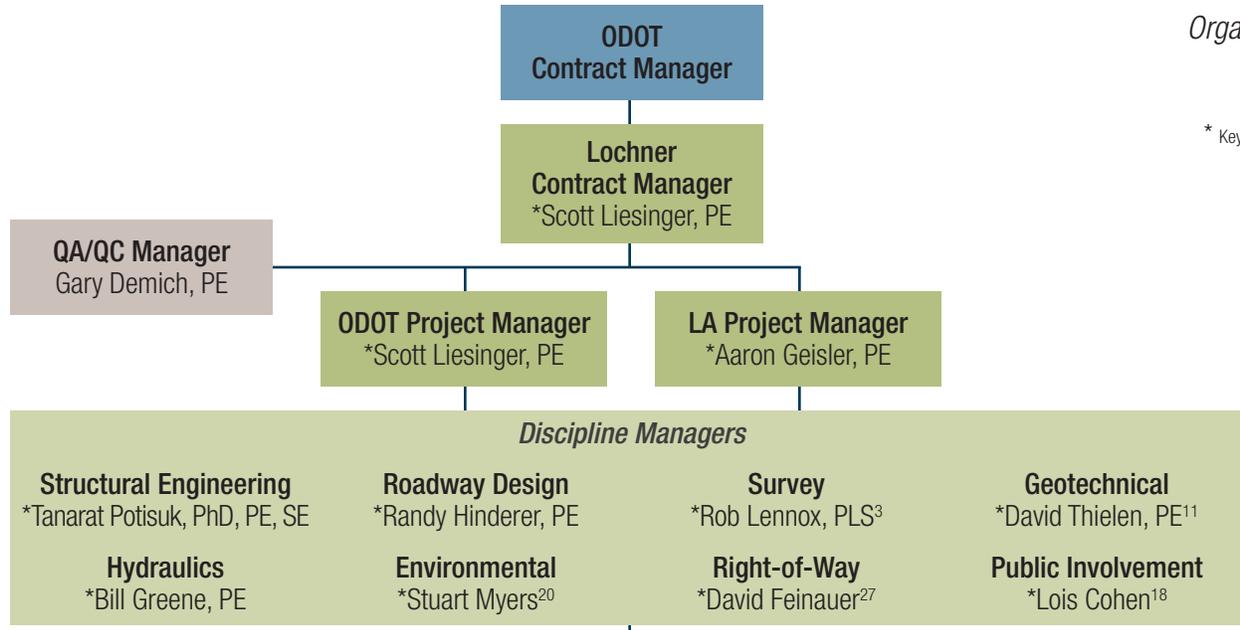
Lochner has assigned Scott Liesinger, PE as the **Contract Manager** and primary contact person. Scott has 18 years of experience as an employee within ODOT and has the insight of ODOT’s organizational evolution of regional project delivery and Local Agency consultant delivery programs. The benefit to ODOT is a consultant with a clear line of communication to the agency and direct communication with the procurement officer, Agency Project Manager (APM), or Local Agency Liaison (LAL) depending on the type and stage of the project. Scott will help preserve ODOT’s desire to direct consultant requests through appropriate channels involving either the APM or LAL, thus minimizing disruption to ODOT staff. For Local Agency contracts, Scott can provide insight to the local agency on ODOT design standards, Federal Administration (FHWA) stewardship agreement requirements, ODOT project delivery process, or whom in ODOT to direct questions to.

Lochner is proposing two primary **Project Managers** to manage WOC assignments. More specifically, these Project Managers bring a detailed understanding of the project owner’s particular needs. For Local Agency projects, Lochner has assigned Aaron Geisler, PE who has both city and county Public Works Director and Engineer experience in Oregon. For ODOT facilities, Lochner has assigned Scott Liesinger, PE. Scott has worked extensively with ODOT’s regions as well as local agencies throughout Oregon. Both Scott and Aaron will serve as the owner’s advocate within the context of the consultant project delivery team. This provides ODOT and the Local Agency partners each with a highly focused Project Manager.



Figure PE-1
Organization Chart

* Key Staff Resume Included



Key Technical Resources

<p>Environmental Andrea Clayton, PE Mike Bonoff²⁰ Guy Neal, PE²⁵ Skip Haak, MS, SPESC²⁵ Ken Vigil, PE, LEED AP³² Karin Ertl, AICP Stephen Caruana¹⁷ Susan Cunningham³² Jon Adkins⁹</p> <p>Cultural Resources Jo Reese, MA, RPA¹ Kathryn Toepel, PhD, RPA¹³</p> <p>Air/Noise Michael Minor²¹ Martha Moore, PE²⁹</p> <p>Hazardous Materials George Freitag, CEG¹² Randy Reid¹⁷ Steve Day, PE, GE²² Dulcy Berri, RG, LR, LHG²⁵</p> <p>Public Involvement Melissa Phillips Stacy Thomas¹⁴</p> <p>Landscape Architecture Paul Agrimis, RLA, PE, PWS³²</p> <p>Trails Roy Hankins, PE Ken Vigil, PE, LEED AP³²</p>	<p>Bridges / Structures Dan Minturn, PE Brad Stein, PE, SE Steve Burgess, PE Sophie Brown, PE Colleen Malone, PE, SE Brandon Estrella Russell Carter, PE, SE³⁴ Scott Harvey, PE, SE, CSI²⁶</p> <p>Hydraulics / Scour Jeff Sims, PE Brian Shewell, PE, CFM Robert Cleere, PE Hans Hadley, PE, PG, CFM³³ Linda Mark, RG, CPG³²</p> <p>Geotechnical David Lauder, PE¹¹ Dwight Hardin, PE, GE¹² Gene Tupper, PE, GE¹³ William Galli, PE, GE¹⁰ Paul Sellke, PE, GE¹⁰ Mark Swank, RG, CEG¹⁷ Arlan Rippe, PE, GE, DGE²⁵ Risheng Piao, PE, GE²⁸ Alan Bean, PE, GE³²</p> <p>Seismic Zia Zafir, PhD, PE¹⁷ Endi Zhai, PhD, PE¹⁷</p> <p>Lighting / Illumination Tom Stoner, PE Bruce Miller, CBI Lewis Venard, PE</p>	<p>Roadway Jonathan Harris, PE Roy Hankins, PE Miguel Sandoval Courtney Gibbs, PE Robert Cleere, PE Yong Zhu, PE John Gaster, PE Leroy Slemmer, PE⁹ Neil Fernando, PE⁸ D. Scott Souders, PE³⁴ Robert Gunter, PE¹⁹</p> <p>Pavement Al Cowen Alan Bean, PE, GE²⁷</p> <p>Drainage Jorge Garcia, PE Robert Cleere, PE Luna Huang, PhD, PE Ken Vigil, PE, LEED AP³²</p> <p>Utility Coordination Jorge Garcia, PE Roy Hankins, PE Luna Huang, PhD, PE Tina Adams, PE⁴</p> <p>TP&DT Gerry Wilhelm, PE, PTOE Jonathan Harris, PE Brian Copeland, PE⁷ Jim Peters, PE⁷</p>	<p>Right-of-Way Appraisals / Acquisitions Michelle Nunez²⁷ Leslie Finnigan, SR/WA³¹ Regina Thompson, SR/WA³¹</p> <p>Land Survey John Putnam, PLS²³ John Pariani, PLS²⁹ Ralph Dunham, PE, PLS³⁰</p> <p>Civil J. Garrett Pallo, PE⁵ David Leonard, PE, SE, GE²⁶ Richard Door, PE¹⁵ Carl Zeitz, PE⁶</p> <p>Specifications Randy Hinderer, PE Jim Evans, PE³²</p>	<p>Traffic / Planning Bob Munchinski, PE Gerry Wilhelm, PE, PTOE Yong Zhu, PE Charles Radosta, PE¹⁶ Brian Copeland, PE⁷</p> <p>Signals / ITS Gerry Wilhelm, PE, PTOE Caroline Brabrook, PE Lewis Venard, PE Jim Peters, PE⁷ Charles Radosta, PE¹⁶ Hermanus Steyn, PE¹⁶</p> <p>Land Use / IAMP Karin Ertl, AICP Bob Munchinski, PE Frank Angelo² Darci Rudzinski, AICP²</p>
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† DBE/MWESB Firms

Subconsultant Key

1 AINW	13 HRA †	25 PBS Eng. + Env.
2 Angelo †	14 JLA Public Involvement †	26 Pinnacle Western
3 BlueDot	15 JUB	27 ROWA †
4 Casso †	16 Kittelson	28 Shannon & Wilson
5 Civil West	17 Kleinfelder	29 SLR
6 Cooper Zietz †	18 Lois D. Cohen †	30 Stuntzner
7 DKS	19 Marquess & Assoc.	31 Universal Field Services
8 Emerio Design †	20 MB&G	32 Vigil-Agrimis †
9 Exeltech †	21 Michael Minor & Assoc. †	33 WEST Consultants
10 Galli Group	22 NW Geotech †	34 ZCS
11 GeoEngineers	23 Orion Geomatics †	
12 GRI	24 Pariani	

These primary Project Managers will be further supported by experienced and well qualified *Discipline Managers* who can also serve as project managers depending on the services required.

Organizational Structure

ODOT project delivery is both process and product driven, requiring a project team with flexibility for both local agencies and ODOT. As such, Lochner will tailor-make project teams for each assignment, utilizing the resources most suitable to address the assignment's needs. This may require key Discipline Managers working under the direction of the Project Manager, or they may lead a phase, task, or an overall project. The organizational chart (Figure PE-1) illustrates the depth and breadth of Lochner's assembled team.

How Organizational Structure Aids Delivery

Lochner is confident that our organizational structure, will provide ODOT the benefit of a direct point of contact (Contract Manager); experience with ODOT and local agencies (Project Managers); and experts in key discipline areas (Discipline Managers). What this means to ODOT is that we are able to address assignments quickly, cost-effectively, and with the right staff to ultimately deliver the project on schedule and within budget. Collectively, these key staff will meet and rapidly define the most expeditious delivery of each assignment.

Subconsultant Selection, Utilization, & Management

Lochner's team consists of subconsultants that understand local agency and ODOT project requirements. All of our subconsultants operate their business' with a high level of integrity, are quality and safety focused, and are experts within their disciplines. When selecting subconsultants for specific WOC assignments, Lochner will utilize the following factors:

- **Technical Expertise:** Subconsultants are chosen based on their proven technical expertise in delivering discipline specific tasks. This provides the best resources for the assignment's particular needs.
- **Availability:** Subconsultants are chosen based on their capacity to meet the project needs within schedule. This ensures the deliverable is on time and quality is not compromised.
- **Support Local Business:** Local subconsultants will be used where the local economy is extremely important to project owners, particularly local agency projects. This also reduces travel costs by utilizing local or regional resources.
- **Support Disadvantaged Business Enterprise (DBE):** Subconsultants with DBE status on work orders in which they offer value added services are preferred. Lochner may offer DBE subconsultants on assignments regardless of whether it is required under the WOC procurement.

