

INSERT Cover Sheet

2.2.1 Understanding of Requested Services/Projects

The Oregon Department of Transportation (ODOT, Agency), on behalf of Local Public Agencies (LPA's) throughout the State, is seeking multiple personal/professional services consultants to provide a broad range of on-call engineering, land surveying, and related services (A&E Services) that are necessary to design and assure delivery of transportation-related projects.

Types of activities anticipated and A&E Services required are associated with, but not limited to the following:

- Planning
- Project Management or Oversight
- Public Involvement
- Land Surveying
- Design
- Engineering
- Environmental
- Right-of-Way
- Construction Engineering and Inspection
- Construction Contract Administration

ODOT is seeking full-service teams to perform project management and all Preliminary Engineering (PE) and Construction Engineering (CE) related facets of a given project from start to finish with minimal oversight and involvement from the Agency. The services requested will be applied to approved LPA projects included in, added to, and assigned under the 2006-2009 Statewide Transportation Improvement Plan (2006-2009 STIP) and potentially the 2008-2011 STIP. These projects will include federally funded projects and, at ODOT's sole discretion and approval, may include state funded or local-agency funded projects.

Otak has successfully provided the requested A&E Services to ODOT under multiple prior Local Agency Agreement-to-Agrees (ATA's). Projects described in the 2006-2009 STIP include Planning, Roadway Design, Bridge Design and Enhancement projects. Anticipated activities for these types of projects include project delivery from finalizing project scope, early action items including surveying, utility research and researching project constraints; preliminary engineering including alternatives analyses, conceptual roadway design, bridge type, size and location reports, environmental studies and permitting requirements,

drainage and water quality solutions, and right-of-way and temporary easement needs; public and stakeholder involvement including public meetings, and council and board presentations; final engineering including design development and plans, specifications and estimate preparation, and bidding phase assistance; construction engineering and contract administration including inspection, design services during construction, quality assurance activities, and quantity verification.

Key issues in these types of projects include:

- **Funding Limitations** – Federal-Aid and other sources of funding have limitations on what will be determined as “participating” and able to be funded by different programs. An example is HBRR funding specifically limits the project elements that can be funded using federal monies. Otak has several years of experience in delivering these types of projects and has current knowledge of these types of limitations.
- **Balancing Federal-Aid vs. LPA standards and requirements** – The use of Federal-Aid funds also requires conformance with applicable ODOT standards and AASHTO guidelines. Otak is experienced in balancing the need to conform to these requirements and incorporating local standards to ensure project continuity in safety, appearance and maintainability.
- **Communication with agencies, the public and other stakeholders** - Communication between ODOT, the Local Agency and Otak has been a key element of project success. Otak prepares monthly progress reports and copies both ODOT and the Local Agency to ensure that each party is receiving the most up-to-date information. Otak is experienced in performing public involvement processes from simple notification efforts and public open houses to complete integrated design dialogues and charettes.
- **Compliance with Federal procurement and environmental laws, and following Federal requirements for right-of-way acquisition and utility relocation** – The use of Federal funds can trigger more restrictive construction material sources, additional environmental permitting requirements, and additional requirements for right-of-way acquisition and utility relocations. Otak is experienced in

managing local agency projects in conformance with these additional requirements.

- **Meeting the needs of ODOT and its partner LPA's with cost-effective design, accurate project documents and effective project delivery** – Programmatically funded projects are often limited in the amount of funds authorized for the project and additional funds are not available. Otak is experienced in developing accurate scopes of work to ensure the project meets the Agency's needs and remains affordable within the budget limitations. During project development, construction costs are estimated at key milestones so design adjustments can be made if necessary. Otak uses procedures that emulate ODOT's to ensure accurate estimating and seamless integration with ODOT's payment processes.

2.2.2 Project Management Approach to Projects from the STIP for Local Agencies

Otak has provided preliminary and construction engineering services for STIP for local agencies under several ODOT Local Agency On-Call contracts and various ODOT On-Call contracts. We provide these services as an extension of the local agency's staff and deliver the projects in accordance with ODOT and local agency standards, and in compliance with the Oregon Federal-aid Stewardship Plan and Agreement.

Our experience has shown that a key element of successful project management is a thorough understanding of the Local Agency and ODOT's goals and expectations for the project. Otak works with the Local Agency and ODOT to develop this understanding including roles and responsibilities, project goals, compliance with standards and agreements and expectations for interaction. We understand that while ODOT is providing funding and oversight, the ultimate owner and operator of the project is the Local Agency. We work closely with the Local Agency to ensure their goals and expectations are met and to ensure the project's compliance with Federal and State standards and agreements. Active and frequent communication during the scoping, project development and construction phases avoids potentially costly misunderstandings.

Key Issues on Project Development

A key element of successful project development is the management of concurrent multi-disciplinary tasks and processes. Otak expedites early action items critical to the development of the basis of design and project schedule including survey, geotechnical investigations and environmental research. Otak recognizes several long-lead items including environmental approvals and permitting, right-of-way acquisition, and utility relocations can have a significant impact to the desired project schedule. Otak works closely with our subconsultants, permitting agencies, utility companies and ODOT to track these efforts and ensure milestones are met. Upon submittal of the Advance PS&E package, Otak works closely with the ODOT Specifications Unit within their pre-letting process to keep the project on schedule for advancement through the approval and bidding process. Major tasks and milestones in a typical project development process for an individual work order are shown below.

Project Scoping - Upon receiving a new work order assignment, Otak will work with ODOT and the local agency to schedule a site visit for scoping the project. The Otak team will consist of the project manager and the relevant task managers. From the scoping notes taken at the site visit, Otak will prepare and submit a statement of work and fee estimate for the work order project. Upon approval of the work order by ODOT and the Local Agency, Otak will begin work.

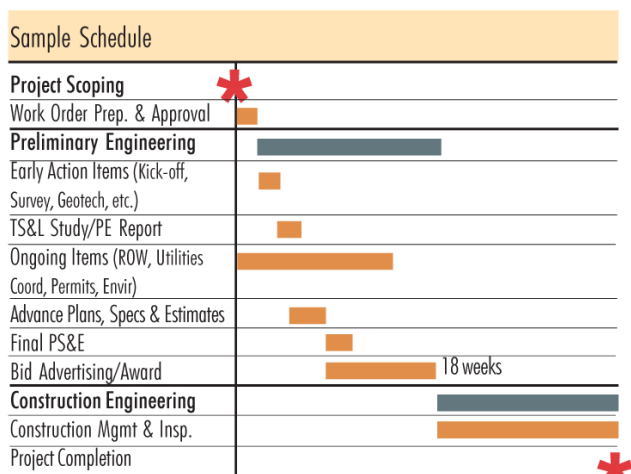
Kickoff Meeting - Upon receipt of notice-to-proceed, Otak will conduct a project kickoff meeting with the Local Agency, ODOT liaison and consultant team to discuss project expectations, design standards, public notifications, project schedules, and communication protocols.

Type, Size and Location Report (TS&L) or Preliminary Design Report - At the approximate 30% Design completion level, Otak will submit a TS&L or a Preliminary Design Report. This report will include a project description narrative, design criteria, preliminary bridge design and roadway design including considered alternatives. The report will also include supporting information including foundation reports, environmental studies, traffic studies, right-of-way needs and utility impacts.

Advance Plans, Specifications and Estimate - Upon review and approval of the TS&L or Preliminary Design Report, Otak will advance the design of the plans and submit an Advance PS&E package containing 95% complete plans, project special provisions and construction cost estimate. Project special provisions will be prepared in accordance with ODOT procedures utilizing the most current ODOT Special Provisions. Concurrent work efforts for environmental permitting, right-of-way acquisitions, utility coordination and other project specific efforts will be performed in order to ensure completion in accordance with ODOT’s Schedule for Advancement of Plans and Specifications to Contract Letting.

Final PS&E - Upon receipt of review comments for the Advance PS&E package, Otak will make the requested revisions and prepare a Final PS&E package including items on the ODOT Final Plans checklist for signature and ODOT preparation of the construction contract bid package.

Construction Engineering - After the award of the construction contract, Otak will provide construction engineering services for the Local Agency in accordance with the ODOT Construction Manual. Otak will work closely with ODOT and the local agency to ensure project quality and regulatory requirements are met.



Approach to Adjusting Schedules and/or Level of Effort

A key element in Otak’s approach to the adjustment of schedule or level of effort is a careful and thorough pre-work order scoping effort. The result of a thorough scoping

effort and a well defined statement of work will minimize unwelcome changes to the work scope later. A well-crafted statement of work may include contingency items for work that may be necessary but cannot be readily defined during the scoping effort. The inclusion of anticipated contingency items in the scope of work helps to avoid project delays due to waiting for additional authorization. Otak has successfully accelerated work on ODOT and Local Agency projects by assigning additional staff, modifying designs to shorten environmental review time, and phasing construction elements.

An example of Otak’s ability to accelerate work and adjust level of effort was our performance on the recent City of Medford OTIA-funded McAndrews Road roadway improvements and Bear Creek bridge replacement. This \$6M construction project required an expedited design schedule in order to meet multiple project construction schedule constraints including in-water work restrictions, irrigation facility shutdown restrictions, water transmission line shutdown restrictions, fiber-optic utility relocations and maintenance of pedestrian mobility. The key elements in Otak’s approach to this successfully accelerated project included:

- Starting survey, geotechnical investigation, traffic analysis, environmental research and other early-action items on Day One of the project. The team members performing these tasks were put on notice ahead of the anticipated notice-to-proceed, in order to be able to “hit the ground running” as soon as contract authorization was received.
- Allocating a dedicated team to the project with roles and responsibilities clearly defined at project kickoff. Otak’s resources allowed creation of a discrete team of a Project Manager, Roadway Engineer, Bridge Engineer and CADD Technician that remained in place for the duration of the project.
- Close and frequent communication and coordination within the project team including the City, ODOT, utilities and consultants.
- Otak developed PS&E for constructing a temporary pedestrian bridge for an early bid letting. This enabled staging of the main bridge construction to meet the environmental, irrigation and utility schedule constraints

Ensure Tasks & Deliverables are Completed in a Cost-Effective Manner

Otak project managers review project costs weekly to monitor project budget and progress. Otak's project managers meet weekly to plan staffing assignments and balance workload among the technical staff. Every Monday, staff from the Transportation, Bridge and Construction Engineering teams meets to update project progress and ensure milestones are being met. Individual project team meetings are held weekly to coordinate interdisciplinary work and subconsultant efforts. Otak will communicate regularly using monthly progress reports to ODOT and the Local Agency and will identify potential cost and schedule issues as early as possible. Otak will work closely with ODOT and the Local Agency to develop solutions and if necessary, modifications to the project scope to complete the project within the original budget.

We at Otak are accountable for our work and obligations. The Otak team is committed to providing the agreed services and deliverables for the agreed cost.

Cost control is critical from the work order development phase through final project completion. We will work closely with ODOT and LPA's. It is important for all the key players to be involved early to clearly define the scope and parameters of the project. Based on the clearly defined scope, project costs can be more accurately calculated. This will help to minimize cost modification.

Throughout the project, costs are reviewed weekly to monitor project budget and schedule progress against forecasted resource expenditures. Unanticipated costs can be tracked to specific tasks where the cause can be evaluated and remedies quickly implemented. Also, cost to complete will be estimated to determine whether excess budget is anticipated. On past projects, where excess budget was available, we completed additional work outside of the original scope. We did this via a no-cost work order amendment to assist the client in completing additional work. We are committed to maximizing our services that we can provide within established budgets.

How We Approach Project Revisions

Changes to the project scope during project development can happen due to changes in regulations, changes in

client needs, right-of-way restrictions and other unforeseen influences. Otak's approach to required project revisions is based on a commitment to minimizing impacts to the project's budget and schedule. Our ODOT Local Agency project development experience has developed a solid understanding of the legal requirements of ODOT contracts and the timelines necessary to obtain approvals for changes in scope. Otak proactively anticipates reasonably expected impacts and includes contingency scope items in the original work order. These contingency items can be authorized by the Local Agency Liaison if required with minimal impact to the project schedule. The project manager and task leaders are aware of the importance of working within the authorized statement of work. If a request for out-of-scope work that is not covered by a contingency item is made to the project team, the agency contract administrator will immediately be informed in order to confirm the need for revision to the work order, statement of work, and budget. We understand that no out-of-scope work will be authorized until an amendment has been approved by the contractor, local agency, and ODOT.

Once the need for out-of-scope work and revision to the work has been confirmed, then a scope of work conference or site visit is scheduled to clearly identify the scope of work and determine additional costs. It will be identified whether or not the additional work replaces original or scoped work and budget reassignment or increase is in order.

Otak has a proven record of working flexibly with ODOT and the local agencies to maximize work under the original scope and deliver a project that satisfies the agency's needs including unforeseen changes during the project development phase.