Once a subconsultant is a part of a WOC assignment team, they will be directed by the Project Manager or Discipline Manager in the chain of command to the same business standard that Lochner as a prime requires for ODOT services.

B. Describe Proposer's methods of coordinating and expediting all elements of projects to meet delivery schedules without sacrificing quality. Describe Proposer's flexibility and approach to making adjustments to schedules or staffing in order to meet a schedule.

Fast-Track Delivery Without Compromising Quality: A key component of Lochner's business model is to deliver our projects ahead of schedule. Our staff performs high quality, multi-disciplinary engineering work, often under extremely demanding schedules. The result of our successfully completing not only fast-track design-bid-build projects, but alternative delivery projects, is a team that is experienced in providing deliverables ahead of deadlines.

Select the Right Management Team: Selecting the most qualified Project Manager and Discipline Managers is vital to managing the critical path of a project and accelerating key components to expedite the schedule.

ODOT Projects: Our Project Managers and Discipline Managers on state highway projects have broad experience and a deep understanding of the internal and external processes of ODOT delivered projects. Our proven project management methods will be utilized to manage work components to an aggressive schedule including:

- Scheduled QC reviews, revisions, ODOT reviews
- Develop a fully resource-loaded schedule baseline at project inception



Spencer Creek Bridge, Beverly Beach Park, OR



- Track schedule and budget using Earned Value Analysis which readily shows progress against baseline (Figure PE-2)
- Integration of work by others into the project schedule including permitting agency review and approval, R/W acquisition, and construction procurement office process
- Careful monitoring and reporting of critical path tasks to ODOT Agency Project Manager (APM)
- Technical risk management plan to manage potential delays to the schedule (Figure PE-3)
- Issue tracking log of project reviews to ensure issues have been addressed and closed
- Documentation of Quality Assurance

Figure PE-2
Earned Value Chart

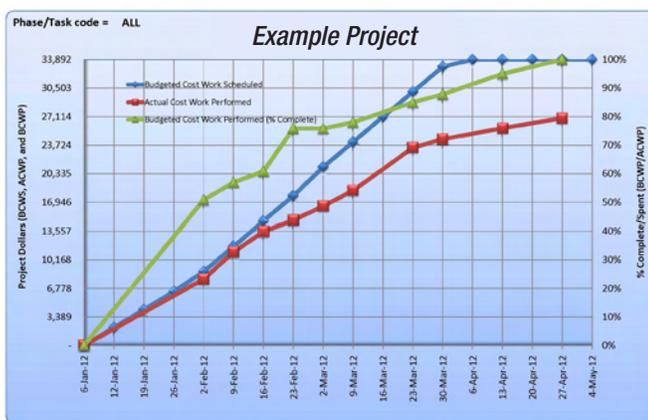
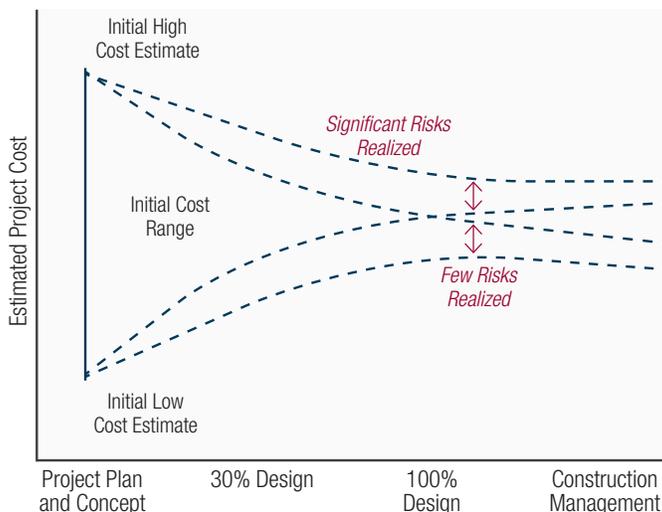


Figure PE-3
Cost Risk Management



Local Agency Projects: Local Agency assignments also require Project Managers and Discipline Managers with the additional skill of managing the schedule expectations of a local agency. This includes additional review time for local agencies and regular communication of the schedule progress. Also, Lochner’s local agency Project Manager has been employed by both a city and county in Oregon and provides a strong understanding of the local agency coordination needed from a consultant.

Discipline Managers are selected with the technical depth to ensure their deliverables are expedited and rigorously reviewed depending on the assignment. Key staff resumes reflect specific requirements for inclusion on our team:

- Strong technical background
- Highly experienced in the transportation industry
- Professionally registered in their area of expertise
- Experienced in Oregon
- Experience with local agency requirements
- Experience with ODOT requirements
- Experience with federal requirements

Early/Ongoing Coordination: Lochner manages communication between team members by developing a Communication Plan at the onset of the project. Regular team meetings provide opportunities to quickly address challenges that may affect schedule, review progress, and accelerate critical path items.

Regularly scheduled client meetings allow for an open dialog with ODOT and the Local Agency concerning unresolved issues impacting schedule and or budget, with options for resolution included. Regular meetings also keep ODOT and/or Local Agencies advised of schedule modifications in advance of a change. Monthly progress reports on key milestones are also provided, in which potential schedule impacts are highlighted.

Expedited Start Up: Lochner begins collaborating early with regulatory and permitting agencies to validate project schedule assumptions and monitor high schedule risk items. Opportunity for accelerating critical path items (typically permitting and R/W acquisition) will be scheduled for review at the start.

Uncompromising Quality: Lochner’s Quality Assurance Program requires that quality control checks are completed for all deliverables, whether on an expedited or baseline schedule.

As an example of how Lochner can accelerate deliverables while maintaining quality is the Lacey Gateway project. Lochner implemented a system of over-the-shoulder agency reviews, coupled with a detailed system to verify design calculations and quality assurance documentation to deliver the design of 2,600 feet of four-lane roadway, with 30-foot landscaped median, a new

roundabout, and thousands of feet of domestic water lines and utility conduits within 120-days of notice-to-proceed. The project won the President's Award for management from the Washington State Association of County Engineers.

Flexibility and Approach to Adjusting Schedules or Staffing to Meet Schedule

Lochner manages its resources using an integrated labor scheduling system based on individualized project plans on a two-week, yearly rolling labor forecast. This system allows us to quickly review scheduled labor to complete tasks and identify resource conflict between projects. Lochner Project Managers and Task Leaders proactively manage our resources to stay ahead of schedule. The tool also allows us to review resources and level of effort scenarios to accelerate critical path items when needed.

Lochner's flexibility to augment our level of effort or shift resources to other assignments is supported by several key factors:

- The technical depth and breadth of the Lochner Team allows us to manage multiple assignments at one time.
- Each task in a Work Order Contract (WOC) is developed into a resource loaded schedule (staffing plan) that is updated weekly to ensure staffing needs are met.
- The Lochner Team's more than 50 Oregon offices, as well as Lochner's additional 35 offices and 500 employees allow us to share work. Within Lochner itself, work-sharing is achieved by video conferencing and network file sharing which is our backbone for scaling resources to meet peak demand on very complex and highly demanding projects across the enterprise.

Lochner's work on multiple alternative delivery projects, such as the SR 520 Eastside Transit and HOV Design-Build for WSDOT, has made flexibility and the ability to change rapidly a critical part of our company culture.

C. Provide a concise summary of Proposer's Quality Control procedures and policies for PE-Design.

The Lochner Team believes that quality is built into the project from the beginning. At the outset, Lochner identifies the qualified personnel to produce, review, and check each design element required by the SOW. Qualified personnel include designers and authors who will produce or directly supervise the services provided and reviewers or checkers, who possess qualifications similar or senior to those designers or authors. We have also included Gary Demich, PE as the QA/QC Manager. Gary's extensive experience working at state and local agency levels, as well as his familiarity with Lochner's corporate Quality Assurance



Lacey Gateway, Lacey, WA

and Control Plan, will provide our team with consistent quality management. As one of Lochner's primary internal auditors, Gary will work with Project Managers and Discipline Managers to ensure deliverables that meet client expectations.

Lochner's quality process is described in Figure PE-4. Prepared for each project, our Quality Assurance and Control Plan is scalable to meet the complexity of the project. Project design and deliverables including technical memorandums, reports, calculations, drawings, plans, specifications, estimates, invoices and meeting minutes are checked for completeness and accuracy. Hard copies of the Quality Assurance and Control checks and reviews are retained in the project file.

After the Kick-Off Meeting, Lochner's Quality Assurance and Control Plan is as follows for reports (shown in Figure PE-4):

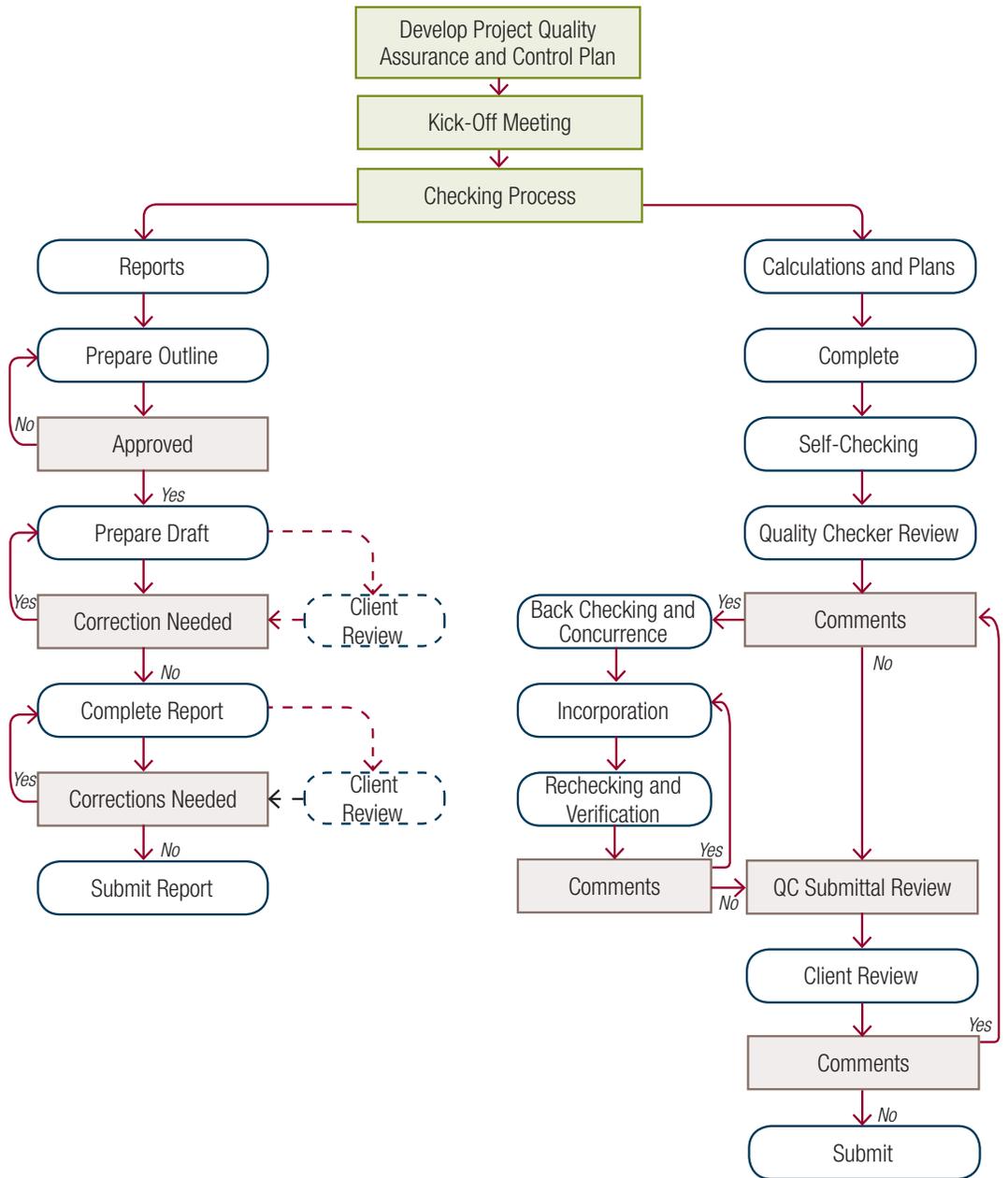
- **Prepare Outline:** The Project Manager and Discipline Manager(s) will work with the appropriate technical staff to prepare an outline of the report based on the project and the client's needs. The outline is reviewed for approval. Once approved, it is developed into a draft.
- **Prepare Draft:** Technical staff work to develop a draft of the report, gathering the appropriate materials, data, and research. The draft report is reviewed by the client as well as the Discipline Manager. If no corrections are needed, the report is finalized.
- **Complete Report:** Technical staff bring the report to a final draft level. The final draft report is reviewed by the client as well as the Discipline Manager. If no corrections are needed, the report is prepared for submittal.
- **Submit Report:** The Discipline Manager and Project Manager present the final report to the client.



Figure PE-4
Quality Process Flow Chart

Lochner's Quality Assurance and Control Plan is as follows for calculations and plans (shown in Figure PE-4):

- Calculations and Plans:** The Project Manager and Discipline Manager(s) work with the technical staff to develop the calculations and plans based on the project and the client's needs. Once they are complete, the calculations and plans move on for self-checking.
- Self-Checking:** During self-checking, the Discipline Manager(s) and technical staff review their work and self-check the calculations and plans for errors.
- Quality Checker Review:** At this time, Lochner employs peer reviews. A technical staff member would provide a review of the calculations and plans.



- Comments:** Comments are a central piece of our Quality Assurance and Control Plan. Once collected, comments are addressed and resolved within the calculations and plans. The calculations and plans are back-checked by the originator and verified that all comments have been addressed. This is a cyclical process until there are no longer any comments on the final calculations and plans.

Lochner tracks and responds to all review comments received from ODOT and Local Agency staff by use of comment logs. A comment log will assure that all comments are properly noted and addressed to the satisfaction of the individual who submitted the comment.

- Submittal Review Required:** The Discipline Manager(s) conduct a final submittal review prior to submitting the calculations and plans to verify that there are no lingering

comments or items that need to be addressed. Once these are taken care of, the calculations and plans are ready for submittal to the client.

- Submit Calculations and Plans:** The calculations and plans are submitted to the client for comments and resolution. During this time, the Discipline Manager(s) work closely with ODOT or the Local Agency to gather and address comments. If there are comments, the process begins again to address and resolve the collected comments.



D. Describe how and when you would determine that a client's total construction budget was insufficient to meet the objectives of a given project and the approach you would use to demonstrate that to the client as early as possible during the PE-Design phase.

Lochner evaluates the project prospectus early on in the engineering services procurement. A 'rough order of magnitude' estimate of construction costs is made based on the anticipated project improvements / requirements and then compared to the total construction budget. Differences are noted and discussed with the Agency Project Manager. We assist in determining what strategies might be available so the owner can make an early decision. Contingency tasks are developed to manage the risk.

As the project progresses to the Design Acceptance Package (DAP) milestone a DAP level cost estimate is started. The overall footprint of the project is solidified and details of the project are becoming known. Significant deviations from the anticipated design outlined in the Statement of Work (SOW) that are discovered during this phase of the project are immediately brought to the attention of the Agency Project Manager. Findings and recommendations are shared with the Agency Project Manager, and strategies are reviewed and adjusted, if needed.

Lochner also utilizes a risk analysis approach to cost management by identifying risk elements and assigning costs to those elements. As designs are refined, more accurate cost estimates are developed and cost risks are reduced. At the end of preliminary engineering, projects costs are well defined as well as any remaining cost risks.

At the DAP milestone, the DAP level estimate is again compared to the total construction budget and the 'rough order magnitude' check made at the start of the project. If the estimate is coming into alignment as expected, then design acceptance would be made and the project could advance into Final Design. If the estimate is high or low, the Design Acceptance Workshop is used to present a summary of developed project documents and to discuss findings and means of reducing or potentially increasing the project scope to arrive at an acceptable solution for the project and the client.

As the design progresses from DAP to Bid-Ready Plans additional milestone estimates are made to ensure the total construction budget is staying on track. These milestones typically include Advance Plans, and Final Plans. Although it is less favorable to report deficiencies in the total construction budget during this time, it can occur. Again, discrepancies are communicated to the Agency Project Manager as soon as they are known, and solutions reviewed that can reduce cost and meet the project goals.

2.2.2 Proposer's Cost Effectiveness for PE-Design

A. Describe the specific efforts Proposer makes to ensure tasks and deliverables are completed in the most cost-effective manner. Explain how Proposer ensures all travel, lodging, and per diem expenses are as low as possible.

Lochner ensures ODOT and the Local Agencies that tasks and deliverables are completed in the most cost effective manner by managing our office overhead, work planning, execution and performance monitoring, and low maintenance design.

Overhead Cost Control: Lochner is an employee owned company which means we control our office and corporate expenses. After labor costs, our office space lease is our second largest expenditure. Our corporate policy prohibits leasing 'Class A' office space and have purposely located the office in a cost effective area. Also, we do not lease or purchase luxury vehicles, and all of our company vehicles in Oregon are Ford and Chevy. These factors help us deliver in the most cost effective way possible.

Work Planning: Developing a clear Statement of Work and understanding the project objectives, context of the project, and permitting requirements creates the baseline for effective design delivery. Lochner develops a detailed project understanding from thorough scoping to avoid delays and costs from WOC amendments. Lochner focuses on work planning efficiency that includes:

- Assign key resources with the proper skill set for maximum task efficiency
- Verification and consensus with Agency on level of effort incorporated into the WOC to deliver services
- Integrate with the Region Technical center staff to augment only the resources that are needed
- Collaborate with Local Agencies to help meet their local match contributions in an Intergovernmental Agreement (IGA) and reduce our costs
- Involve permitting agencies early and coordinate with the Regional Environmental Coordinator at ODOT to focus environmental efforts
- Develop risk mitigation strategies (Project Risk Management Plan) to identify and monitor project risks that may cause delay or add cost to the project
- Implement a strict Quality Management Plan to reduce rework potential



- Use qualified subconsultants near the project location for greater responsiveness, cost effectiveness and local insight
- Utilize high resolution, mobile-based video and GPS technology of project to reduce site visits and traffic exposure for field personnel
- Leverage electronic communication (video and web-based conferencing) to minimize meeting travel time when it is advantageous
- Carpool with subconsultants or ODOT staff to meetings to minimize expense, congestion, and carbon footprint
- Maximize the use of templates, Lochner's design file resources, and document control software to develop deliverables quickly
- Leverage electronic submittals to reduce printing and mailing

Execution and Monitoring: Upon NTP, Lochner will manage and aggressively deliver the scope led by our experienced Project Managers and Discipline Managers to execute project deliverables. Lochner provides:

- Proactive management to the project team through weekly meetings to update the status of task progress, budget, forecast, and delivery schedule
- Biweekly review of project charges to ensure accuracy of resources and hours attributed to the proper task
- Monitor actual progress compared to planned progress (Earned Value Analysis) for each task
- Schedule management to avoid early start on work out of sequence to minimize rework potential
- Risk matrix status updates with Agency during design maturity with recommendations to the Agency to address changes
- Corrective action (staffing or level of effort modifications) when needed to keep a task from compromising the project budget and critical path schedule
- Ongoing quality control throughout the task development process to keep team focused in the right direction long before the final submittal review to avoid rework
- Management of integration of changes to ODOT design standards, specifications, software versions, and other evolutionary project development requirements of ODOT to avoid revisions
- Design approach maximizing use of Programmatic Agreements and Nationwide permits to reduce task and phase duration and reduce level of effort obtaining permits
- Design approach minimizing size of project footprint and R/W files required

Low Maintenance Design: While efficient design is important, so is the effectiveness of construction (discussed in section 2.2.7) and long term ownership and maintenance. Most design firms do not particularly scrutinize the long term ownership or maintenance practicality of the design. Lochner does not overlook this important step in the design execution phase. We will meet with the ODOT District Manager's designee or local agency maintenance foreman to assess the corridor maintenance program, agency equipment (means and methods), and their maintenance reduction suggestions in formulating design development. While this may not ensure our task and deliverables are completed most cost effectively during the design phase, it is where the design efforts can make one of the most significant contributions in saving the facility owner long term commitment and expense. Lochner designs for long term maintenance as a marquee feature of our design and construction engineering efforts.

Ensuring Travel, Lodging, and Per Diem Expenses Are As Low As Possible

As previously mentioned project travel, lodging, and per diem expenses are kept as low as possible through careful up-front planning. Whenever possible, Lochner utilizes qualified local subconsultants to ensure travel costs are minimized.