Summary of Otak's PE Quality Assurance/Control Procedures and Policies

Work Quality

At Otak we strongly believe that the point of greatest control over quality is early at critical decision making points. We recognize the limitations of an after the fact review process to assure quality. Our Otak team is proactive, by assuring that all team members will make themselves familiar with all project requirements and criteria. The specific responsibilities of each team members are delineated and

clarified to assure overlapping areas of concern. Team communication is encouraged both through regular formal meetings and ad hoc conferences. To the greatest extent possible the same team members will participate throughout the entire project to maintain continuity of decision making.

We believe that the development of a comprehensive project work plan at project start-up is a fundamental and critical communication tool for achieving successful performance throughout our projects. The work plan sets forth standards to be followed, levels of detail to be maintained, budgets, deadlines, and protocols for communications, documentation, and quality. The work plan clearly informs the team at the beginning of the project about the scope, specific staff assignments, schedule, and budget. The project manager uses the work plan as an important tool to monitor progress and anticipate issues.

Otak builds quality into each phase of a project through completion. All Otak team members work in partnership with our clients to ensure each project meets or exceeds expectations for cost-effectiveness and quality. Our approach consists of several documents to provide guidance and reference for all team members. These documents are:

- [Quality Assurance/Quality Control Procedures](#) – detailed steps and procedures for assuring quality design and product
- [Project Management Manual](#) – a professionally developed management guide, reviewed, updated, and adapted as needed
- [CAD Technical Procedures and Design Standards Manual](#) – this manual was created in-house by staff from each discipline to coordinate and guide the use of CAD
- [Style Guide Manual](#) – an in-house guide developed for writing, editing, and formatting for all written documents
- [New Employee Handbook](#) – an introduction to the company, which describes Otak's philosophy, including quality of work, individual responsibility, and team effort

Key elements of Otak's PE QA/QC process are the preparation of a Design Criteria memo to confirm the project design criteria, including differences between

ODOT and LPA standards that may require a design exception, and other project design exceptions. This memo is submitted to the agencies for concurrence and is included in the preliminary design report; performance of a conceptual design review once the basic project concept is developed. This review confirms the appropriateness of the roadway geometry and limits, the bridge layout concept, and other key project concepts; Quality control reviews are performed at key milestones including preliminary design report/TS&L, 60%, 95% Advance Plans and 100% Final Plans. All deliverables go through an in-house review process, following a checklist format considering all aspects of the project. This review is completed by senior staff, who has not been actively involved in the day-to-day project activities. This provides a cross-check to ensure that our standards of quality are applied uniformly to all projects.

Other steps Otak takes to ensure quality in the project deliverables include constructability reviews by Otak's construction engineering staff including Ken Karnosh and project inspectors; bridge PS&E and calculations receive appropriate independent ODOT-type Class 1 or 2 design checks. Unless requested otherwise by the LPA, Otak prepares the project PS&E in conformance with the ODOT Contract Plans Development Guide, The Oregon Standard Specifications for Construction and the ODOT bid item list. This provides consistency for the construction contractor and for preparing the progress payments.

We at Otak are accountable for our work. Each of us takes personal responsibility for what we do and how we do it. A team of professionals create the Otak team who has an outstanding reputation of responsiveness and meeting schedules. Otak has an outstanding track record on our quality of past work. We have consistently received praise from our clients regarding the high quality of our engineering, architecture, planning, and design projects, as well as our responsiveness to time constraints and budgets.

The success of our quality of work is demonstrated by the fact that 80 percent of our work is from repeat clients such as Tillamook County, Lane County, Clark County, BLM, ODOT, WSDOT, Clatsop County, Washington County, TriMet, City of Portland, and the City of Salem. Many have been working with our firm since its founding in 1981.

Our quality is additionally demonstrated by the numerous design awards. Additionally, our subconsultants have an outstanding record of quality of work and design awards.

Recent special recognition earned by Otak project teams include:

- Engineering Excellence Silver Award – Fourth Plain Boulevard/Covington Road; Vancouver, WA
- Presidential Award for Excellent Design – Westside MAX Light Rail, Portland
- CECO – Engineering Excellence Honor Award – Ashland Creek Flood Restoration, Ashland
- ACEC Oregon Project of the Year – Interstate MAX Light Rail Extension; Portland
- ACEC Oregon, Engineering Excellence Honor Award, WSDOT/FHWA Award of Excellence, ACEC Washington Bronze Award for Meeting/Exceeding Client Needs – Padden Parkway West Section; Vancouver, WA
- ACEC Oregon, Engineering Excellence Grand Award in Transportation, ACEC Grand Award in Transportation, Governor’s Livability Award, Large-Scale Infrastructure – Portland Streetcar; Portland
- ACEC Oregon Honor Award for Transportation, ACEC Washington Silver Award for Complexity – West Main Street Improvements; Battle Ground, WA
- ACEC Washington, Engineering Excellence Silver Award for Social/Economic Considerations – Winnifred Street Bridge Repair; Ruston, WA

Summary of Otak’s CA/CE & Inspection Quality Assurance/Control Procedures and Policies

Otak utilizes a Construction Project Manager (CM) to administer each construction contract. The CM may employ several other people to accomplish the following:

- A Project Inspector to perform site inspection and perform the other duties of an inspector as discussed in the ODOT Construction Manual and as supplemented by the ODOT Inspector’s Manual.
- A Certified Testing Technician to perform those duties that require that certification.
- A Contract Administration Specialist in the office to assure that proper quality and quantity documentation is provided and to prepare progress estimates to pay the contractor.

The CM also solicits the assistance of the Design Project Manager and the design staff to resolve design issues.

It is Otak’s philosophy that, in order to accomplish a successful project, there must be an effective working relationship between the Project Manager and staff, the Contractor’s Project Superintendent and supervisors, and the owner. This may include:

- Meeting with the Superintendent soon after he/she is identified
- Involving the Superintendent in establishing the agenda for the preconstruction conference
- Assuring that regular on-site meetings occur
- Addressing concerns and changes as they occur and resolving immediately if possible
- Having most conversations in person or by telephone, using written communications basically to summarize the verbal conversations

The CM is responsible to assure that the inspector and contractor know and fulfill the project needs and requirements and to assure that those needs and requirements are met. Those include:

- Requiring the Contractor to provide and maintain a current project schedule and monitoring the schedule to assure that work meets or exceeds the schedule
- Developing, and providing to the Contractor, a Test Summary and list of quality documentation needs and a list of how payment will be measured/paid for each item, including a breakdown of lump sum items, and assuring that proper information is provided timely
- Looking ahead for upcoming problems and discussing same
- If issues arise, assuring that adequate information is recorded to be able to resolve the issues

The CM uses the Project Manager’s Checklist, located at the front of the Construction Manual, as a guideline to assure that needed activities occur and that needed documentation is prepared. If additional activities are included in contract requirements, the CM will include those activities in the Checklist. This includes monitoring expenditures to the Project Authorization and initiating requests for additional authorization if expenditures will exceed the Project Authorization.

If changes must be made to the work, the CM will involve the Agency liaison in determining the best solution and in approving the change.

The inspector must be familiar with applicable sections of the Construction Manual and Inspector's Manual, discuss upcoming work with the Superintendent to assure that he/she understands the work and quality needs, inspect the work processes to assure proper construction and quality, assure proper testing (including verification testing by ODOT and process review by our certified technician), assure proper material quality, record needed information in the Daily Progress Report, measure and record quantities for payment, liaison with Agency representatives as needed, and perform other needed duties, including wage interviews and Commercially Useful Function reviews. The CM may assist the inspector as needed or requested.

The inspector will coordinate with the ODOT Quality Assurance Coordinator about verification testing and with the certified testing technician about review of the Contractor's testing processes. The inspector will assure that testing is performed at the frequencies specified in the ODOT Manual of Field Test Procedures.

The Contract Administration Specialist prepares the Test Summary at the start of each project, assures that proper quality documentation is received and enters information in the Test Summary, that proper source documents justify payment for work under each pay item and checks all calculations on the documents, enters needed information to produce progress payment estimates, and performs other tasks as needed, including reviewing payrolls.

It is the goal of the CM and Otak to construct a project within the Project Authorization, within the project completion dates, with all needed documentation provided timely, and in which all parties to the contract take pride.

ODOT certified inspectors on our team include: Mike Fisher – Portland; Ken Norton – Roseburg; Diana Norris – Medford; Chuck Godfrey – Eugene; Tom Eiguren – Bend; Chuck Laws – Central Point; Ken Karnosh – Salem; and Ron Jee, In-Tae Lee, David McCurry, Steve Wilson, Ian Machan, Alexandra Kuschell, David Hopkins, Don Fantz, Don Poletski, Mark Vrvlo, Lyndell Walton, and Ken Warrington – Portland

ODOT certified QCCS staff include Kevin Berklund with FEI Testing & Inspection, Inc. (Certification number is 42330)

2.2.3 Proposer's General Qualifications

Similar Services Performed within the Last 4 years

The Otak team has recently undertaken or is currently performing projects that parallel the tasks for which ODOT will issue work orders under this contract. The following projects and contracts demonstrate the range of project experience that this team can offer.

Otak

"A" Canal (Washburn Way) Bridge Widening; Klamath Falls, OR - Otak is providing project management services for the design of the widening and rehabilitation of the "A" Canal Bridge, an OTIA project. Otak provided bridge, road, and hydraulic engineering along with developing the PS&E package. Other team members provided geotechnical investigations, right-of-way acquisition, biological assessment for endangered fish and habitat, wetlands study, ACOE regulated permitting, utility coordination, and public involvement.

Little Butte Creek (Loto Street) Bridge; Eagle Point, OR - Otak provided project management, surveying, civil engineering, structural engineering, and construction management services for Loto Street Bridge. The project consists of a three-span concrete bridge structure crossing Little Butte Creek and an arterial roadway extension with pedestrian and bike lane improvements. In addition to the roadway and bridge design, project elements include field survey, geotechnical investigation, environmental documentation, hydraulic and hydrologic analysis.

9th Street Extension/Deer Street Bridge; Prineville, OR - Otak provided project management and design services for this OTIA-funded project in the City of Prineville. The project included 680 m of new and 700 m of rehabilitated roadway. The replacement of a load-limited bridge on Deer Street and the construction of a new bridge on 9th Street were required as part of the new roadway to span Ochoco Creek. The project team worked on an aggressive schedule,

completing project design and permitting in three months with construction completed four months later.

[Bear Creek \(Pine Street\) Bridge; Jackson County, OR](#)

- This Highway Bridge Replacement and Rehabilitation (HBRR) project involved the replacement of a 355-foot-long reinforced concrete deck girder bridge crossing Bear Creek at Pine Street near Central Point. Elements of the project included field survey, geotechnical investigation, environmental documentation, hydraulic/hydrologic analysis, roadway design including temporary detour, and bridge design. The design effort involved preparation of a TS&L report and included construction plans, special provisions, and cost estimates (PS&E). Otak provided full construction management services.

[Avenue A: Atlantic Avenue to Kershaw Road; White City, OR](#)

- Otak performed civil engineering services for the improvement of Avenue A in White City, Oregon. The project consisted of roadway and drainage improvements for approximately a half-mile of currently unimproved county road. The project was funded with Federal Congestion Mitigation and Air Quality (CMAQ) funds.

[Douglas County Bridges; Douglas County, OR](#) - Otak provided engineering services for three bridge replacement projects, which include Days Creek, Deadman Creek, and Diamond Creek Bridges. Otak is responsible for project management, bridge engineering, roadway engineering, hydrologic/hydraulic investigation, specifications, cost estimates, construction management, construction inspection, utility coordination, and surveying.

[Main Street & Harwood Bridges; Prineville, OR](#) - Otak provided project management, design, and construction engineering services for this OTIA III funded bridge project. The project included the replacement of two bridges within Prineville. The Main Street Bridge is an existing concrete structure, which will be replaced with a precast concrete slab single-span bridge. The bridges were designed to accommodate the FEMA floodway while eliminating “in water” work. This allowed the ACOE/DSL permit process to be streamlined through the Nationwide/General Authorization procedures. The project was completed on an expedited schedule with design completed in 2.5 months

and construction scheduled to be completed four months later.

[Lane County On-Call Bridge Design and Special Services; Lane County, OR](#)

- Otak is contracted to provide bridge design and other special services to support project development for Lane County. Projects may range from minor repair to new construction and will be funded by the County. The types of anticipated services could include project development, construction assistance, bridge preservation, bridge operations, and special analysis such as special structural analysis, geotechnical investigations, hydrology/hydraulic, and emergency response.