Technology will be leveraged for meetings, virtual project site replication, templates for expediting production of deliverables, and electronic submittals. Lochner is fully equipped to utilize video conferencing and can offer that technology to our clients on a project by project basis if they do not already have access to those resources, again reducing travel costs.

Carpooling with ODOT staff and/or subconsultants to project meetings is an effective way to both save travel costs and reduce our carbon footprint. We combine travel with other projects or business reasons, when possible, to defray cost to the project. Lodging costs when necessary will be reduced by booking in advance using the Government rate as appropriate.

B. Describe the specific methods, tools, and processes Proposer uses to develop the estimate for Services. How does Proposer ensure that estimates for Services are fair and reasonable to both the government and Proposer?

We put our reputation on the line every time we begin a new project. Therefore the development of fair and reasonable estimate is a process we take very seriously. Ensuring that ODOT and Local Agencies are receiving the value they expect is critical to our success as a service provider and our continued sustainability as an Oregon firm.



Specific Methods, Tools, and Processes Used to Develop the Estimate for Services

Methods: Lochner uses three methods to develop our estimate for Services: Zero-Based Budgeting (Bottom-Up), Recent Unit Costs (Parametric), and Percent of Construction Costs (Top-Down). Also, to assure our viability in the market, Lochner regularly compares our salaries with industry and market standards, making adjustments when necessary.

Tools: Beginning with the development of the SOW and schedule, Lochner utilizes an internal project management system, Deltek Vision. Vision is utilized as part of our planning process for project management and allows us to assign resources, level of effort (hours), and develop the project schedule. After setting up the project in Vision, we are able to export from Vision into MS Project and the Breakdown of Costs (BOC). We are then able to bill our client only those costs that are directly associated with their respective project tasks.

Developing the project schedule along with the SOW ensures the numerous work windows and tasks are accounted for in the budgeting process.

Processes: The planning and preparation of our estimate for Services begins with the preparation of a detailed SOW that outlines all the tasks and deliverables to be performed, and a draft project schedule. Lochner works closely with the Agency to develop the appropriate detailed work tasks and deliverables and project schedule to meet the specific needs of the project. The SOW and schedule is then used to define the extent of staffing assignments required to execute the work.

We then use ODOT’s BOC estimating template and the Zero-Based Budgeting (Bottom-Up) method to create a detailed budget spreadsheet that incorporates all of the tasks and subtasks in the SOW to develop a detailed breakdown of estimated hours required by each staff classification to complete the work, along with associated task expenses. Each task will have a cost; and the total labor cost is determined by the addition of all the required tasks.

We check our Zero-Based Budget by applying recent unit-costs (Parametric) from past project to current project units. Under this method an estimate is based on the number of units of work performed; for example, cost per plan sheet. An hourly production rate per sheet is applied to each of the sheet types to determine an overall level of effort. Hourly production rates are based on Lochner’s prior cost of services.

Lastly, we compare our total estimate of Services against client expectations using industry standard “percent of construction cost” (Top-Down) guidelines and historical Preliminary Engineering costs based on type of work and agency.

Efforts to Ensure Estimates for Services are Fair and Reasonable to both the Government and Proposer

We use trained and qualified personnel directed by experienced Project Managers and follow a defined QA/QC plan in developing the estimate for services. Lochner works diligently to prepare a fair and reasonable SOW. Lochner identifies contingency tasks early so that budgets are not inflated for a task that may not happen. These contingencies are prepared for activities that are required if the assumptions first established cannot be achieved.

Lochner has a Senior Project Manager review the final project budget, both for fairness to the Agency and to ensure we have estimated adequate efforts for our staff to complete the work outlined in the SOW. The resultant budget spreadsheet becomes the basis for negotiating each task/subtask budget.

Lochner then enters into negotiations with the Agency. During negotiations, both the agency and Lochner are able to explain the work they envision, and the effort it will take to complete the work, and come to an agreement both in scope and in budget. *Lochner has negotiated numerous estimates for services with ODOT since opening our office in Salem, Oregon and have arrived at fair and reasonable results for both parties.*

2.2.3 Project Team & Qualifications for PE-Design Services

A. Describe experience of Project Manager(s) with similar multi-disciplinary teams.

Lochner brings two Project Managers with extensive ODOT experience and who are capable of effectively managing a wide variety of projects and multi-disciplinary teams. In addition, our discipline leads will support Aaron Geisler and Scott Liesinger in the project management.

Scott Liesinger, PE

- Role:** Contract Manager
ODOT Project Manager
- Education:** BS Civil Engineering
- Registrations:** Professional Engineer (OR 15507)
- Experience:** 27 years

Scott Liesinger, PE brings an extensive knowledge and understanding of ODOT. As such, Scott has been assigned the roles of Contract Manager and ODOT Project Manager. In these roles, Scott will be the single point of contact for this contract and will also be the Project Manager for the ODOT WOC assignments.



Currently, Scott serves as a Project Manager / Structures Task Lead with Lochner and oversees the Salem structures group. Scott has led design efforts for the SR520: Eastside Transit and HOV Design-Build Project. In this capacity, Scott has worked closely with members of the multi-disciplinary design and construction team to make owner requested structural design changes.

Scott worked on the Oregon Bridge Delivery Program (OBDP), delivering a combination of 38 bridge replacement and repair projects to ODOT. In this role, Scott managed multi-disciplinary teams consisting of AE subconsultant Bridge Design Firms; Small Contracts Program subconsultants performing services such as land survey, geotechnical drilling and testing, public involvement, quantity calculations, and estimated construction schedules; OBDP Discipline Reviewers; and Agency Project Managers, Construction Project Managers, and District Managers.

He managed public meetings; met with residents to explain design and right of way needs; met on-site with regulatory agencies regarding fish passage requirements; met with shortline railroads; and coordinated with AE subconsultant and utility companies regarding utility relocations.

Scott also managed an OBDP Concept Design Team consisting of engineers, designers, and specialists from Bridge, Roadway, Environmental, Utilities & Railroad to prepare concept design, constraint maps, risk memos, and specifications for the Bundle 508 Design-Build Request for Proposal.

Prior to the Oregon Bridge Delivery Program, Scott served with ODOT as a Structural Managing Engineer and Bridge Design Engineer in the Bridge Engineering Section. In these roles, Scott worked with multi-disciplinary teams, to provide bridge engineering, to successfully manage the Bridge Program, and to deliver projects in many locations across the State of Oregon.

Aaron Geisler, PE

- Role:** Local Agency Project Manager
- Education:** BS Construction Engineering Management
- Registrations:** Professional Engineer (OR 64486)
- Experience:** 18 years

As the Local Agency Project Manager, Aaron Geisler, PE brings his understanding of local agency needs as a former Public Works Director and engineer for the City of North Bend and Polk County, OR in leading multi-disciplinary teams. His perspective of managing similar project teams is highly sensitive to the local agency point of view as the owner based on his experience.

Aaron is very familiar with the previous state and federal funding programs administered by ODOT while serving as the owners

representative on projects orchestrated by Intergovernmental Agreements. In this capacity he worked with multiple design firms and ODOT and their multi-disciplinary design teams on projects ranging from enhancement, road preservation, bridge projects at the city and county level, to participating with ODOT in developing interchanges in Rickreall and Ft. Hill. Often the execution of these projects included coordination with other cities, counties, and tribes as well as multi-disciplinary design teams.

Since leaving the public sector, Aaron has been leading local agency and ODOT highway project multi-disciplinary teams for the past five years. He has managed multiple environmental, survey, design, right of way, construction administration and inspection teams in the execution of state highway and local agency transportation related projects in most ODOT regions in Oregon.

By selecting Lochner, both the State of Oregon and Local Agencies benefit from well-managed multi-disciplinary teams in the execution of WOCs. The primary benefits include:

- Practical design focus on the scope and level of effort of the team budgets. Aaron is focused on his team delivering only the services that are needed because of his previous experience as a staff member of fiscally constrained local agencies.
- Sensitivity of the long term maintenance requirements and costs to the local agency when developing design solutions. Most consultants have never had the responsibility to budget and maintain the infrastructure they design. Aaron will orient the teams in developing low maintenance alternatives.
- Managing impacts to local traffic during construction. Often large teams are accustomed to working on very large ODOT projects and do not differentiate the traffic impacts



Dennis L. Edward Tunnel, Washington County, OR



for much smaller local agency projects. Aaron's focus on the local agency perspective of construction impacts will provide a significant benefit to the local agency. He has experience to know just how responsive a city council or county commission will be in applying pressure to their staff when local impacts are encountered during construction.

- The Local Agency Liaison will find benefit from having a project manager with a local agency background managing a multi-disciplinary team to help meet the requirements of the state and understand the local agency perspective.

Over the last 10 years, Aaron has successfully managed multi-disciplinary teams on state and local agency projects in Coos, Douglas, Marion, Polk, Yamhill, Tillamook, Hood River, Jefferson and Wasco counties.

B. Describe the types of Services Proposer has qualifications and experience to self-perform.

Over the last 9 years, Lochner's Salem staff has delivered to ODOT multiple full-service PE contracts. We have the resources available that are both knowledgeable of, and familiar with, federal, state, and local agency standards and procedures, especially those of the ODOT and the Federal Highway Administration (FHWA). Lochner has the expertise on hand to provide the following services for transportation projects:

- Bridge Design (Roadway, Rail, & Pedestrian)
- Bridge Rehabilitation Design
- Transportation Structure Design
- Rail Design
- Structural Analysis
- Load Rating & Bridge Inspection
- Tunnel Design
- Roadway Design
- Maintenance of Traffic (MOT)
- ADA Design & Improvements
- Hydraulic / Hydrologic Analysis
- Stormwater Drainage, Detention, & Water Quality Design
- Signal, Illumination, & Electrical Design
- Access / Interchange Studies & Planning
- Utility Engineering
- Low Impact Development (LID) Design
- Multi-Modal Transportation Planning & Design
- Seismic Design, Assessment, & Evaluation

- Traffic Control & Traffic Circulation Planning
- Traffic Operation Simulation Modeling
- Feasibility Studies
- General Civil Engineering Services
- Public Involvement

B. Provide 2-3 examples of multi-discipline transportation design projects started in the last 5 years where Proposer was responsible for 51% or more of the PE-Design phase work under the contract.