[McAndrews Road Bridge Replacement; Medford, OR](#)

- The City selected Otak for design of the McAndrews Road Bridge Replacement project. This \$6M project will replace the existing bridge over Bear Creek. Otak performed project management, bridge design, roadway design, hydraulic analysis, survey and is currently providing construction management. As part of the project, several structures need replacement/modification/addition: replacement of Bear Creek (McAndrews Road) Bridge, a temporary multi-use path bridge, three retaining walls and modifications to a major siphon structure. The existing bridge is being replaced with a new 242-foot three span precast prestressed box beams with a cast-in-place deck supported on reinforced concrete columns on drilled shafts. The project required coordination with a wide variety of stakeholders, including City staff, Rogue Valley Mall, and utilities.

DKS

[OR 213/Beavercreek Road Improvement Project; Oregon City, OR](#) - DKS provided traffic analysis and design services for the ORE 213/Beavercreek Road Improvement Project. DKS was responsible for determining vehicle queuing and storage requirements, signal phasing requirements, and signal systems operational analysis. DKS designed traffic engineering improvements for two traffic signals, traffic signal interconnect, roadway lighting, and signing/stripping. DKS worked closely with the City of Oregon City, Clackamas County, and ODOT to ensure all plans, specifications, and estimates met the standards of all three agencies in metric format. Currently, DKS is providing construction services, which includes submittal reviews, preparation of shop drawings for all non-standard signs, inspection services for

all aspects of the design work, field inspection reports per ODOT requirements, and record drawing preparation.

Central Point Pine Street/Hwy 99 Improvements; Central Point, OR - DKS prepared PS&E for construction of intersection and traffic improvements at the intersection of Highway 99/Pine Street in Central Point. The improvements included a traffic signal modification, installation of a traffic signal interconnect, installation of pedestrian-scale ornamental lighting, and modifications to signing and striping. DKS worked with the City, ODOT, and the property owners to develop an access management plan in the vicinity of the intersection. DKS is currently providing engineering oversight during construction of these improvements.

Hardey Engineering

Antelope Road East; Jackson County, OR - A public street improvement project (approx. 9,500 lf). This project involved the design and improvement of an existing substandard public street to county urban standards, including storm drainage.

Avenue A; Jackson County, OR - A public street road improvement project (approx. 12,000 lf). This project involved the design and improvement of an existing substandard public street to county urban standards, including storm drain and a waterline (560 lf).

Kittelson & Associates, Inc.

SW Farmington Road Improvements; Washington County, OR - KAI was retained by Washington County to design improvements to SW Farmington Road (OR 10). KAI provided transportation planning and traffic engineering design services for this \$3 million improvement project. The first task consisted of evaluating existing and projected traffic operations and developing improvement recommendations to the project's public advisory committee. In the final design task, KAI prepared the final PS&E for the permanent traffic signals and the permanent illumination along the corridor. KAI reviewed shop drawings and submittals, responded to RFI from the contractor, and prepared as-built drawings.

Highway 47/Sunset Drive Intersection Improvements; Washington County, OR - KAI completed an intersection safety improvement project for Washington County at the

Highway 47/Sunset Drive intersection. KAI's responsibilities included collecting traffic counts at the intersection, preparing a technical memorandum summarizing the signal warrants and left-turn signalization criteria, general project coordination between ODOT and Washington County, developing final traffic signal and signing/stripping plans, special provisions, and a cost estimate to ODOT standards, and providing construction inspection services.

Foundation Engineering, Inc.

"A" Canal Bridge; Klamath Falls, OR - The City of Klamath Falls plans to widen the bridge on Washburn Way where it crosses "A" Canal. The City is the project owner and Otak, Inc. is the prime designer. Foundation Engineering, Inc. was retained by Otak to complete a geotechnical investigation and develop recommendations for the design of foundations, retaining walls and pavements.

Bear Creek (Pine Street) Bridge; Jackson County, OR - Pine Street crosses Bear Creek, east of Central Point and I-5 in Jackson County. FEI provided foundation analysis and design recommendations for replacement of the older bridge section. Selection of the most appropriate foundation option for the replacement bridge included consideration of new foundation construction while maintaining the stability of existing foundations that support the north structure. Drilled shafts were selected as the most feasible foundation option due to the proximity of the adjacent structure to the north. The proposed 1.83 m diameter shafts were analyzed for lateral deflection, axial capacity and settlement. The shafts can be constructed in a manner that presents the least risk for settlement related damage to adjacent foundations.

Shannon & Wilson

Riddle Bridge at Cow Creek; Douglas County, OR - S&W provided geotechnical investigation and foundation recommendations to support the design for the replacement of the existing Riddle Bridge at Cow Creek located south of the City of Riddle. Included in the geotechnical investigation were site reconnaissances, field explorations, and laboratory testing, followed by engineering analyses and development of geotechnical recommendations. S&W performed in-water drilling, completed within the defined in-water work period, and obtained all necessary exploration permits from Oregon DSL and the ACOE.

ODOT Bridges: Neskowin Creek (Cascade Trace Road) Bridge, Tillamook County, Oregon; Mill Creek (Fifth Street) bridge, City of Turner, Oregon; Willamina Creek (Tindle Creek Road) Bridge - Tasks that were completed by S&W included managing the subsurface explorations and the laboratory testing program, logging the subsurface explorations, analyzing and providing recommendations for deep foundations that included axial and lateral analyses, shallow foundations, and pavement sections, and producing a Foundation Report for each of the bridges.

Cornforth

ODOT Cracked Bridges Program; OR - Many of Oregon's bridges were designed and built in the early 20th century. Since then, allowable truck loads and tire pressures have increased, and in many instances current truck loads exceed the original design loads for these structures. Cornforth Consultants was retained to conduct research of geotechnical and project files for nearly 200 bridges across the state of Oregon. Based on our review of existing information we provided geotechnical recommendations as part of the evaluation under the jurisdiction of the ODOT. The work tasks consisted of searching records for available subsurface data and foundation information in ODOT Region and headquarters offices, evaluating geotechnical conditions based on available data, reviewing existing foundation drawings and reports, providing recommendations for further geotechnical exploration programs (as needed), evaluated foundation types, provided comments regarding anticipated level of foundation construction difficulty and relative cost estimate factors, prepared summary geotechnical reports for each bridge, and reviewed Baseline Reports for compliance with geotechnical findings and recommendations.

Warner Highway Curve Realignment – OR 140 E (Hwy 431). MP 17.4 to 18.4; Lake County, OR - ODOT will realign and upgrade an approximately 1-mile long, substandard section of the Warner Hwy. Cornforth performed geotechnical work to identify alignment alternatives, including geologic site reconnaissance, evaluation of seismicity, material source investigation, and subsurface exploration and laboratory testing programs. In addition, Cornforth provided recommendations for cut slopes, embankments, rockfall mitigation, use of excavated

material for road construction, rock source development, pavement design, culvert/bridge foundations and construction staging.

Heritage Research Associates

Rogue River (Depot Street) Bridge (#6970); Jackson County, OR - Standard cultural resource investigations were conducted for the proposed replacement of the Rogue River Bridge in Rogue River. Records research was conducted at SHPO, a state archaeological permit was obtained, and an intensive pedestrian survey supplemented by subsurface probing was conducted of the entire area of potential effect; no archeological resources were located. A determination of eligibility and finding of effect was prepared for the Rogue River Bridge, a steel-thru truss arch bridge completed in 1950; follow-up documentation included 4(f) evaluation, public meeting notice, notice of availability, and memorandum of agreement for the bridge.

Redmond US 97 Reroute; OR - The Redmond US 97 Reroute Project within the city limits of Redmond will reroute US Highway 97 traffic from 5th and 6th Streets in downtown Redmond through construction of a 5-lane roadway along the east side of the city and improvement of several major intersections. The cultural resource survey included an inventory of all historic structures 50 years of age and older, as well as identification of potential archaeological site locations. More than 20 historic properties were inventoried, of which three have been determined eligible to the National Register of Historic Places. No archaeological sites will be affected by the proposed project. Work tasks included preparation of documentation for Determinations of Eligibility and Findings of Effect in compliance with Section 106 and Section 4(f).

MB&G

Willamina Creek (Tindle Creek Road) Bridge Replacement Project, ODOT, Yamhill County, OR - MB&G prepared Endangered Species Act (ESA) documentation for the replacement of a steel truss bridge over Willamina Creek in rural Yamhill County. Fisheries biologists prepared a Biological Assessment (BA) to meet ESA Section 7 consultation requirements for potential impacts to listed fish species, including Chinook salmon and steelhead trout. Conducted environmental construction monitoring

to ensure compliance with issued permits and prepared monitoring summary report to document the construction process and its effect on the project area environmental baseline.

[Ochoco Creek \(Deer Street and 9th Street\) Bridges, ODOT; Prineville, OR](#) - MB&G prepared wetland documentation and permitting services for the construction of the 9th Street Bridge and the replacement of the existing Deer Street bridge over Ochoco Creek. MB&G wetland scientists conducted wetland delineations at both bridge sites and prepared a wetland delineation report for submittal to the DSL. MB&G coordinated with the US Army Corps of Engineers and the DSL on Section 404 and Oregon Removal/Fill permitting.

[Grave Creek \(Beecher Road\) Bridge Replacement Project; Josephine County, OR](#) - MB&G prepared ESA, wetland, and rare plant documentation for the replacement of a steel truss bridge over Grave Creek in rural Josephine County, Oregon. Wetland documentation included a wetland delineation and the preparation of a wetland delineation report. MB&G prepared a Biological Assessment to document potential impacts on federally listed coho salmon, bald eagle, Northern spotted owl, and Gentner mission-bells. Section 404 and Oregon Removal/Fill permitting was also conducted for this project. MB&G is currently conducting environmental monitoring for the construction phase of this project.

NRPS

[ODOT Wilson River Highway at Wilson River Loop; Tillamook County, OR](#) - NRPS prepared environmental baseline technical reports for the ODOT funded baseline study of the intersection of Wilson River Highway and Wilson River Loop. The baseline reports covered the following NEPA sections: socio-economics, land use, hazardous materials, and aesthetics. NRPS is now preparing Phase 2 regulatory compliance documents including an ESA Section 7 BA. (ODOT Region #2)

[Bridge Replacements – OTIA III Local Agency Projects \(2 Projects\); Douglas County, OR](#) - NRPS handled all permitting for the Myrtle and Pruner Bridge replacement projects. The work involved preparation of ESA Section 7 BAs, wetland delineations, formal consultations, and permit

applications. The projects also include design of mitigation for in stream habitat loss that include the development of a planting plan to encompass 1,500 square feet of invasive plant removal and replacement by native species, as well as the addition of gravels to a gravel-limited stream (South Umpqua River). Species of concern included Oregon Coast Coho. (ODOT Region #3)

JD White

[Willamina Creek \(Tindle Creek Road\) Bridge Replacement; Yamhill County, OR](#) - Dan Cary, now a JDW Senior Scientist, was the project manager, and Ed Strohmaier was the wetland scientist for this project. They conducted a wetland delineation of the area surrounding this crossing of Willamina Creek. Water levels in Willamina Creek at this location fluctuate greatly throughout the seasons, making this a complex wetland delineation. Dan was also responsible for state and federal permitting for the project.

[Port of Portland Noise Plan Update; Portland, OR](#) - JDW teamed with a prime consultant for the Port of Portland Noise Plan Update project for Portland International Airport, and JDW was responsible for providing land use planning and public involvement services. JDW developed and implemented a comprehensive public outreach strategy to involve airport tenants and organizations, neighboring residents, a broader audience of the general public, airport passengers, and civic organizations. As part of this project, JDW assessed the existing land use trends and developed a compatibility matrix based on the FAR Part 150 guidelines identifying specific noise levels at which various land uses would become incompatible with the airport.

Right of Way Associates, Inc.

[Pine Street at Highway 99; Central Point, OR](#) - This OTIA funded LPA project improved the intersection of Highway 99 and Pine Street. The project impacted five commercial properties which were gas stations, an office building and two manufacturing facilities. Property was also acquired for changes at a railroad crossing. ROWA provided preliminary cost estimates, the coordination of appraisals and appraisal reviews, as well as acquisition negotiations for the project.

[Noble Creek Bridge; Coos County, OR](#) - ROWA obtained appraisals of takings at two ownerships, and negotiated

for the purchase of easements for this OTIA-funded bridge replacement project in Coos County. The bridge was the primary residential and commercial access point for the area, particularly for timber companies.

UFS

SW 170th Avenue Project; Washington County LUT, OR

- The project consisted of widening of SW 170th from Blanton Rd to Farmington Rd and then from Farmington Rd to Rigert St. UFS performed acquisition and relocation tasks for 12 residential properties in a residential area. These were all single-family residence with a variety of issues including property owners that were non-English speaking. All of these properties were settled without condemnation action.

Roseburg Airport Extension; Roseburg, OR - UFS is in the process of acquiring 121 mobile homes and relocating the occupants from a mobile home park for the Airport extension. This park is a seniors-only park and involves multiple relocation issues, primarily the fact that the average age of the occupants is 75 years old and the income levels are low. The project was started in February 2002 with several public meetings and then the development of a relocation plan. The objective was to acquire the hardship cases first, followed by volunteers to move, and finally acquire and relocate those remaining from the south end of the park to the north. This was to accommodate funding with FAA and also to prevent a burden on the market by trying to find replacement housing all at once.

Zetlin

Highway 58 Bridges Project; OR - Zetlin (ZSC) was retained to develop and implement the public involvement and communications plan. Specifically to identify, notify and meet with key stakeholders including community members, business leaders, elected officials, truckers, and emergency service personnel. ZSC is providing timely and accurate project information about each of the bridges, specific impacts in the communities and responding directly to concerns, or forwarding the information to the ODOT and OBDP. Zetlin maintains the database (3000+ names) with contact information and is responsible for development and distribution of project newsletters, meeting notices and Project Information Papers. In addition, Zetlin is responsible for making meeting

arrangements, facilitating meetings and conducting follow-up activities.

Burnside Bridgehead Project; Portland, OR - Zetlin was responsible for guiding a developer through a process, identifying the not-for-profit affordable housing team members and other community partners, and working with the community to minimize resistance to the proposed development. PDC and Zetlin are currently working on a public participation plan that will continue to inform and seek input from the community throughout the design, program planning and construction for the site. This plan will include working with established neighborhood and business associations, skate board, bicycle and pedestrian advocacy organizations and the Central Eastside Urban Renewal Citizen Advisory Committee. The plan lays out tools for working with and recruiting citywide civic organizations, local property and business owners, and private individuals who have expressed interest in the project.

CES, Inc.

May Creek Bridge Hydraulic Study; Everett, WA - CES prepared a hydraulic study for the replacement of the existing bridge. The replacement bridge opening will be sized to meet the requirements for a fish bearing stream as specified in the BRAC (Bridge Replacement Advisory Committee) funding guidelines. A 2-foot freeboard for a 100-year flood has been recommended by BRAC. The scope of work included hydraulic and hydraulic studies, and report preparation.

Miekler Road Bridge Replacement; Kelso, WA - CES completed replacement design for an existing timber bridge over Hill Creek on Miekler Road, approximately 6 miles NW of Castle Rock, WA. The completed PS&E is for a 75' long pretensioned, prestressed voided slab bridge built on new cap pile substructure. The use of voided slab was used to achieve the required clearance over the high water mark. CES also developed approximately 300' of approach roadway design.

Hamilton Engineering

Spokane Street Swing Bridge, Lift/Turn Cylinder Replacement; Seattle, WA - The Lift/Turn Cylinder, positioned inside the pier-house is a key element of the

lift system for two identical 15 million pound bridge leaves. The project scope included review of existing design, development of several new concepts and detailed design of the new cylinder. Scope of work also included instrumentation of the existing and new Lift/Turn cylinders. Responsible for QC and peer review of final design. Responsible for development of instrumentation plan for measurement of displacement and stress level for existing and redesigned L/T cylinders, field testing and final report.

Evergreen Point Bridge (SR520) Lift Deck Hydraulic System Investigation; Seattle, WA - Evergreen Point Bridge (SR520) floats over Lake Washington with the movable bridge section positioned near the middle of the bridge. The movable section of the bridge consists of a dual arrangement of the Lift Deck and the Floating Span. The Lift Deck is powered by 8 hydraulic cylinders. Work involved the review of hydraulic system design for bridge lift deck, field inspection of bridge deck lifting machinery, instrumentation of the hydraulic systems, analysis of the hydraulic system data and control system stability. The results of this analysis were presented to WSDOT in the form of a report along with recommendations and cost estimates for system improvements.

Moffatt & Nichol

San Francisco Oakland Bay Bridge East Span Safety Project; Oakland, CA - In a joint venture, Moffatt & Nichol was the Project Manager for the structural design of the \$2.5-billion San Francisco-Oakland Bay Bridge East Span replacement. The joint venture provided 30%-complete concept design for the entire structure together with two cable-supported bridge design concepts for the main span - a cable-stayed alternative and a self-anchored suspension alternative. The Metropolitan Transportation Commission chose the self-anchored suspension bridge concept. The joint venture then developed the final PS&E for the entire structure.

The signature portion of the new bridge is a single-tower, self-anchored suspension segment with a 1,263-foot main span and a 590-foot back span. Both the 530-foot tall, single-tower and the self-anchored features of the suspension segment represent innovations in bridge design. In addition to overall project management, M&N was

responsible for the design of the foundations for the main span and viaducts, ship collision measures, design of the YBI viaducts, YBI detours and YBI transition structures, and the Oakland approach structures.

Route 123 Bridge Over Occoquan River; Prince William & Fairfax Counties, VA - Moffatt & Nichol provided concept development and final design services for the replacement of an existing bridge across the Occoquan River in the historic Town of Occoquan. In addition to the bridge design services, Moffatt & Nichol also provided public involvement, hydrologic modeling, river/tidal mechanics, scour analysis, dredging plans, staged construction, surveying, geotechnical, and environmental support services.

Rhine

Washburn Way, "A" Canal Bridge, ODOT; OR – Design Topographic Survey for bridge widening and reconstruction in Klamath Falls, Oregon. Survey tasks were completed on schedule and within budget.

Crooked Creek Bridge, ODOT; OR – Construction staking for a bridge outside of Chiloquin, Oregon. Survey tasks were completed on schedule and within budget.

CMTS

SE Foster Road at SE 162nd Avenue, PDOT; OR – CMTS provided construction management services for this multi-purpose project which included the straightening and widening of Foster Rd., addition of left-turn lanes, traffic signal installations, and replacement of an existing box culvert with a pre-cast open bottom arch culvert to improve fish passage. Additional work included the construction of lock-block retaining walls; temporary stream diversions as well as a temporary storm and sanitary diversion in conjunction with a temporary 200 mm water main diversion across Kelley Creek.

SW Clay/Market Streets Resurfacing Project, PDOT; OR – This project covered SW Clay Street from Naito Parkway to SW 1st, on SW Market from Naito Parkway to SW 2nd, and on SW 1st from Market to Clay. CMTS' Senior Inspector, who is an ODOT retiree, performed a constructability review for PDOT Project Manager prior to the beginning of the project. This project was nominated for a paving award.

Project Name/Location	Type	Size	Duration	Schedule	Budget
Otak					
"A" Canal (Washburn Way) Bridge Widening; Klamath Falls, OR	Bridge Widening	\$1.2 M	12 mo.	On Schedule	Under Budget
Little Butte Creek (Loto Street) Bridge; Eagle Point, OR	Bridge Replacement	\$500,000	28 mo.	On Schedule	Budget Revised ₁
9th Street Extension/Deer Street Bridge; Prineville, OR	Street Improvement	\$350,000	5 mo.	On Schedule	Within Budget
Bear Creek (Pine Street) Bridge; Jackson County, OR	Bridge Replacement	\$343,077	13 mo.	On Schedule	Within Budget
Avenue A: Atlantic Avenue to Kershaw Road; White City, OR	Roadway Improvements	\$200,000	14 mo.	On Schedule	Under Budget
Douglas County Bridges; Douglas County, OR	Bridge Replacement	\$982,000	In Progress	In Progress	In Progress
Main Street & Harwood Bridges; Prineville, OR	Bridge Replacement	\$1.6 M	2.5 mo.	On Schedule	Within Budget
Lane County On-Call Bridge Design and Special Services; Lane County, OR	Bridge Design	\$375,000	36 mo.	On Schedule	Within Budget
McAndrews Road Bridge Replacement; Medford, OR	Bridge Replacement	\$656,000	12 mo.	On Schedule	Within Budget
DKS					
OR 213/Beavercreek Road Improvement Project; Oregon City, OR	Road Improvement	\$170,000	48 mo.	On Schedule	Within Budget
Central Point Pine Street/Hwy 99 Improvements; Central Point, OR	Traffic Improvements	\$80,000	11 mo.	On Schedule	Within Budget
Hardey Engineering					
Antelope Road East; White City, OR	Roadway Improvement	\$486,000	8 mo.	On Schedule	Within Budget
Avenue A; White City, OR	Roadway Improvement	\$255,000	6 mo.	On Schedule	Within Budget
Kittelson & Associates, Inc.					
SW Farmington Road Improvements; OR	Roadway Widening	\$85,000	24 mo.	On Schedule	Within Budget
Highway 47/Sunset Drive Intersection Improvements; OR	Traffic Signalization	\$23,000	16 mo.	On Schedule	Within Budget
Foundation Engineering					
"A" Canal (Washburn Way) Bridge; Klamath Falls, OR	OTIA Bridge Rehabilitation	\$19,437	10 mo.	On Schedule	Within Budget
Bear Creek (Pine Street) Bridge; Jackson County, OR	HBRR Bridge Replacement	\$41,246	12 mo.	On Schedule	Within Budget
Shannon & Wilson					
Riddle Bridge; Douglas County, Oregon	Foundation Investigation	\$37,000	8 mo.	On Schedule	Within Budget
Neskowin Crk Br.; Tillamook Co. Mill Crk Br.; Turner, Willamina Crk Br.; Yamhill Co, OR	Foundation Investigation	\$13,000	4 mo.	On Schedule	Within Budget
Cornforth					
ODOT Cracked Bridges Program; OR	Geotechnical Services	\$194,000	12 mo.	On Schedule	Under Budget
Warner Highway Curve Realignment – OR 140 E (Hwy 431); Lake Co., OR	Geotechnical Services	\$152,000	20 mo.	On Schedule	Under Budget
HRA					
Rogue River (Depot Street) Bridge; Jackson County, OR	Cultural Resource Investigation	\$15,000	24 mo.	On Schedule	Within Budget
Redmond US 97 Reroute; Redmond, OR	Reroute Project	\$9,000	24 mo.	On Schedule	Within Budget
Mason Bruce & Girard					
Willamina Crk (Tindle Crk Rd) Bridge Repl.; Yamhill County, OR	Bridge Replacement	\$20,000	36 mo.	Schedule Revised ₂	Over Budget ₂
Ochoco Creek (Deer Street and 9th Street) Bridges; Prineville, OR	New Bridge & Replacement	\$33,000	12 mo.	On Schedule	Within Budget
NRPS					
ODOT Wilson River Highway at Wilson River Loop; Tillamook County, OR	NEPA Compliance	\$11,800	4 mo.	On Schedule	Within Budget
Bridge Replacements – OTIA III Local Agency Projects; Douglas County, OR	Environmental Compliance	\$48,784	16 mo.	Schedule Revised ₂	Within Budget
JD White					
Willamina Creek Bridge (OR 93); Yamhill County, OR	HBRR Bridge Replacement	\$310,000	18 mo.	Schedule Revised ₂	Within Budget
Port of Portland Noise Plan Update; Portland, OR	Noise Study	\$327,237	12 mo.	Schedule Revised ₂	Budget Revised ₂
Bolima					
East Columbia to Lombard Connector Project; Portland, OR	Roadway Improvement	\$35,000	14 mo.	On Schedule	Within Budget
1-5 Sutherlin to Roseburg Project, ODOT; OR	Bridge Replacement	\$99,999	12 mo.	On Schedule	Within Budget
Right of Way Associates, Inc.					
Hwy. 99W / Pine Street; Central Point, OR	Highway Improvement	\$84,500	7 mo.	On Schedule	Within Budget
Noble Creek Bridge; Coos County, OR	Bridge Replacement	\$14,000	6 mo.	On Schedule	Within Budget
UFS					
SW 170th Avenue Project; Washington County, OR	Road Improvement	\$26,016	18 mo.	On Schedule	Within Budget
Roseburg Airport Expansion	Expansion	\$682,335	60 mo.	On Schedule	Within Budget
Zetlin					
Highway 58 Bridges Project; OR	Bridge replacement	\$30,000	12 mo.	On Schedule	Within Budget
Burnside Bridgehead Project; Portland, OR	Mixed-Use	\$33,475	36 mo.	In Progress	In Progress
CES, Inc.					
May Creek Bridge Hydraulic Study; Snohomish County, OR	Hydraulic Study	\$23,190	In Progress	In Progress	In Progress
Miekler Road Bridge Replacement; Cowlitz County, OR	Bridge Replacement	\$88,800	In Progress	On Schedule	Within Budget
Hamilton Engineering					
Spokane Street Swing Bridge Cylinder Replacement; Seattle, WA	Cylinder Redesign	\$156,000	26 mo.	On Schedule	Within Budget
Evergreen Point Bridge Investigation; Seattle, WA	Bridge Assessment	\$30,000	12 mo.	On Schedule	Within Budget
Moffatt & Nichol					
Route 123 Bridge over Occoquan River; Prince William and Fairfax Counties, VA	Concrete bulb T-girder	\$16 M	12 mo.	On Schedule	Within Budget
San Francisco Oakland Bay Bridge East Span Safety Project; Oakland, CA	Cast-in-place Post Tensioned Box Bridges	\$2.5 B	Comp. 2003	Schedule Revised ₄	Budget Revised ₄
Rhine					
Washburn Way "A" Canal Bridge, ODOT; OR	Survey	9 mo.	\$15,000	On Schedule	Within Budget
Crooked Creek Bridge, ODOT; OR	Construction staking	6 mo.	\$4,000	On Schedule	Within Budget
CMTS					
SE Foster Road at SE 162nd Avenue; Portland, OR	Inspection Services	\$4.1 M	Comp. 2002	On Schedule	Within Budget
SW Clay/Market Streets Resurfacing Project; Portland, OR	Inspection Services	\$1.1 M	Comp. 2002	Ahead of Schedule ₅	Over Budget ₅