I-5 Pavement Rehabilitation, Joe Leary Slough to Nulle Road

Location:	Skagit County, WA
PE Start:	2011
Total PE Contract Amount:	\$943,698
% of Contract Amount:	78%, completed by our Salem office staff

This project is a \$14.5 million design-build project to rehabilitate 11 miles of northbound I-5 between Burlington and Bellingham, Washington. The scope included perpetual paving, dowel bar retrofit of PCCP panels, crack and seat concrete panels, permanent signing, illumination, bridge approach slab and bridge rail retrofit, roadway repair, striping, guardrail and safety improvements, environmental compliance, and traffic control.

Self-Performed Tasks

Project Management	<ul style="list-style-type: none"> • Administration • WSDOT Coordination • Subconsultant Coordination • Meetings
Utility Coordination	<ul style="list-style-type: none"> • Utility Impact Assessment
Erosion Control	<ul style="list-style-type: none"> • Erosion Control Design
Roadway	<ul style="list-style-type: none"> • Pavement Design • Roadway Design • Guardrail Design • Permanent Signing • Permanent Striping • Constructability Reviews
Structures	<ul style="list-style-type: none"> • Bridge Approach Slab Design • Bridge Rail Retro-Fit Design



OR99W: Locke Creek Bridge Replacement

Location: Benton County, OR
PE Start: 2007
Total PE Contract Amount: \$398,978
% of Contract Amount: 54%, completed by our Salem office staff

Locke Creek Bridge located on Highway 99W, was built in 1919 and reconstructed in 1942. This bridge replacement project allowed for a widened roadway section of 2 – lanes with a traversable median and standard shoulders. Approximately ½ mile of principal arterial highway was reconstructed to match the new bridge section and lane configurations, which required an access management plan, R/W appraisals and acquisitions, and staged construction to keep the highway open to traffic.

Self-Performed Tasks

Project Management	<ul style="list-style-type: none"> • Administration • ODOT Coordination • Subconsultant Coordination • Meetings
Utility Coordination	<ul style="list-style-type: none"> • Utility Impact Assessment • Utility Relocations
Hydraulics Related Services	<ul style="list-style-type: none"> • Hydrologic Analysis • Hydraulic Analysis & Report • Stormwater Management Plan • Stormwater Design
Traffic Engineering & Management	<ul style="list-style-type: none"> • Access Management Plan • Traffic Mobility Plan • Traffic Control Plans • HAR System Design
Roadway	<ul style="list-style-type: none"> • Roadway Design • Permanent Signing • Permanent Striping • Cost Estimating • Specification Preparation • Constructability Review Coordination
Structures	<ul style="list-style-type: none"> • Bridge Design
Bidding Assistance	

I-90, Beck Road Interchange, M.P. 1.0

Location: Kootenai County, ID
PE Start: 2012
Total PE Contract Amount: \$2,330,212
% of Contract Amount: 81%, assisted with Salem office staff

The I-90 Beck Road Interchange is a new diamond interchange for the Idaho Transportation Department on I-90 in Post Falls Idaho. The interchange was designed as part of a design-build contract under Idaho’s STARs legislation, which allows for public-private partnerships. Lochner design for the project included a new two-span interchange bridge over I-90 along with a second single span bridge over Grassland Avenue. Lochner also designed over a mile of new urban arterial and four new signals for the City of Post Falls to provide needed connectivity with the interstate. The new interchange provides a new western gateway for the City of Post Falls and reduced traffic on adjacent interchanges.

Self-Performed Tasks

Project Management	<ul style="list-style-type: none"> • Administration • Stakeholder Coordination • Subconsultant Coordination • Meetings
Roadway	<ul style="list-style-type: none"> • Roadway Design • Trail Design • Cost Estimating • Specification Preparation • Construction Staging Plans • Right of Way Design
Drainage & Hydraulics	<ul style="list-style-type: none"> • Drainage Design • SWPP Plans and Reporting
Traffic Engineering & Management	<ul style="list-style-type: none"> • Permanent Signing and Pavement Markings • Illumination Design • Signal Design • Maintenance of Traffic Plans • Traffic Control Plans
Structures	<ul style="list-style-type: none"> • Bridge Design • Retaining Wall Design
Public Involvement	<ul style="list-style-type: none"> • Public Involvement Support



CA/CEI Services

Introduction

The Oregon Department of Transportation (ODOT) and Oregon Local Agencies are seeking experienced staff to deliver CA/CEI services that support efficient and smooth construction processes, and that result in high quality facilities constructed to client expectations within budget and schedule.

Lochner has provided construction engineering support services for ODOT and Local Agency projects since opening its Oregon office in 2003. For this Price Agreement (PA) Lochner has strategically teamed with David Evans and Associates, Inc. (DEA) to augment these services and provide ODOT and Oregon Local Agencies with a full suite of construction administration and construction inspection (CA/CEI) services.

DEA has been performing CA/CEI services in Oregon for more than 30 years. Many of Lochner and DEA's staff and all of DEA's Construction Project Managers (CPMs) are former ODOT employees. As a result, our team has an in-depth working knowledge of ODOT processes, procedures, and expectations for delivering successful construction projects. Through their ODOT experience, as well as subsequent experience delivering CA/CEI services for ODOT and Local Agency projects throughout Oregon, DEA's CPMs have established relationships with current ODOT and Local Agency staff statewide, and with the construction contractors (CC) who work in Oregon.

The Lochner/DEA Team (HWL/DEA) will support ODOT and Local Agencies under this PA with highly experienced and certified staff.

As a result of our statewide CA/CEI knowledge, experience, and relationships, selecting the HWL/DEA Team will provide ODOT and Local Agencies with the following key benefits:

- Efficient delivery of CA/CEI services that meet ODOT/ Federal Highway Administration (FHWA) requirements;
- High quality transportation facilities constructed to client expectations;
- Projects completed within budget and schedule, with the potential for cost savings and early schedule completion;
- Minimized potential for contractor claims;
- Ability to meet all FHWA requirements for full funding;
- Smooth, successful construction processes that maintain support of local communities; and
- Quick project closeout.

2.2.6 Proposer's Project Management for CA/CEI Services

A. Describe your firm's management and organizational structure, and how that structure aids the delivery of project services - including chain of command.

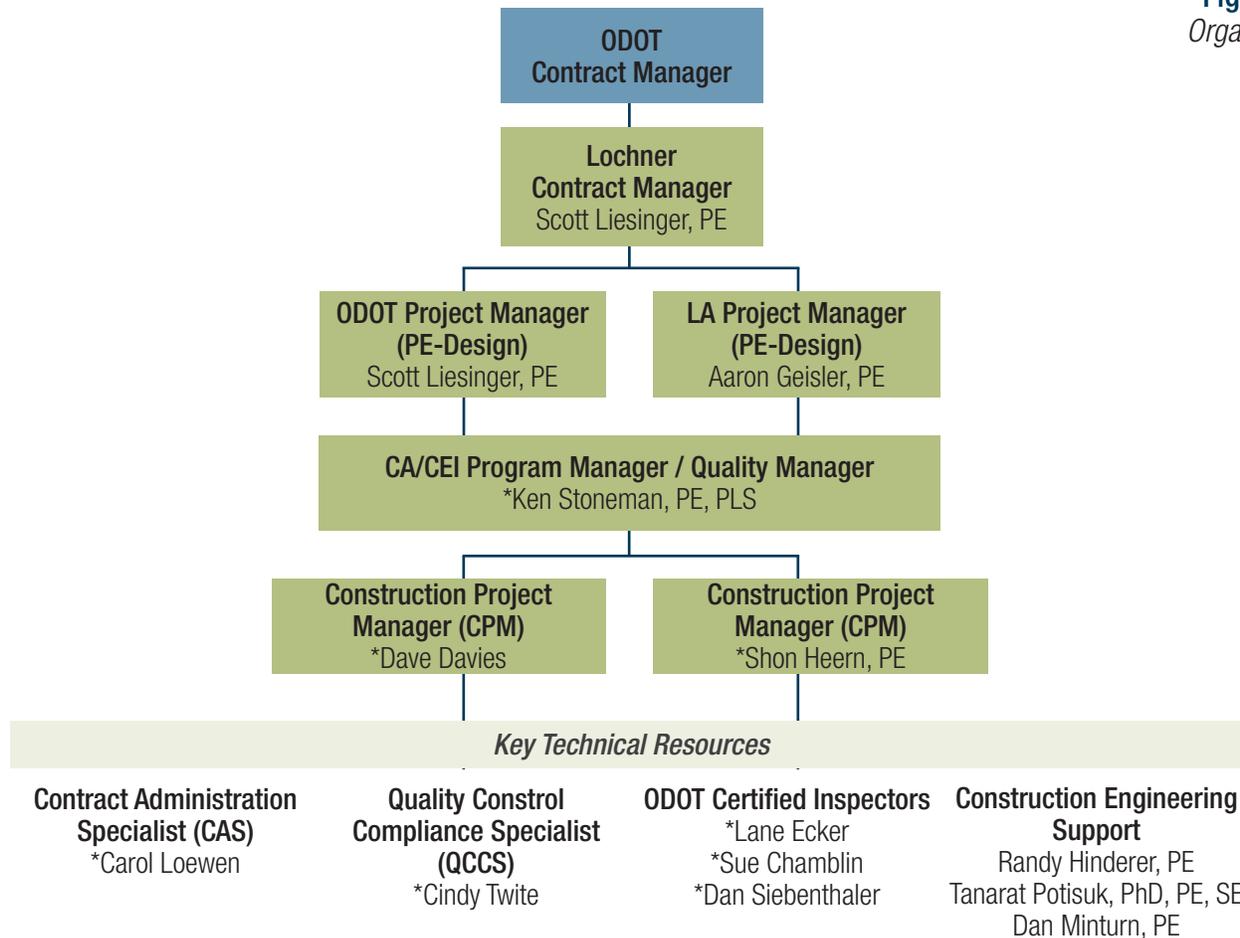
Our team provides a streamlined management and organizational structure that maximizes the capacity of project management staff, construction administration, Quality Control Compliance Specialists (QCCS), inspection staff, and construction engineering support while providing consistent, predictable, and responsive project support for clients.