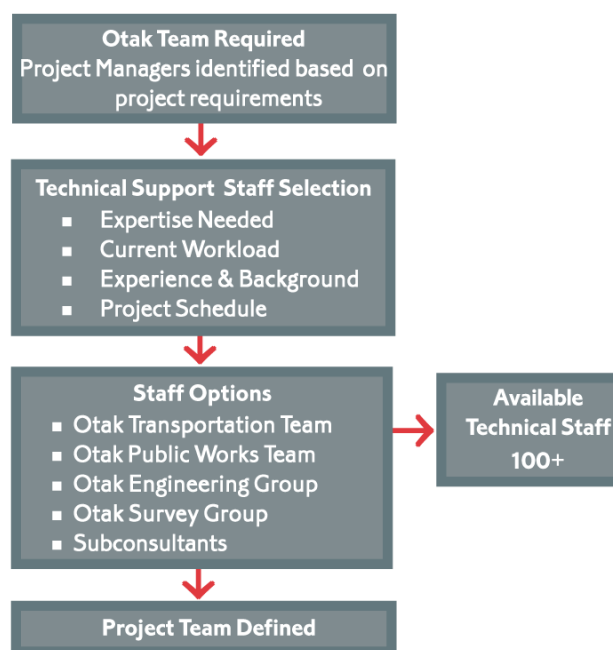
1. Additional work authorized by City for 2nd bid and streetscaping design; 2. Revised due to additional services; 3. Delay in design; 4. Design schedule and construction cost were impacted due to controversial issues within the community; 5. This project was completed ahead of schedule and only came in \$8,000 over engineer's estimate

2.2.4 Proposer’s Capabilities

Accommodate Varying Levels of Work Assigned

The nature of on-call contracts requires a team with the staff and material resources necessary to respond quickly and efficiently to project needs. These projects at times require immediate response related to emergency situations such as landslides, flooding or washouts where public safety is a top priority. The Otak team is organized to respond effectively to the varying levels of work assignments related ODOT/Local Agency on-call contracts.

Our approach to accommodating these variable levels of work assignments is a three step process as outlined below. The initial step is to select a project manager based on a specific project. The project manager will oversee the main services of the project and act as the main liaison with ODOT and the Local Agency. Based on project needs, the second step will be to review technical support staff for each of the applicable disciplines. Selection of staff will be based on the type of expertise needed, current work load, experience and background, and project schedule. The third step will be to select staff from a large pool of resources based on project needs. The conclusion will result in the development of a project team customized to meet the needs of the project.



We are organized to respond to multiple work order assignments concurrently. We have staff depth at the project manager level and, for technical support within each of the specific disciplines and services. This will enable us to mobilize multiple project teams to work on concurrent projects.

Availability of Personnel

The Otak team commits to ODOT and the local agencies to have the proposed key staff and supportive members available for the duration of the contract to provide the services and deliverables necessary to complete assigned project. Actual staff utilization will be determined by the project needs.

If requested by the LPA, Otak will provide a Capacity Summary showing current and projected project assignments for Project Managers and other key personnel.

Approach Ensuring Plans Developed for the Project Can Be Constructed within the Client’s Budget

Otak understands the local agency’s funds are often limited and that the agency cannot afford to absorb additional project costs or overruns. At the conceptual design stage, Otak will evaluate the programmed estimate for realism and develop a project approach to meet the project budget goals. Otak tracks the anticipated project costs by preparing cost estimates to ODOT standards at the 30% Preliminary Design Report (or TS&L), 60% Design (where applicable, 95% Advance Plans and 100% Final Plans stages. One successful approach Otak has used was demonstrated on the recent Loto Street Bridge project in Eagle Point. The Loto Street Bridge was an OTIA I funded project with a \$2.25M funding cap. Otak was aware from the beginning that the City would not be able to fund additional project costs. Taking the City’s needs into account, Otak developed a bridge concept that would meet the City’s needs for context-sensitivity, functional capacity and meeting a firmly established budget. During project development, project costs were carefully estimated and each project element with potential cost impact was discussed with the City’s project leaders. Desired elements with potential cost impacts included additional streetscaping, concrete intersections, ornamental street lighting and bridge

rail, colored bridge concrete and a new 12” water main crossing. Tracking the estimated project costs showed that the project would be very close to the maximum available and due to increasing construction costs statewide, the project amenities were at risk. Otak developed a base bid with alternates that would allow the City to award just the project elements it could afford. Otak also cut costs during construction by deleting certain non-critical aesthetic features. The project has been completed within the original project budget and included all of the desired project amenities. Otak has a wealth of design and construction experience with local Oregon practices and also has experience from outside the region so the most innovative and cost-effective solutions can be applied.

Mgmt. & Organizational Structure

Otak takes pride in our proactive project management approach that enables us to effectively manage and work on projects of varied size and scope. We have organized our project team to provide an efficient and cost-effective approach for managing and allocating project staff. We have established tracking and monitoring procedures to keep the project team, client, and other participants informed and involved. This occurs from the initial meeting that establishes a detailed schedule and scope of services to the final project documentation and closeout.

It is important that the members of the team work efficiently and cooperatively as a cohesive unit. The Project Manager is proactive in communicating the goals of the project, keeping the team focused, reviewing the team’s work quality, budget and schedule, and seeking feedback for improvement.

Our approach to the project will be to utilize on-going communication to keep the agency in the loop, and strategically arrange milestone dates for review of design progress and deliverables to ensure the team is performing the work as expected.

Successful performance of an on-call contract is dependent upon the individual success of projects assigned under the contract. We have developed a proactive project management approach that enables us to concurrently manage and complete projects of varying size and scope. Because on-call contracts normally require quick response

for scoping, estimating, scheduling and performance of work, we have organized our project team to provide an efficient and cost-effective approach for managing and allocating resources.

For this contract, Kay Van Sickel will serve as principal-in-charge and Terry Song, PE will serve as contract manager. Kay will ensure that sufficient resources will be available to quickly and efficiently carry out any project for which Otak is selected. She will also be responsible for the negotiation and approval of all contracts. As the primary point of contact between ODOT, local agency, and the consultant team, Terry will provide continuity between each Work Order assigned from this contract. Individual work orders will be assigned to Terry Song, PE, Dick Yano, PE, Ron Jee, PE, and In-Tae Lee, PE, as project managers. Depending on the complexity of the project, within each work order the project manager may be supported by task managers for specific disciplines. The task managers will direct the work efforts of the technical staff and subconsultants. Our team is comprised of multiple task managers each covering specific project required disciplines. The multiple task managers enable us to undertake multiple work order assignments concurrently. Ron Jee, PE leads Otak’s construction engineering team and will be responsible for administering the construction contracts and managing Otak’s construction engineering efforts. He is supported by Ken Karnosh, PE, and Ian Machan, MSCE CM, construction managers. Ken Norton, former ODOT Region 3 Local Agency Liaison, is employed by Otak for construction services and project scoping, and is available to advise the project management team on Federal-Aid issues.

2.2.5.A Experience and Availability in ODOT

Region I

Firm’s Knowledge, Experience, Qualifications and Local Presence

The team assembled has an exceptional level of knowledge, experience, qualifications and local presence in Region 1. Kay Van Sickel was the former Region 1 Manager and is very familiar with the Region and local agencies within the Region. Region 1 encompasses five counties in

the northwestern part of Oregon including Multnomah, Washington, Clackamas, Hood River and Columbia counties. The Region headquarters is in Portland. The Region is subdivided into three maintenance districts with offices in Troutdale, the Sylvan Hills area of Washington Co., and Lawnfield Rd. in Clackamas Co. Region 1 is the most urban region and equals Region 2 in the number of political entities and agencies.

This knowledge and experience enables the team to understand local conditions and issues. Our past and current work has included work within the following jurisdictions in Region 1:

- I-84 Corridor through the National Scenic Area of the Columbia River Gorge (Multnomah and Hood River Counties)
- I-205 Corridor through Multnomah & Clackamas Co.
- Washington County
- Clackamas County
- Cities of Portland, Gresham, Happy Valley and Damascus, Beaverton, Lake Oswego, Milwaukie, Tigard, and Tualatin
- TriMet

Our most recent experience in Region 1 includes the extremely successful I-84 Corridor Strategy and Design Guidelines and the I-205 Storm Water Master Plan.

The Otak team has staff located in the Region 1 area. Our home office is in Lake Oswego where much of our engineering and planning staff is located. Our local presence will provide Region 1 with cost efficiencies and time savings for project work assignments. Our knowledge of local issues and concerns along with our understanding of the need for coordination and collaboration with jurisdictions and interested stakeholders will aid the Region in the successful implementation of their local program projects.

Firm's Accommodation and Response to Project Locations

The Otak team is committed to provide comprehensive and responsive services for ODOT and Local Agencies in Region 1. We are currently working on projects within the region as noted above. We have staff located throughout the region and are able to respond and accommodate work by:

- Efficient communication via e-mail, FTP, fax, and telephone
- Meetings via telephone or video conferencing to accommodate working schedules
- Centralized meetings at ODOT offices in Salem or Region 1
- Temporary assignment of staff to project locations when needed
- Rapid on-site meetings to maximize design and construction problem resolution

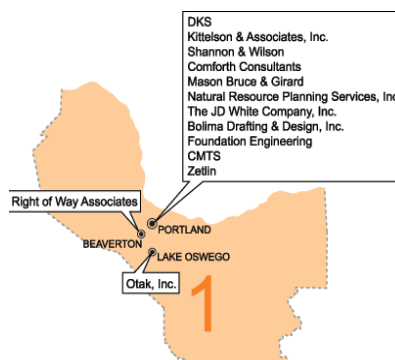
Firm's Control of Travel and Per Diem Costs

The Otak team through the efficiencies noted above due to our central location within Region 1 can minimize travel and per diem costs for all our project work assignments. Because Region 1 is the smallest Region in size of the five regions, our team will be able to travel to most project sites or attend project meetings without extended overnight trips. Our team will use the following strategies to minimize travel and per diem costs:

- Compare costs for travel based on mileage versus a rental car and use the lowest cost option
- Efficient communications via e-mail, FTP, fax and telephone to minimize travel
- Meetings via telephone or video conferencing to minimize travel
- If staff is required to travel, assign them to work longer period (i.e., 10 straight days @ 10 hours per day) to minimize travel to and from the project

Proximity of Firm and Subcontractors to Geographic Area

The Otak team has offices located within Region 1. Otak's main office is located in Lake Oswego.



2.2.5.B Experience and Availability in ODOT Region 2

Firm's Knowledge, Experience, Qualifications and Local Presence

The team assembled has an exceptional level of knowledge, experience, qualifications and local presence in Region 2. Otak has provided ODOT Local Agency On-Call Services to this region since 1998. Region 2 encompasses six counties in the southwestern part of Oregon including Marion, Polk, Yamhill, Lincoln, Benton and Linn Counties and portions of Clatsop, Tillamook, Washington, Clackamas and Lane Counties. The Region headquarters is in Salem.

This knowledge and experience enables the team to understand local conditions and issues. Our past and current work has included work within the following jurisdictions in Region 2:

- Marion, Yamhill, Clatsop, Tillamook, Lane Counties
- City of Salem, Turner, Tillamook, and Astoria

Our most recent experience in Region 2 includes the OR36: Lingo Slough Bridge, Sharp's Creek Bridge, Row River Bridge and Portland Road Streetscape projects. Rick Garrison, a former Region 2 project leader and designer is a Senior Transportation Designer with Otak.

Otak's office in Lake Oswego is within a few miles of the Region 2 boundary and 35 miles from the Region headquarters in Salem. Otak's office is within a few hours drivetime of any location in the Region.