Figure CA/CEI-1 on the following page shows the HWL/DEA Team organizational structure and each team member's proposed role for this PA. Our team's organizational structure features the following key roles:

- **Contract Manager:** This role provides ODOT and Local Agencies with a single point of contact. The Contract Manager for this contract is Scott Liesinger, PE.
- **PE-Design Project Manager:** The PE-Design Project Manager (DPM) will work seamlessly with the CPM to provide a smooth transition from PS&E to construction and address any design questions that arise.
- **Construction Program Manager:** Our team features Ken Stoneman, PE, PLS as the Construction Program Manager. In this role Ken will provide his extensive expertise to help select the CPM for each work order contract (WOC), provide additional support for ODOT and Local Agencies with strategic project approach and issue solution development, escalation of project issues, and staff mentoring, if needed.
- **Quality Manager:** Ken Stoneman will also be the quality manager and provide ODOT and Local Agencies with ongoing monitoring of CA/CEI services to support consistently high quality results.
- **Construction Project Managers:** CPMs are the project primary point of contact for clients and construction contractors, leading project teams and addressing day-to-day service delivery and issue resolution. The CA/CEI Team features proven CPMs who have many years of demonstrated experience leading project teams for multiple, concurrent projects.
- **Contract Administration Specialists (CAS) and Quality Control Compliance Specialist (QCCS):** DEA's expert CAS and QCCS staff support project efficiency and cost-effectiveness. These staff are able to support multiple projects concurrently.



Figure CA/CEI-1
Organization Chart



- **Project Inspectors:** Dedicated project inspectors provide focused and comprehensive oversight of day-to-day construction activities for one project at a time. The CA/CEI team has more than 15 project inspectors immediately available to work on diverse projects statewide.
- **Subcontractors:** We use CA/CEI subcontractors from various geographic locations to meet project schedule and budget needs statewide (minimizing travel expenses). CA/CEI subcontractors are able to perform a range of services, from construction project management to onsite inspection.
- **Construction Engineers:** Lochner’s design engineers will provide construction engineering support, answering Requests for Information (RFI); reviewing shop drawings, working drawings, falsework, and temporary works; and reviewing CC cost reduction proposals, as requested, quickly and efficiently to keep construction on schedule.

Within our structure, the HWL/DEA Team is able to support projects with flexibility and responsiveness, providing clients with reliable, efficient, and seamless delivery of project services and minimal number of hours required to deliver projects, as well as projects that are closed out soon after project on-site completion.

Key factors that aid our team’s ability to deliver projects successfully include:

- Staff who clearly understand the expectations and processes for the delivery of CA/CEI services for ODOT and Oregon Local Agencies
- Staff with experience working together for many years, some for more than 25 years, which has resulted in highly productive working relationships that support efficiency and teamwork
- Team structure and staff experience that enables inspectors closest to the work and issues to efficiently make decisions and resolve issues independently. (The CPMs work closely with inspectors and are aware of each inspector’s specific skills and level of experience. Depending on their experience level, CPMs adjust the level of support to meet specific project needs most efficiently.)
- Project inspectors working in the field who are fully supported by CPMs, CAS, and QCCS, enabling inspectors to focus on assuring quality construction that is delivered on schedule and on budget



- Versatile staff who are experienced in multiple CA/CEI roles, and who can perform multiple roles independently
- Continued DPM and engineering involvement that provides continuity and design support throughout the construction phase.

Work Order Chain of Command

Lochner's chain of command for CA/CEI work is relatively straightforward. While Scott Liesinger, PE is the Contract Manager, Ken Stoneman, PE is ultimately responsible for all CA/CEI work. Although Ken will be monitoring the projects, staff, and performance from a high level, the CPMs will coordinate the CA/CEI work with the client and manage the rest of the CA/CEI work. This chain-of-command is clear for the client, contractor, and CA/CEI staff and aids in the delivery of the project.

A. Describe how subcontractors will be selected for specific WOC assignments, utilized and managed to complete the projects.

The selection of subcontractors for a particular project starts with understanding the project. Upon learning of a potential WOC, our team will meet with the client to identify preferences and needs for the project. Once we understand the project and the opportunities for subcontractors, we will apply the following criteria for selection:

- Positive work history/reputation with the client
- Staff experience and CA/CEI certifications
- Office location in relation to the project
- Project knowledge
- DBE/MWESB certification
- Previous experience with similar projects
- Previous productive teaming experience
- History of high quality, cost-effective service
- Current project workload and availability

Once selected, subcontractors are utilized and managed as equal members of the CA/CEI team. They are integrated into the CA/CEI project management system and engaged through the appropriate communication medium (face-to-face, phone, email, written documents, fax), participation in team work sessions, and inclusion in all team correspondence. Our internal procedures and policies are utilized so that work quality and cost control extends to all subcontractors. We will continually monitor the subcontractors' performance, and provide any necessary mentoring, so that the project succeeds and they enhance their project delivery skills.

Recent projects for which other firms were successfully utilized to perform inspection work include:

- Mill Creek Drive (N. Fork Rogue River) – Hardey Engineering & Associates
- Dairy Loop Rd: Lookingglass Creek Bridge – i.e. Engineering, Inc.
- OR99E: Kellogg Creek, Harrison (Milwaukie) – CMTS (formerly Crane & Merseth)
- OR99E: Dunes Drive, 10th St. (Oregon City) – Cooper-Zeitz

B. Describe your firm's methods of coordinating and expediting all elements of projects to meet delivery schedules without sacrificing quality.

Once a project reaches the construction stage, delays in completing construction can be expensive and can negatively impact the traveling public. However, our team's experienced staff has been doing this type of work in Oregon for more than 30 years and knows all the key methods to coordinating and expediting all elements of a project to meet delivery schedules without sacrificing quality. Our proven methods include:

Construction Program Manager/Quality Manager: Ken Stoneman, PE, PLS will continue to use these proven methods to coordinate and expedite projects to meet delivery schedules without sacrificing quality:

- Develop the overall framework for HWL/DEA CA/CEI service delivery in Oregon.
- Make sure adequate resources are available.
- Provide high-level monitoring, including discussions with the client, DPM and CPM, and monitoring ODOT quantity and quality audit findings (Documentation Review Record), to support achieving desired quality level.
- Communicate with clients at regular intervals to make sure services are being delivered to their satisfaction.
- Ken knows when and how much to get involved with project issues and staff

Construction Project Managers: CPMs use the following methods to coordinate and expedite projects to meet delivery schedules without sacrificing quality:

- Provide the project team with a full understanding of expectations, roles, and available resources.
- Continually communicate with staff to monitor project performance to support project quality requirements and timely issue resolution.



- Use the Quality & Quantity (Q&Q) spreadsheet tool (developed by current DEA staff during their tenure at ODOT).
- The CPM, CAS, and QCCS develop the Q&Q spreadsheet for each project, identifying and outlining the requirements for materials testing, quality certifications, and documentation for all bid items.
- Q&Qs are reviewed with project contractors and subcontractors before the start of construction, with mentoring of the contractor's field and office staff, as needed.
- Q&Qs are also reviewed in depth with the ODOT Region Assurance Specialist (RAS) assigned to the project prior to construction to verify that it meets the ODOT contract requirements.
- Analyze and approve the original construction contractor's schedule to verify that contract time requirements are met and that the initial schedule is achievable.
- Hold regularly scheduled project meetings to discuss the progress of the project with the client, contractor, DPM and CA/CEI team.
- Schedule and review monthly updates of the overall project schedule to proactively identify and resolve potential schedule impacting issues.

Quality Control Compliance Specialist: DEA is one of the few consultants in Oregon to have a fully ODOT-certified QCCS. Cyndi Twite is DEA's QCCS specialist, and works tirelessly throughout the construction phase to confirm high quality and timely construction is being performed on the project.

Cyndi works closely with the CA/CEI CASs in setting up the Q&Q, discussed above, on every project. She uses the following methods to coordinate and expedite projects to meet delivery schedules without sacrificing quality:

- Verifies the contractors' and material suppliers' quality testing and documentation requirements to minimize confusion and misunderstandings during construction.
- Continually monitors the work to support timely quality control testing completion that is in conformance with contract requirements, and to make sure that construction materials meet contract specifications.
- Coordination of Quality Assurance (QA) and Independent Assurance (IA) testing by ODOT Region QA staff.

When project materials issues arise, Cyndi helps the contractor and material supplier take appropriate steps to correct quality issues and keep the project on schedule. Her extensive experience helps her provide options on how to most efficiently resolve the problem.

Construction Inspectors: Experienced inspectors use the following methods to coordinate and expedite projects to meet delivery schedules without sacrificing quality:

- Closely monitor the quality and workmanship of project materials.
- Use of the Q&Q guide to verify that the proper materials documentation is submitted and follows up with Field Inspection Reports (FIRs) to document their observations.
- The FIR reports are submitted to the CAS and QCCS for review and then entered into the test summary sheets for the projects. This quality check is performed before authorizing progress payments to the construction contractor.
- The CAS and QCCS facilitate regular ODOT progress reviews of the project to verify that contract requirements are met and there are no surprises at the end of the project that might delay project closeout and acceptance.

Construction Engineers: The construction engineers use the following methods to coordinate and expedite projects to meet delivery schedules without sacrificing quality:

- Use of Received/Returned logs to track RFIs, shop drawings and other review submittals.
- Direct interface with inspection and agency staff
- Immediate response to change conditions requiring design input

Another key to success in coordinating and expediting all elements of projects to meet delivery schedules without sacrificing quality is to have an efficient and realistic staffing plan. The CPMs identify and track needed project resources on a weekly basis, and communicate this information to Ken. If any project requires an expedited schedule or staffing changes, information is immediately available.

C. Describe your firm's flexibility and approach to making adjustments to schedules or staffing in order to meet a schedule.

The HWL/DEA Team is able to immediately respond and provide engineers and inspectors to the project, as they are needed, to complete the project efficiently. For example, DEA provided similar services to ODOT on the I-5: Victory to Lombard project and the OR 217 Modernization project, as well as the current US 26/Glencoe Interchange project. DEA also provided QCCS services on short notice for both the I-84 at 257th Ave. (Troutdale Interchange) and US 30 at Eilertsen Creek projects when ODOT QCCS staff were unavailable.



Similarly, Lochner provided construction engineering support services for the Dennis L. Edwards Tunnel on the Sunset Highway in ODOT Region 1. Unanticipated conditions due to wetter, colder weather and softer, more fragile rock (that was unable to develop adequate resistance for rock bolts) required Lochner to change the tunnel lining promptly, resulting in construction proceeding without compromising the scheduled completion.