Firm's Accommodation and Response to Project Locations

- The Otak team is committed to continue to provide comprehensive and responsive services for ODOT and Local Agencies in Region 2. We are currently working on projects within the region as noted above. We have staff located in the region and are able to respond and accommodate work by:
 - Efficient communication via e-mail, FTP, fax, and telephone
 - Meetings via telephone or video conferencing to accommodate working schedules
 - Centralized meetings at ODOT offices in Salem, or at local agency offices in the region
 - Temporary assignment of staff to project locations when needed

- Rapid on-site meetings to maximize design and construction problem resolution

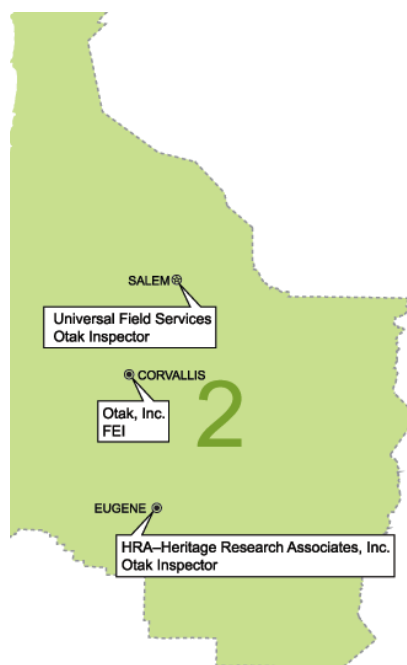
Firm's Control of Travel and Per Diem Costs

The Otak team will minimize travel and per diem costs for all our project work assignments in Region 2 by continuing to schedule needed travel in the most efficient way, utilizing local Otak and subconsultant resources, and maximizing the use of time while onsite in the region. Our team will use the following strategies to minimize travel and per diem costs:

- Compare costs for travel based on mileage versus a rental car and use the lowest cost option
- Efficient communications via e-mail, FTP, fax and telephone to minimize travel
- Meetings via telephone or video conferencing to minimize travel
- If staff is required to travel, assign them to work longer period (i.e., 10 straight days @ 10 hours per day) to minimize travel to and from the project

Proximity of Firm and Subcontractors to Geographic Area

The Otak team has offices located within Region 2. Otak's main office in Lake Oswego is within a few hours travel to any location in the Region.



2.2.5.C Experience and Availability in ODOT

Region 3

Firm's Knowledge, Experience, Qualifications and Local Presence

The team assembled has an exceptional level of knowledge, experience, qualifications and local presence in Region 3. Otak has provided ODOT Local Agency On-Call Services to this region continuously since 2000. Region 3 encompasses six counties in the southwestern part of Oregon including Douglas, Coos, Curry, Josephine, Jackson Counties and a portion of Lane County. The Region headquarters is in Roseburg and the Tech Center is in White City.

This knowledge and experience enables the team to understand local conditions and issues. Our past and current work has included work within the following jurisdictions in Region 3:

- Jackson, Josephine, and Douglas County
- City of Medford, Ashland, Eagle Point, and Roseburg

Our most recent experience in Region 3 includes the Bear Creek Bridges at McAndrews Road in Medford and Pine Street near Central Point, the Loto Street Bridge in Eagle Point, Avenue A: Atlantic-Kershaw in White City and Local Agency OTIA III funded bridge packages in Jackson, Josephine and Douglas Counties.

The Otak team has construction staff and subconsultants located in the Region 3 area. Our experience and multitude of projects in Region 3 allows us to achieve economies of scale when traveling to the region by combining multiple projects into a single trip. Otak has been highly successful in maintaining an excellent level of service in the region by efficient use of travel and electronic communication. Otak will continue to utilize local subconsultants including Hardey Engineering of Medford for tasks requiring unique local knowledge including drainage strategies for the Agate Desert area near White City and tasks requiring a quick response local presence including surveying.

Firm's Accommodation and Response to Project Locations

The Otak team is committed to continue to provide comprehensive and responsive services for ODOT and Local Agencies in Region 3. We are currently working on projects within the region. We have staff located in the region and are able to respond and accommodate work by:

- Efficient communication via e-mail, FTP, fax, and telephone
- Meetings via telephone or video conferencing to accommodate working schedules
- Centralized meetings at ODOT offices in Salem, Roseburg, or White City.
- Temporary assignment of staff to project locations when needed
- Rapid on-site meetings to maximize design and construction problem resolution

Firm's Control of Travel and Per Diem Costs

The Otak team will minimize travel and per diem costs for all our project work assignments in Region 3 by continuing to schedule needed travel in the most efficient way, utilizing local Otak and subconsultant resources, and maximizing the use of time while onsite in the region. Our team will use the following strategies to minimize travel and per diem costs:

- Compare costs for travel based on mileage versus a rental car and use the lowest cost option
- Efficient communications via e-mail, FTP, fax and telephone to minimize travel
- Meetings via telephone or video conferencing to minimize travel
- If staff is required to travel, assign them to work longer period (i.e., 10 straight days @ 10 hours per day) to minimize travel to and from the project

Proximity of Firm and Subcontractors to Geographic Area

The Otak team has offices located within Region 3. Otak's main office in Lake Oswego is within a few hours travel by air to the Rogue Valley International Airport. Hardey Engineering is located in Medford. Ken Norton and Diana Norris, Otak field staff, are based in the region.



2.2.5.D Experience and Availability in ODOT

Region 4

Firm's Knowledge, Experience, Qualifications and Local Presence

Region 4/Central Oregon is the second largest geographical regional area in the State, with overall attributes unique to this region only. Central Oregon spans from the scenic Columbia River Gorge with Wasco, Sherman, and Gilliam Counties in the north to the California border and Klamath and Lake Counties in the south. Starting at the Cascade Mountain Range in the west, the Region encompasses the High Desert area to the east including its internal Counties of Wheeler, Jefferson, Deschutes, and Crook.

Knowledge and Experience in Region Transportation

Otak's recent project experience in Region 4 includes:

- Highway Corridor Studies
- US97 Corridor Refinement Study
- OR293: Willowdale-Antelope Phase 2, two replacement and one rehabilitation
- Rock Creek Bridge Replacement at Olex
- Ochoco Creek (Deer St.) Bridge Replacement, Prineville
- Ochoco Creek (9th St.) Bridge, Prineville
- Ochoco Creek (Harwood St.) Bridge Replacement, Prineville
- Ochoco Creek (Main St.) Bridge Replacement, Prineville
- "A" Canal (Washburn Way) Bridge Widening, Klamath Falls
- OR140: Warner Highway Reconstruction, Lake County
- Six (6) Planning Level Engineering Concepts and estimate for Klamath Falls and Klamath County, bridge replacements and rehabilitations
- US26: Crooked River Bridge, bridge replacement and intersection reconstruction, Crook Co.
- Prineville R&R Emergency Inspection and Repair Review, Prineville
- Tumalo Creek Pedestrian Bridges, Shelvin Park, Bend
- Columbia River Gorge ODOT Design Guidelines
- Prineville Architectural-Engineering On-Call 2005

Firm's Accommodation and Response to Project Locations

The Otak team is committed to providing responsive services for ODOT and Local Agencies in Region 4. The team has and is currently working on projects within

the region in The Dalles, Wasco County, Sherman County, Gilliam County, Prineville, Crook County, Bend, La Pine, Klamath Falls, Klamath County, Lake County, and Lakeview. These projects have involved preliminary engineering and a number of them involved construction engineering. Our practice is to accommodate and respond to our Central Oregon clients by:

- Strategically locating team offices and staff throughout the region
- Otak has a Bend office with roadway, survey, CAD, utility, drainage project development and construction inspection services
- Project management and bridge engineer located in La Pine as-needed
- Construction inspection staff located in Medford, Roseburg, Eugene, Salem, Bend, Klamath Falls, and Portland
- Subconsultant for project coordination, local survey, and utility coordination located in Klamath Falls
- Committing to assigning staff to be responsive as appropriate for the assignment such as attending public meetings, providing R/W legal descriptions, mapping, and staking, and construction inspection
- Efficient communication via e-mail, FTP, fax, and telephone
- Meetings via telephone or video conferencing to minimize travel
- Centralized meetings at ODOT offices in Salem and Bend or at Local Agency offices
- Temporary assignment of staff to project locations
- Set up of a resident project office and consider office sharing within the client office

Our team's responsiveness and performance is evidenced by our successful completion of two OTIA projects in Prineville and one bridge replacement project near Olex, Wasco County. The projects were complex and on an expedited schedule. Preliminary engineering and full construction management/inspection was required for the Prineville bridge replacement projects. The Rock Creek Bridge at Olex was a design/build project where Otak was hired by the construction contractor for design and construction support and both phases required quick response engineering services.

2.2.5E Experience and Availability in ODOT Region 5

Firm's Knowledge, Experience, Qualifications, and Local Presence

The team assembled has a wealth of knowledge, experience, qualifications, and local presence in Region 5. Region 5, encompassing approximately one-third of the state, is located in eastern Oregon and includes Morrow, Umatilla, Wallowa, Union, Baker, Harney, and Malheur counties. The Region is headquartered in La Grande. The Region is subdivided into three maintenance districts with offices located in Pendleton, La Grande, and Ontario.

This knowledge and experience has enabled the team to be aware of local conditions and issues. Our past and current work has included work within the following jurisdictions in Region 5:

- Morrow, Umatilla, Wallowa, Union, Baker, Harney, and Malheur Counties
- Cities of Milton-Freewater, Pendleton, Union, North Powder, Cove, Prairie City, Nyssa, Burns, and Ontario

Recent project experience in Region 5 includes the Perry Arch Bridge in Perry, the I-84 Stanton Boulevard - Snake River project in Ontario, and the Transportation System Plan update for Milton Freewater.

Firm's Accommodation and Response to Project Locations

The Otak team is committed to providing responsive services for ODOT and Local Agencies in Region 5. The team has and is currently working on projects within the region as listed above. We have accommodated and responded to work by:

- Strategically locating team offices and staff throughout the region.
- Efficient communication via e-mail, FTP, fax, and telephone.
- Meetings via telephone or video conferencing to minimize travel
- Centralized meetings at ODOT offices in Salem or Region
- Temporary assignment of staff to project locations
- Set up of project offices

Firm's Control of Travel and Per Diem Costs

The Otak team strives to minimize travel and per diem costs for all our project work assignments. The stewardship of tax payers monies for ODOT and local agency projects is an important consideration to our team. Our practice includes the following strategies to minimize costs:

- Assign staff located in close proximity to the project location to the greatest extent possible
- Consider office sharing with the client office
- Coordinating project site visits with another project's schedule to minimize travel charges to the ODOT/local agency project
- Call at least two motels for closest proximity to project site and most economical rates
- Request motel rates for government contract rates
- Some construction staff have a camp trailer to stay overnight to keep charges lower than a motel
- Use the most cost-effective arrangement for a rental car versus private car reimbursed for mileage
- All direct expense charges require a receipt
- Track direct charges on weekly basis to check meeting contract requirements
- For staff required to travel, assign them to work longer periods (i.e.; 10 straight days @ 10 hour days) to minimize travel to and from the project
- Efficient communication via e-mail, FTP, fax, and telephone to minimize travel
- Meetings via telephone or video conferencing to minimize travel

Proximity of Firm and Subcontractors to Geographic Area

Otak has a Bend office located within Region 4. We also have offices in Lake Oswego, and Corvallis, as well as an Inspector located in Bend. Rhine Surveying is located in Klamath Falls. Heritage Research and Associates in Eugene is located close to Region 4.



Firm's Control of Travel and Per Diem Costs

The Otak team strives to minimize travel and per diem costs for all our project work assignments. The stewardship of tax payers monies for ODOT and local agency projects is an important consideration to our team. We have used and will use the following strategies to minimize costs:

- Assign staff located in close proximity to the project location to the greatest extent possible.
- For staff required to travel, assign them to work longer periods (i.e.; 10 straight days @ 10 hour days) to minimize travel to and from the project.
- Compare costs for travel based on mileage versus a rental car and utilize the lowest cost option.
- Efficient communication via e-mail, FTP, fax, and telephone to minimize travel.
- Meetings via telephone or video conferencing to minimize travel.

Proximity of Firm and Subcontractors to Geographic Area

The Otak team is currently providing services in Region 5 from its main office in Lake Oswego, Oregon. Otak has met the challenges of working remotely by committing to minimizing travel expenses while meeting the project needs for on-site agency and/or field work. Otak is committed to recruiting local individuals and firms to best serve ODOT in this Region.