Since most of our CA/CEI staff members are experienced and qualified in several roles of the CA/CEI work, they have the flexibility and knowledge to jump in and help each other out when conditions dictate. Our QCCS and CAS staff often perform inspection work in addition to their regular duties, giving our inspectors support when an extra person is required. This gives

Table CA/CEI-1
Internal QC Program

Role	Staff Performing QC Check and Internal QC Actions	Key Issues Addressed
Construction Project Managers	<p>Our Construction Program Manager, Ken Stoneman, discusses with the CPMs significant actions they are considering.</p> <p>Ken checks with the CPMs on the status of the authorized construction budget, the CA/CEI budget, and the contractor’s construction project progress vs. project-specified completion date.</p> <p>Ken also reviews significant correspondence, prepared Contract Change Orders (CCOs), and monthly invoices prior to sending.</p> <p>CAS reviews work correspondence, letters, and contract change orders, etc. for completeness and accuracy.</p>	<ul style="list-style-type: none"> • Maintaining overall budget through construction • Completing project construction on time • Achieving complete quality and quantity documentation • Achieving full FHWA funding, where appropriate • Minimizing construction impacts to users and adjacent property owners/businesses
Inspectors	<p>CAS constantly monitor pay notes and quality documentation to make sure they are accurate, complete, and timely, and that they follow ODOT processes.</p> <p>CAS double checks all documents and calculations. This is especially a focus during the preparation of the CC monthly progress pay estimate to make sure all construction work incorporated meets quality requirements prior to payment. In addition, our CPMs continually communicate with the inspectors, CASs, and contractors, as well as monitor the construction work.</p>	<ul style="list-style-type: none"> • Achieving complete quality and quantity documentation • Achieving full FHWA funding, where appropriate • Minimizing construction impacts to users and adjacent property owners/businesses • Completing project construction on time
QCCSs	<p>CAS continually reviews the QCCS work for compliance, timeliness, and completeness, including the Test Summaries.</p> <p>The CPM is also frequently communicating with the QCCS and checking on their work.</p>	<ul style="list-style-type: none"> • Achieving full FHWA funding, where appropriate • Completing project construction on time • Achieving complete quality and quantity documentation
CASs	<p>QC checks are performed through a combination of our QCCS, our other CAS, our office project assistant, and the assigned CPM.</p>	<ul style="list-style-type: none"> • Achieving complete quality and quantity documentation • Achieving full FHWA funding, where appropriate • Minimizing construction impacts to users and adjacent property owners/businesses
Construction Support Engineers	<p>DPM and other engineers will prepare QC check.</p>	<ul style="list-style-type: none"> • Completing project construction on time

us the ability to react to project demands and provide consistent, comprehensive inspection coverage on our projects.

We have also found that some cities and counties have the capabilities to perform much of their CA/CEI services, but still may or may not need additional specific support, e.g., CAS, QCCS and inspection support. To provide flexibility for the client, we have negotiated contingency tasks for these items should the city or county later need this support.

The size and flexibility of our staff, along with resources from our subcontractor team, will make sure that qualified staff is available throughout the State to help out if unexpected schedule changes or increased staffing needs develop.

D. Provide a summary of your firm's Quality Control procedures and policies for CA/CEI services.

Our internal Quality Control procedures are focused on the five key issues that ODOT, cities and counties have in regards to Quality Control for CA/CEI services.

- Maintaining overall budget through construction
- Completing project construction on time
- Achieving complete quality and quantity documentation
- Achieving full FHWA funding on federal aid projects
- Minimizing construction impacts to users and adjacent property owners/businesses

Even though a major element of the CA/CEI work is Quality Control (QC) of the contractors' materials and workmanship, we utilize an internal QC process to make sure our own work is being performed and maintained at a high quality. A summary of our internal QC program and how it addresses the client's key concerns is shown in Table CA/CEI-1.

As part of our internal quality requirements, including occasional internal auditing, we have a simple but complete documentation process in place to demonstrate that our QC checks mentioned above are being performed. Although not a formal procedure in our internal QC program, we utilize our primary CAS, Carol Loewen, in a unique role. Carol was an experienced ODOT RAS prior to coming to DEA, so she routinely reviews all projects from a RAS perspective before the ODOT RAS does his or her review. This process has routinely resulted in excellent project documentation audits from the ODOT RAS personnel, and leads to quick project closeouts.

Our CAS staff takes great pride in the accuracy and completeness of our quality and quantity, and our labor compliance documentation, and strives to receive clean documentation review reports from the ODOT RAS assigned to our projects.

2.2.7 Proposer's Cost- Effectiveness for CA/CEI Services

A. Describe the specific efforts your firm makes to ensure tasks and deliverables are completed in the most cost-effective manner.

DEA has an excellent reputation for delivering cost-effective, high quality CA/CEI services to ODOT, and cities and counties statewide, including federal aid projects. Aside from ODOT staff, HWL/DEA's staff is the most highly experienced and skilled CA/CEI staff with ODOT program methodologies and processes in the state. Almost all of DEA's CA/CEI staff are former ODOT construction engineering employees. This experience working at ODOT means they know ODOT processes, know ODOT staff, and know their requirements, all of which streamlines project delivery, and enhances quality. In addition, DEA's Construction Program Manager, Ken Stoneman, was the manager of ODOT's Construction Section and helped develop many of ODOT's CA/CEI practices that are still in place today. This senior-level knowledge and experience will prove invaluable.

Our expertise with this type of work allows us to complete all aspects of our tasks and deliverables with minimum number of hours. Having dealt with most of the CA/CEI issues that can come up on a project, we use a proactive approach that results in the most cost-effective completion of tasks and deliverables. Our approach includes:

- Completing a Quality and Quantity (Q&Q) spreadsheet tool at the startup of every project and getting approval from the ODOT RAS.
- Using this Q&Q to clearly communicate documentation and quality requirements with the CC before work begins. This may include mentoring and teaching CC field and office staff.
- All field and office documentation is continually checked to make sure it is up-to-date and complete, thus avoiding having to later track down missing documentation. More importantly, this continual checking allows quick closeout of projects after construction completion, eliminating extra costs for this task. It also minimizes the possibility that potential staff changes would disrupt documentation cleanup at project completion.
- Our staff anticipates, identifies, and communicates potential problems for CCs in a timely manner to provide them with ample opportunity to mitigate or avoid the problem.
- Our experienced inspection staff have in-depth understanding and knowledge of ODOT reporting, inspection, and documentation requirements. This enables



them to perform the daily requirements of inspection quickly and efficiently.

- Our CPMs develop solutions with the CCs and proactively resolve potential claim issues quickly with CCs, keeping ODOT and Local Agency exposure and costs to a minimum.

The CA/CEI staff are experienced in performing multiple CA/CEI roles and work in various positions within a CA/CEI team. This provides ODOT and Local Agencies with flexibility and can reduce CA/CEI budgets, especially on small and/or remote projects. For instance, our CPM, QCCS, and CAS staff can also perform construction inspection duties when it is more efficient for them to do so.

We understand that overall costs are minimized if our CA/CEI teams support CCs and work productively to help them successfully deliver high quality projects. This may include:

- Clearly communicate project requirements and expectations before starting work.
- Proactively monitoring CC schedules, and taking appropriate, effective steps to help motivate CCs to reach project completion as quickly as possible.

We also understand that providing construction schedules and constructability input to the design team and specifications writers, prior to bidding will help to develop more concise plans and specifications and a streamlined construction contract time.

A. Explain how your firm ensures all travel, lodging, and per diem expenses are as low as possible.

Our statewide team uses various strategies to reduce and minimize travel related costs, depending on specific project locations and needs. This includes reducing the amount of daily travel, overnight accommodation, and meal expenses, as well as long-term per diem expenses, wherever possible. Our team has staff throughout all five ODOT regions, including subcontractors who are able to efficiently provide local field staff, which minimizes or eliminates travel costs.

In addition, our ability to assign staff with knowledge of local issues supports efficient, responsive service delivery, and lower overall project costs.

We also use the following key project management techniques to provide efficient statewide project delivery:

- Staffing projects with experienced personnel located closest to the project(s).
- Sharing local office space when feasible.

- Assigning field staff who live at various non-office locations throughout the state to projects close to their homes. For instance, part-time inspectors live in Astoria, Hermiston, Roseburg, Coos Bay, and Medford and can work locally, with significantly reduced travel costs.
- Combining trips for multiple projects and purposes to minimize travel costs for any one project.
- Supporting the ability of CPMs to conduct communications for other projects on their cell phones (via Bluetooth) during travel to remote projects, which reduces time charged to the destination project.

For long-term CA/CEI projects, we use two approaches to keep costs as low as possible:

- Using local, experienced firms that are in proximity to the project site whenever feasible, thus reducing or eliminating travel, lodging, and per diem expenses. Our team has used local subcontractors on several recent projects, including:
 - Hardey Engineering & Associates from Medford supplemented the DEA team with construction project management and inspection assistance, also working with a Medford-based DEA inspector, for DEA's project to provide full CA/CEI services on the Mill Creek Drive (N. Fork Rogue River) Bridge for Jackson County and ODOT near Prospect.
 - An inspector from i.e. Engineering, Inc. in Roseburg supplemented the DEA team with inspection services on the recently completed Dairy Loop Road: Lookingglass Creek Bridge project for Douglas County and ODOT near Roseburg.
- Selecting a certified and highly qualified QCCS. Our QCCS is key to DEA's excellent track record of projects that have received their full share of federal funding and have met ODOT/FHWA requirements. Where possible, we will have our QCCS bundle trips to perform testing on more than one project to split costs between them.

B. Describe the specific methods, tools, and processes your firm uses to develop the estimate for Services. How does your firm ensure that estimates for Services are fair and reasonable to both the government and your firm?

Cost Estimating Methods, Tools, and Processes

We use a wide variety of specific methods, tools, and processes to develop estimates for CA/CEI services. Delivering similar services for many ODOT and Local Agency projects throughout Oregon provides the CA/CEI team with in-depth understanding of ODOT's



and Local Agencies' processes and requirements, as well as the ability to quickly assess the needed level of effort for each project.

The estimated construction schedule prepared during design is used to establish the construction contract time for the bidding documents. This PE-Design phase deliverable and the assistance of the DPM provides the CPM with an excellent understanding of the project, including any unique features, and a sound basis for estimating construction phase hours.

Our key cost estimating methods, tools, and processes include:

- Using a DEA-developed Excel spreadsheet tool for CA/CEI budget estimating that helps break down estimated labor by task hours, mileage, and travel expenses (if needed).
- Applying DEA's extensive history of CA/CEI project experience as a basis for developing estimates for new projects, which are broken down to the various CA/CEI roles and how much time will be needed by task.
- Comparing historical CA/CEI percentages for similar types of ODOT projects to check estimates.
- Applying our knowledge of repeat clients' processes, requirements, and desired level of effort to quickly adjust SOW and fees to get new projects quickly under contract.
- Checking our estimate against the ODOT prospectus.

Our accounting system will enable us to track the actual project costs for all of our projects. It also provides a tool for predicting future costs. We use this data to evaluate our cost estimates versus actual work performed, including change orders. This historical data allows us to refine and adjust our cost estimates, as necessary, for future projects.