2.2.6 Project Team and Qualifications

Resumes

Name/Title: Terance Song, PE - Senior Project Manager, Otak Associate

Registration: Professional Engineer – OR, WA, CO, CA

Years of Experience: 20 years

Description of Professional Area of Expertise and Proposed Role Under the PA: Terry is a civil engineer specializing in the management and design of transportation projects similar to the projects anticipated under the proposed PA. He is available to perform project management, roadway design and senior-level design quality review for projects assigned under the PA. Terry has provided such services

under prior ODOT Local Agency On-Call ATA's. Three relevant projects are shown below:

- **McAndrews Road Bridge; Medford, OR** – Project Manager – Otak performed plans, specifications and estimates for this OTIA-funded bridge replacement and roadway realignment on McAndrews Road, a major arterial in the City of Medford. Otak led a multi-discipline project team including surveying, roadway design, bridge design, biological assessments for fish, wildlife and plants, wetland delineations, cultural resource studies, geotechnical investigations, hydraulic analysis, permitting and utility coordination.
- **Loto Street Bridge; Eagle Point, OR** – Project Manager – Otak performed preliminary and construction engineering for this OTIA-funded bridge replacement. Terry led the project team for the design of this 180-foot-long crossing of Little Butte Creek. Project services included survey, environmental permitting, cultural resource studies, hydraulic/hydrology analysis, traffic engineering, public involvement, and bridge and roadway design.
- **Bear Creek (Pine Street) Bridge, Jackson County, OR** – Project Manager – Otak performed preliminary and construction engineering for this HBRR-funded bridge replacement. Terry led the project team for the design of this 354-foot-long crossing of Bear Creek. Project services included survey, environmental permitting, cultural resource studies, hydraulic/hydrology analysis, traffic engineering, public involvement, and bridge and roadway design.

Name/Title: Kay Van Sichel - Director of Transportation, Otak Senior Associate

Registration: none

Years of Experience: 31 years

Description of Professional Area of Expertise and Proposed Role Under the PA: Kay is a transportation planner and manager specializing in transportation planning and public involvement for transportation projects similar to the projects anticipated under the proposed PA. She will be Otak's principal-in-charge for work done under this PA. She will be responsible for negotiating and executing all contracts between ODOT and Otak. She will also lead public involvement and planning tasks assigned under this PA. Three relevant projects are shown below:

- [I-84 Gorge Design Guidelines; Columbia Gorge National Scenic Area; OR](#) – Project Manager— Responsible for overseeing civil engineering, landscape architecture, scheduling support, and project management for development of context-sensitive and sustainable solutions for ODOT bridge and highway work within the Columbia Gorge National Scenic Area. The project identifies a programming and development model for I-84 transportation projects and develops standards for attractive and aesthetically pleasing highway elements while maintaining safe and efficient travel for highway users. The project’s objective was the need to balance aesthetic values and highway safety in the design and construction of highway elements by the development of approved guidelines and standard drawings to provide engineers with approved options and guidance for context-sensitive design.
- [New Mexico Highway 50 Transportation Study, Pecos National Historical Park; Pecos, NM](#) – Project Manager—Responsible for identifying and evaluating economically and politically feasible design and management alternatives that will preserve and provide public access to the Civil War era Glorieta Battlefield while improving the safety of the roadway for local residents, park visitors and the community of Pecos. The plan’s goal is the recommendation of implementation steps toward a long-term solution for the issue between the growing transportation demands on New Mexico Highway 50 and the preservation and interpretation goals at the Glorieta Unit of Pecos National Historical Park in a comprehensive, context-sensitive, and fully inclusive manner.
- [Milton-Freewater Transportation System Plan Update and Special Transportation Area Plan; Milton-Freewater, OR](#) – Project Manager – Project consisted of a variety of projects for Milton-Freewater that will enhance the City’s network of pedestrian and bicycle facilities, revitalize its downtown streets into a functioning Main Street, and develop zoning and development code amendments to better manage the highway routes through downtown Milton-Freewater.

Name/Title: Ron Jee, PE - Senior Project Manager, Otak Associate

Registration: Professional Engineer – OR, ID, WA

Years of Experience: 33 years

Description of Professional Area of Expertise and Proposed Role Under the PA: Ron is a bridge engineer specializing in the management and design of transportation projects similar to the projects anticipated under the proposed PA. He is available to perform project management, bridge design and senior-level design quality review for projects assigned under the PA. Ron is a former ODOT Bridge Design Team Leader and has provided such services under prior ODOT Local Agency On-Call ATA’s. Three relevant projects are shown below:

- [Grave Creek \(Beecher Road\) Bridge; Josephine County, OR](#) – Engineering Manager and Structural Designer – Otak performed inspection and design for an emergency temporary repair for this deteriorated 100-foot single-span timber pony truss. Repairs were detailed for County forces to perform the repairs. Otak developed a planning level project scoping report. When funds for a permanent replacement were available, Otak led a project team to complete bridge and roadway design, environmental studies, geotechnical investigations and hydraulic studies for the new bridge.
- [Neskowin Creek Bridge, Tillamook County, OR](#) – Project Manager – Otak performed plans, specifications and estimates for this HBRR-funded bridge replacement. Otak led a multi-discipline project team including surveying, roadway design, bridge design, biological assessments for fish, wildlife and plants, wetland delineations, cultural resource studies, geotechnical investigations, hydraulic analysis, permitting and utility coordination.
- [Willamina Creek Bridge, Yamhill County, OR](#) – Project Manager – Otak performed plans, specifications and estimates for this HBRR-funded bridge replacement of a load limited steel truss bridge. Otak led a multi-discipline project team including surveying, roadway design, bridge design, biological assessments for fish, wildlife and plants, wetland delineations, cultural resource studies, geotechnical investigations, hydraulic analysis, permitting and utility coordination.

Name/Title: In-Tae Lee, PE, SE - Senior Project Manager, Otak

Registration: Professional Engineer – OR, ID, WA

Years of Experience: 19 years

Description of Professional Area of Expertise and Proposed Role Under the PA: In-Tae is a bridge engineer specializing in the management and design of transportation projects similar to the projects anticipated under the proposed PA. He is available to perform project management, bridge design and senior-level design quality review for projects assigned under the PA. In-Tae is a former ODOT Bridge Design Team Leader and has provided such services under prior ODOT Local Agency On-Call ATA's. Three relevant projects are shown below:

- **Shevlin Park Bridge; Bend, OR** – Bridge Engineer – In-Tae designed a pedestrian bridge to replace the flood-damaged existing structure. The proposed structure is a 60-foot long single-span glue-laminated timber bridge designed in accordance with AASHTO Standard Specifications for Highway Bridges.
- **Douglas County OTIA Bridges; Douglas County, OR** – Project Manager – Otak performed plans, specifications and estimates for three OTIA-funded bridge replacements. Otak led a multi-discipline project team including surveying, roadway design, bridge design, biological assessments for fish, wildlife and plants, wetland delineations, cultural resource studies, geotechnical investigations, hydraulic analysis, permitting and utility coordination.
- **McAndrews Road Bridge; Medford, OR** – Bridge Task Leader – Otak performed plans, specifications and estimates for this OTIA-funded bridge replacement on McAndrews Road, a major arterial in the City of Medford. Otak led a multi-discipline project team including surveying, roadway design, bridge design, biological assessments for fish, wildlife and plants, wetland delineations, cultural resource studies, geotechnical investigations, hydraulic analysis, permitting and utility coordination. Otak also performed structural design for the relocation of an irrigation siphon headworks to accommodate the roadway realignment.

Name/Title: Dick Yano, PE - Engineering Manager, Otak Principal

Registration: Professional Engineer – OR, WA, CO, AZ

Years of Experience: 21 years

Description of Professional Area of Expertise and Proposed Role Under the PA: Dick is a civil engineer specializing in the management and design of transportation projects similar to the projects anticipated under the proposed PA. He is available to perform project management, roadway design and senior-level design quality review for projects assigned under the PA. Dick has provided such services under prior ODOT Local Agency On-Call ATA's. Three relevant projects are shown below:

- **Antelope Road; Jackson County, OR** – Project Manager – Otak designed roadway improvements to improve traffic circulation and safety in a highly congested area. Key project elements included survey, roadway widening, access control, drainage improvements, and traffic and construction engineering. Project was performed under an ODOT Region 3 Local Agency On-Call ATA.
- **Prineville OTIA Projects; Prineville, OR** – Project Manager – Otak designed new roadway improvements, roadway reconstruction, a new bridge crossing and a bridge replacement for this OTIA-funded project. Project services included survey, environmental permitting, cultural resource studies, hydraulic/hydrology analysis, traffic engineering, public involvement, and bridge and roadway design.
- **New Mexico Highway 50 Transportation Study; Pecos, NM** – Project Engineer – Otak is developing recommendations for implementation of steps toward a long-term solution to resolve issues related to growing transportation demands on NM Highway 50 through the Pecos National Historic Park. This goal is being balanced with preservation and interpretation goals in the park. Dick is responsible for managing the engineering design aspects of the plan.

Name/Title: Ken Karnosh, PE - Construction Manager, Otak

Registration: Professional Engineer – OR, WA, CO, AZ

Years of Experience: 35 years

Description of Professional Area of Expertise and Proposed Role Under the PA:

Ken is a civil engineer specializing in the construction management of transportation projects similar to the projects anticipated under the proposed PA. He will perform construction engineering/management and senior-level constructability review for projects assigned under the PA. Ken has extensive experience as a former ODOT Contract Administration Engineer and he has provided such services under prior ODOT Local Agency On-Call ATA's. Three relevant projects are shown below:

- [Bear Creek \(Pine Street\) Bridge, Jackson County, OR](#) – Construction Manager – Otak performed preliminary and construction engineering for this HBRR-funded bridge replacement. Ken managed the construction engineering phase and provided oversight of Otak's inspection team for structural and roadway construction. He was responsible for ensuring the project's conformance to ODOT and Federal-Aid quality documentation requirements.
- [Loto Street Bridge; Eagle Point, OR](#) – Construction Manager – Otak performed preliminary and construction engineering for this OTIA-funded bridge replacement. Ken managed the construction engineering phase and provided oversight of Otak's inspection team for structural and roadway construction. He was responsible for ensuring the project's conformance to Eagle Point's Intergovernmental Agreement for OTIA-funding.
- [Avenue A: Atlantic to Kershaw; White City, OR](#) – Construction Manager – Otak performed preliminary and construction engineering for this CMAQ-funded road paving project. Ken managed the construction engineering phase and provided oversight of Otak's inspection team for roadway construction. He was responsible for ensuring the project's conformance to ODOT and Federal-Aid quality documentation requirements.

Name/Title: Jack Carlson, PLS - Survey Manager, Otak Principal

Registration: Professional Engineer – OR

Years of Experience: 20+ years

Description of Professional Area of Expertise and Proposed Role Under the PA:

Jack is a land surveyor specializing in managing the survey tasks for transportation projects similar to the projects anticipated under the proposed PA. He is available to perform survey management of topographic, right-of-way, recovery surveys, legal description preparation, mapping and senior-level survey review for projects assigned under the PA. Jack has provided such services for ODOT and Local Agencies. Three relevant projects are shown below:

- [Bear Creek \(Pine Street\) Bridge, Jackson County, OR](#) – Survey Task Manager – Otak performed surveying for this HBRR-funded bridge replacement. Jack led the survey effort for the design of this 354-foot-long crossing of Bear Creek. Surveying tasks included boundary surveying, topographic surveying, creek cross-sections for hydraulic analysis, and a pre-construction monument survey. Jack wrote legal descriptions for right-of-way and construction easement acquisition.
- [Center Street; Salem, OR](#) – Principal Surveyor – The project widened 1000 feet of collector street from three to five lanes at its intersection with an arterial roadway. Survey elements included existing right-of-way resolution, topographic design survey, pre- and post-construction record of survey, legal descriptions for right-of-way acquisition, and construction staking.
- [Flexible Services – Surveying \(1990-2002\); ODOT Region 5, Eastern OR](#) – Project Manager – This contract included a wide variety of surveying services throughout Eastern Oregon and was issued and renewed for total of ten years. Work Orders included highway construction slope and pipe staking; centerline and right-of-way determination and monumentation, property line and proposed right-of-way staking; and miscellaneous boundary and control survey.

Name/Title: Mark Hynson, PWS – Senior Biologist/Project Manager

Registration: Professional Wetlands Scientist, Society of Wetlands Scientists

Years of Experience: 22 years

Description of Professional Area of Expertise and Proposed Role Under the PA:

Mark will be one of the environmental managers and has expertise in natural resource management and regulatory compliance, including wetland delineation, mitigation planning, regulatory agency coordination, Endangered Species Act (ESA) compliance, environmental construction inspection, and environmental impact assessment. He has worked on more than 40 transportation projects, including local agency bridge replacements, interstate highway expansions, interchange improvements, and new highway corridor studies. He is a lead technical specialist for wetlands and ESA permitting for several ODOT bridge replacement projects. Three relevant projects are shown below:

- [Willamina Creek \(Tindle Creek Road\) Bridge Replacement; Yamhill County, OR](#) – Environmental Project Manager – Managed ESA documentation and compliance monitoring for the replacement of a steel truss bridge over Willamina Creek. Prepared Biological Assessment (BA) and directed staff in construction monitoring to ensure implementation of conservation measures in the Biological Opinion (BO).
- [Grave Creek Bridge Replacement Project; Josephine County, OR](#) – Environmental Project Manager – Managed wetland and ESA documentation for the replacement of the Beecher Road Bridge over Grave Creek. Prepared a rare plant survey report, BA, and wetland fill permit application. The project area contained potential habitat for several rare plants, including clustered lady’s slipper and Gentner mission bells. Species addressed included coho salmon, northern spotted owl, bald eagle and clustered lady’s slipper. Conducted biological monitoring for the construction phase.
- [Mill Creek Bridge Replacement Project; City of Turner, OR](#) – Environmental Project Manager/Senior Wetlands Scientist – Prepared wetland and ESA documentation for the replacement of a large timber bridge over Mill Creek. Species addressed included Chinook salmon and steelhead trout. Conducted wetland delineation, prepared wetland delineation report and wetland fill permit application. Provided construction monitoring for compliance with the environmental permits.