Fair and Reasonable Estimates for Services

DEA has consistently achieved fair and equitable contract agreements with ODOT and Oregon Local Agencies. It is our team's goal to be responsive to our client's budgetary needs and to provide exceptional value for the level of service received. To help keep costs down and give our clients a fair and reasonable estimate for services, both Lochner and DEA have been actively working to lower our overhead rates and, as such, lower cost to our clients. It is important to note that DEA's overhead rate has decreased every year for the past two years and is expected to decrease again this next fiscal year. This decrease in rate is implemented immediately after being audited and approved and saves money for our clients.

HWL/DEA achieves fair and reasonable service estimates by first gaining a clear project understanding and then applying our experience from delivering other similar projects. We then collaboratively work with the Agency PM to discuss the project

and our assumptions to come to an agreement on how a project will likely proceed. Reasonable and agreed-upon assumptions are included in the Statement of Work (SOW) to protect both parties if significant variations from the assumptions are encountered during construction. For tasks or portions of tasks that are uncertain, we will include contingency tasks in the SOW and ODOT Breakdown of Costs (BOC) spreadsheet. This portion of the budget will not be used without agreement and approval from the Agency PM.

We use the following tools to help verify that our estimates for services are fair and reasonable to both HWL/DEA and ODOT or the Local Agency:

- Historical percentages of CA/CEI work compared to project cost (bridge replacement, sidewalks, paving, etc.)
- Itemized hours estimates by task and employee
- Past experience on similar projects
- ODOT Prospectus amounts

We also use two unique methods when preparing the CA/CEI breakdown of costs:

- Using our knowledge and experience to tailor the SOW and fee to meet the preferences of ODOT Project Managers and Local Agency Liaisons.
- Assigning an independent Contract Review Team to review and compare the scope of work and/or fee estimate against similar recent scopes and actual costs before they are submitted to the client. This review helps minimize the comments and edits that the client needs to make.

We ask the hard questions before the client has to, so that we clearly understand and can effectively explain every line in the SOW and fee.

In addition, we will not pursue additional CA/CEI fees on a WOC unless there is a significant increase in the level of effort required by ODOT or Local Agency representatives, or unless the CC's activities significantly add to the level of effort required from what was anticipated when the WOC was approved.

Our ability to arrive at fair and reasonable cost estimates in a timely and collaborative manner with ODOT and Local Agencies reflects our desire to consistently deliver responsive and cost-effective services.



2.2.8 Project Team & Qualifications for CA/CEI Services

Table CA/CEI-2
Examples of Past Projects

A. Describe experience (which may include experience while working for the Proposing firm or for other firms) of Project Managers with CA/CEI Services on projects similar in nature and complexity to the projects described in this RFP.

Aside from ODOT, our team has some of the most experienced CPMs for transportation CA/CEI services in the state. Our CPMs have managed construction projects in all five ODOT Regions, working on ODOT, Local Agency, and design-build projects throughout Oregon since 1985. These construction projects have ranged in size from under \$100,000 to over \$60 million. The types of ODOT and Local Agency projects completed by our CPMs are varied and diverse in nature and complexity. Some examples of the types of work included in our past projects managed by our CPMs are shown in Table CA/CEI-2.

B. Complete “Key Staff Resume for CA/CEI Services” forms for team members for use under assigned WOCs for CA/CEI Services:

CA/CEI Key Staff Resumes, consisting of the staff members and roles identified below, are included on the CA/CEI resume forms provided.

- **CA/CEI Program Manager:** Ken Stoneman, PE, PLS
- **Quality Manager:** Ken Stoneman, PE, PLS
- **Construction Project Managers:** Shon Heern, PE; Dave Davies
- **Quality Control Compliance Specialist:** Cindy Twite
- **ODOT Certified Inspector(s):** Lane Ecker, Sue Chamblin, Dan Siebenthaler
- **Contract Administration Specialist:** Carol Loewen

The HWL/DEA team is excited to continue supporting ODOT and Oregon Local Agencies with CA/CEI services to deliver transportation projects safely, quickly, and cost-effectively.

Ken Stoneman, PE, PLS
Construction Program Manager

Key Experience

- Nearly 10 years leading DEA's CA/CEI team, providing contract administration and construction inspection services on more than 60 projects for ODOT and Oregon cities and counties.

CA/CEI Work Type	Ken Stoneman, PE, PLS (DEA)	Shon Heern, PE (DEA)	Dave Davies (DEA)
Bridge replacements	63	12	34
Bridge repair	21	7	7
Historic bridge restoration	8	2	5
Seismic retrofit	7	1	4
Slide repairs	10	1	6
Sidewalk	68	13	40
Drainage, pipes	84	18	52
Sanitary sewer	16	2	16
Waterline	24	2	16
Water quality treatment facilities	30	9	16
Bike and Pedestrian	45	10	27
Earthwork	95	18	63
Paving (AC)	88	27	38
Paving (PCC)	8	1	3
Signing	95	19	62
Illumination	32	5	21
Intelligent Transportation System	7	2	4
Freeway interchanges	15	4	6
Interstate reconstruction	8	3	3
Covered bridges	1	0	1
Pedestrian bridges	7	1	4
Historic bridge restoration and cathodic protection	3	0	4
Historic building restoration	3	1	3
Signals and interconnect	44	7	25
Retaining walls (block, gravity, sheet pile, cantilever, soldier pile, temporary, and MSE)	47	14	22
Foundations (drilled pile, driven pile, augered pile, spread footings, micro-piles, and drilled shafts)	66	12	36

- 30-year career at ODOT, with the last 8 years in the position of State Construction and Materials Engineer, managing the Construction Section and Material Lab, where he provided oversight for more than 150 projects (\$300M) annually.

Signature Project

Rogue River (Depot Street Bridge), Jackson County, OR

The constructed Rogue River (Depot Street) bridge is an award winning, signature structure for Jackson County, the city of Rogue River and ODOT. For this \$9.6 million bridge replacement project, Ken Stoneman successfully led the DEA team through a challenging construction process, providing a full range of CA/CEI services (including construction contract administration, construction engineering, construction monitoring and inspection, QC/QA oversight and documentation, environmental permit coordination and compliance monitoring, and construction surveying) to support the construction of a state-of-the-art, concrete tied-arch bridge, the type of which has not been built in Oregon since the 1930s. A unique construction feature of this 320-foot-long bridge is that it was built upstream from its final resting position to accommodate local community access, via the existing bridge, then was slid sideways approximately 25 feet into its final position using innovative heavy-moving technology.

Personal Statement

“Through my experience and knowledge, I understand how to assess a project and develop tailored CA/CEI teams to address the specific needs of that project. Aiding this team development is my understanding of many of the individual clients and construction contractors throughout Oregon. My strengths include building a strong team, identify potential project issues early and developing proactive resolution strategies. I also understand the importance of keeping clients fully informed throughout the construction phase of our projects.” – Ken Stoneman

Client Statement

“I have found that once the contractors get to know everyone involved in a project the bids come in close. Good specs help but it's the people/team that counts the most. Out of the four projects that were bid by ODOT, the Linn County Work had the tightest grouping. Those that have earned a ‘reputation’ in name can drive the project bids up 10 to 15%. Apparently we haven't. It is difficult not to notice it - this is good.” - To Ken Stoneman from Chuck Knoll, Linn County Engineer, regarding the Stayton Scio Rd and Oakville Road Project

Dave Davies

Construction Project Manager

Key Experience

- 30 years of CA/CEI experience, including 23 years while at ODOT, where he led the construction engineering of more than 150 diverse project types.
- More than 40 CA/CEI projects for ODOT and Oregon cities and counties in all 5 ODOT Regions over the last nine years with DEA.

Signature Project

Beaver Creek and Fishtrap Creek Bridges, Coos County, OR

This \$4 million bridge project replaced two timber supported structures in a flood prone area. Mr. Davies led DEA's CA/CEI services team to provide construction administration, engineering support, and inspection services, following DEA's design work on the project. Dave Davies led the team to aggressively seek ways to reduce overall project costs without impacting the quality or durability of the finished bridge and roadway. As a result, the project was completed more than a year ahead of schedule and the client saved \$90,000. With this savings, the client was able to reinvest in other maintenance and operational issues within the project limits, including the design and reconstruction of a dangerous intersection.

Personal Statement

“My experience in all regions of the state has provided me with in-depth knowledge and relationships which I apply to achieve the best construction results for clients. I believe in establishing a firm, but fair partnering relationship with construction contractors, which minimizes contractor claims for a client's project – I have only had one formal claim in my career.” – Dave Davies

Client Statement

“Dave Davies performance as Construction Project Manager has been ‘top notch,’ and he has done a great job in preventing/resolving issues on this complex project being built in a neighborhood.” - Ken Cook, Public Works Director, City of Astoria regarding 38th St. (Franklin Ave.) Bridge





Shon Heern, PE

Construction Project Manager

Key Experience

- 16 years of CA/CEI experience, including 8-year tenure at ODOT, including working in the Salem, Eugene, and Corvallis ODOT Construction Project Manager's offices.
- 8 years at DEA, managing over 40 design and construction projects of various types and sizes for ODOT and Local Agencies in four out of five ODOT Regions.

Signature Project

I-5: McKenzie River to Goshen Grade Section Design-Build, Eugene, OR

This \$61 million design-build project consisted of replacing six bridges, retaining walls, drainage, freeway paving, rock cut excavation, and earthwork, and rebuilding interchange ramps. Shon Heern led the construction quality management and construction inspection for this project, with early completion of construction and exceptional results. As the construction quality manager, he provided nearly identical duties as a construction project manager would normally provide on a typical consultant-managed design-bid-build project. The client project manager, Timothy Dodson, remarked, "The DEA Quality Control team performed exceptionally well as part of the design-build team on the McKenzie River – Goshen Grade project. I was very pleased with the excellent talent and attitudes of the personnel executing the quality program and with the excellent management of the quality program. I am in agreement with my fellow ODOT Project Managers that, from the ODOT viewpoint, the DEA quality team sets the standard for consultant-provided quality control."

Personal Statement

"My experience managing both design and construction projects provides me with the ability to work on projects 'cradle to grave.' As a CA/CEI manager, I will apply my understanding of the design process to support projects getting built as intended by the client. My ability to work proactively with contractors in a fair manner, while minimizing cost impacts to the client, has resulted in an excellent record of projects constructed on time and within budget and exceeding client's expectations. I have had no formal construction claims." – Shon Heern

Client Statement

"Thanks for all of help with this – it was the smoothest construction contract we've had in a while. You did a great job of overseeing the construction work." - Don Wiley, to Shon Heern, regarding the OR282 Final Pay Estimate