Name/Title: R. David Feinauer – Acquisition Agent/Project Manager

Registration: Principal Real Estate Broker, OR; Certified Appraiser, OR

Years of Experience: 35 years

Description of Professional Area of Expertise and Proposed Role Under the PA:

David will be one of the Right-of-Way Managers for work done under this PA. David has managed the acquisition and relocation portion of public projects in Oregon for a wide variety of agencies located in all five of ODOT’s regions. He is well versed in various types of federal and state funded projects and experienced with acquisition projects following the ODOT R/W Manual, the Uniform Act, and State and Local policies and procedures. Three relevant projects are shown below:

- [Hazel St.-N. 10th Street, ATA #23459, City of Central Point, OR](#) – For this current LPA project, the City of Central Point has designed street improvements to widen 9th Street between Hazel Street and N. 10th Street and to widen Laurel Street between 9th Street and N. 10th Street. This project will include paving the existing gravel street as well as adding curbs, sidewalks, storm sewer, and a new water main. ROWA is in the process of requesting donations from 28 property owners for temporary easements and partial fee takings. If the property owners are unwilling to donate, appraisals and appraisal reviews will be obtained for acquisition negotiations.
- [East Main Street Bypass Project, City of Klamath Falls, OR](#) – This OTIA funded LPA project was designed to improve the intersection of South Sixth Street with East Main Street and Washburn Way and to extend East Main Street through to Washburn Way. The project calls for 20 commercial property acquisitions located along the project route. ROWA has provided the preliminary right-of-way cost estimating and is currently coordinating the appraisals and appraisal reviews, and property acquisition services for the project. We also coordinated the negotiation for access management easements between 12 property owners and their commercial lessees.
- [Pine Street at Highway 99, City of Central Point, OR](#) – This was an OTIA funded LPA project that improved the intersection of Highway 99 and Pine Street. The

project impacted five commercial properties which were a commercial card lock gas station, a public gas station an office building and two manufacturing facilities. Property was also acquired for changes at a railroad crossing. ROWA provided preliminary cost estimates, the coordination of appraisals and appraisal reviews, as well as the acquisition negotiations for the project.

Name/Title: Lois Cohen - Regional Director/Project Manager

Registration: none

Years of Experience: 20+ years

Description of Professional Area of Expertise and

Proposed Role Under the PA: Lois will be one of the public involvement task managers for projects under this PA. As Regional Director, Lois has led the public involvement effort on multiple projects with ODOT's Oregon Bridge Delivery Partners and other clients. These projects include: developing stakeholder databases, writing and disseminating newsletters, holding public information meetings, meeting with elected/appointed officials, conducting design workshops for public input; inviting, answering, and tracking community questions and comments for trend analysis and problem-solving. Three relevant projects are shown below:

- **ODOT's OBDP, Bridge Design Projects: 2004 – 2006** – Working with the engineering design prime consultants, Lois is currently leading the public involvement efforts on two bridge bundles. In each community, Zetlin has identified the unique characteristics and specific stakeholders to ensure that pertinent issues are addressed, e.g., equestrian access, safety for school children, access to businesses, etc. Working as members of the team that includes the OBDP staff and the prime contractor, Zetlin successfully addresses the client's needs, the goals of the project, and the concerns of the community.

- **Burnside Bridgehead Project; Portland, OR** – The Portland Development Commission unanimously awarded the multi-use development of a five-block area of Portland's inner eastside. The developer hired Zetlin as their government and community affairs consultant to assist in winning the contract and in managing community affairs during all phases of the project. Lois was instrumental in bringing affordable housing partners to the proposal team and addressing resistance in the community to the developer proposal. She is currently designing the public information and involvement program to meet the needs of the developer and a broad range of community stakeholders-from business leaders and bike and ped activists, to neighborhood association reps and neighborhood merchants.
- **OHSU - Construction Apprenticeship and Workforce Solutions, Inc. (CAWS)** – In recent years, large construction projects in the Portland metropolitan area have led to a variety of uncoordinated and often duplicative workforce strategies to meet diversity goals. The Oregon Health & Science University hired Zetlin to assist in creating CAWS - an umbrella organization focused on supporting efforts to expand recruitment and retention of minorities and women into the construction workforce. Lois' work for OHSU included strategic planning, partnership development, creation of promotional materials and agendas (internal and external), and meeting management and follow up. CAWS is to be a unique organization with sufficient private sector support to make it a true public/private partnership embracing all community stakeholders.

Key Personnel Form – Attachment C

On the following page is the Key Personnel Form.

Experience Using Teams on Similar or Related Projects

The Otak team is specifically structured to allow us to respond to a wide variety of concurrent work orders. It includes a large pool of specialists that are available for one or more concurrent projects. The subconsultants that make up this project team have worked together on projects which parallel the tasks for which ODOT will issue work orders. Our team members are very familiar with each other's strengths and realize the importance of being able to work seamlessly.

The nature of a flexible services contract calls for an ability on the part of the consultant team to respond to new challenges. Otak is committed to tailoring the team as needed on individual work orders to meet ODOT objectives. Where an individual specialty is not necessary, the scope

will be tailored accordingly. If a unique, unforeseen issue arises, Otak will identify that element and obtain the services of the appropriate specialist with ODOT approval. The table to the left lists recent projects that the team has completed together or is currently working on.

Project Manager's Experience with Similar Contracts and Interdisciplinary Teams

The Otak team includes several project managers with experience managing multidiscipline project teams composed of geotechnical, traffic, surveying, structural, water resources, environmental and other disciplines. They have demonstrated their ability to understand the unique challenges that various types of work present and to successfully orchestrate multifaceted teams. These teams have involved not only in-house staff, but specialty subconsultants as well. Our project managers have focused on managing and designing roadway projects and, in particular, ODOT projects which have given them valuable knowledge of the interdisciplinary relationships within ODOT, as well as ODOT's standards and procedures. Their ODOT experience has included a variety of projects including local roadways, bridge replacements, highway rehabilitation and interstate freeways. A comprehensive list of ODOT project experience, by project manager is shown on this page. In addition, each of the Otak project managers are experienced in using Microsoft Project and

Projects	Firms Involved
ODOT Roadway Design Flex. Svcs.	Otak, DKS
ODOT Reg. 2 Survey & Design Flex. Svcs.	Otak, DKS
ODOT Reg. 2 Design/Constr. Eng. On-call	Otak, DKS, HRA, MB&G, S&W
West Main Street - Clark Co.	Otak, DKS, UFS
McLoughlin Blvd Retrofit TGM	Otak, DKS
ODOT Reg. 3 PE/CE On-Call	Otak, DKS, HRA, MB&G, FEI
Prineville OTIA Projects	Otak, HRA, MB&G, Kittelson
Portland Road Improvement	Otak, DKS
Highway 99	Otak, DKS
Fourth Plain Blvd./Covington Rd.	Otak, DKS
Bear Creek Bridge	Otak, DKS, FEI, HRA
Tillamook Street Project	Otak, DKS, MB&G, FEI
Warner Highway	Otak, HRA, Kittelson, Cornforth
Grave Creek Bridge	Otak, MB&G, FEI
Blaser Bridge	Otak, MB&G, FEI, UFS
Water Street Bridge	Otak, MB&G
Banks - Forest Grove	Otak, Kittelson, RWA
Loto Street Bridge	Otak, DKS, Hardey, S&W, MB&G
Antelope Road	Otak, DKS
McAndrews Road Bridge	Otak, S&W, DKS, FEI, MB&G, UFS, HRA
Long Prarie Road	Otak, NRPS, DKS, FEI
West Main Wetpond Staking	Otak, JD White
Winnifred Street Bridge	Otak, CES
A Canal Bridge	Otak, Rhine, MB&G, DKS, FEI, UFS
TriMet I-205 Structural Services	Otak, CES

PM/Years Experience	ODOT & LPA Projects/Disciplines	Survey	Roadway	Geotech	Bridge	Hydraulics	Environm.
Dick Yano 22 years	Warner Highway	•	•	•	•	•	•
	Seven Oaks Interchange	•	•	•	•	•	•
	Crooked River Bridge	•	•	•	•	•	•
Terry Song 20 years	Loto Street Bridge	•	•	•	•	•	•
	McAndrews Road Bridge	•	•	•	•	•	•
	Bear Creek (Pine St.) Bridge	•	•	•	•	•	•
Ron Jee 30 years	Neskowin Creek Bridge	•	•	•	•	•	•
	Willamina Creek Bridge	•	•	•	•	•	•
	Tillamook River Bridge	•	•	•	•	•	•
In-Tae Lee 19 years	Days Creek Bridge	•	•	•	•	•	•
	Gibbs Creek Bridge			•	•	•	
	Deadman Creek Bridge	•	•	•	•	•	•

various project management software packages to motivate team members to stay on course, constantly be aware of the client's mission, work within the budget, and deliver the project on schedule.

Subconsultant Selection & Management

The Otak team is composed of multiple subconsultants for each discipline to provide added depth and flexibility. The project manager will select a subconsultant for a project based on:

- Expertise needed
- Experience and background in project area
- DBE requirements
- Current workload
- Project schedule

Once the project team is selected, Otak and subconsultants will work closely with ODOT and the local agency to perform project scoping and work order contract. After work order execution, the project manager will conduct a formal kick-off meeting with Otak staff, subconsultants, ODOT, and Local Agency. During the project, regular team meetings will be held to ensure the project stays on schedule and within budget.

Criteria 2.3 Tier 2 WOC Assignments

2.3.1.a Public Involvement

The Otak team has completed over twenty significant public involvement processes in the past four years. The projects range in increasing order of complexity from simple and effective notification processes, public open houses to long-duration facilitated stakeholder involvement programs. Otak has in-house leading edge visualization and computer modeling capabilities to enhance our presentation capabilities.

[Design Guidelines for the Columbia Gorge; OR](#) - The Otak team is developing a long term vision and design guidelines for the Interstate 84 corridor in the Columbia Gorge National Scenic Area. Interstate 84 parallels the historic Columbia River Highway, and the broader corridor is one of exceptional scenic beauty and historical significance. The vision and design guidelines have been developed through the collaboration of hundreds

of interested citizens as well as government agencies and special interest groups. This collaborative effort is being led by Mandi Roberts of Otak and others from the Otak team, and is the result of interactive workshops that have allowed the expression of concerns, ideas, and interests of the stakeholders. The process identified common messages and conflicting interests to be resolved, and is the guiding force in shaping design guidelines that address these interests balanced against good design practice. The outcome of this process is a corridor plan that presents the vision, goals and objectives, design guidelines, and an implementation process. The process is a partnership of the Oregon Department of Transportation, FHWA, the Columbia River Gorge Commission, USDA Forest Service, and counties in the National Scenic Area.

[Project Manager:](#) Kay Van Sickel, Otak

[Key Staff:](#) Mandi Roberts, Public Involvement (Mandi Roberts has over 20 years of professional planning, urban design, and landscape architectural experience including project management, land use and transportation planning, and environmental analysis); In-Tae Lee, Bridge Engineer

[Agency:](#) ODOT Region 1 through Oregon Bridge Delivery Partners

[Agency PM:](#) Charlie Sciscione

[Date Completed:](#) 2005

[Status:](#) The project is currently on budget. We are currently negotiating with ODOT and OBDP to extend the contract 18 months to continue the coordination with stakeholders, and continue the Level 1 and 2 team meetings to transition to applying the design guidelines to the bridge design projects and STIP projects in the NSA.

[Highway 58 Bridges Project, Oregon Bridge Delivery Partners \(through a prime consultant\)](#) - ZSC developed and implemented the public involvement and communications plan for this bridge replacement and roadway improvement project. ZSC identified, notified and met with key stakeholders including community members, business leaders, elected officials, the trucking industry and emergency services providers. The project affected rural communities, recreational access and commercial users along a key east-west highway. The result of this plan was the development of productive interaction between the

stakeholders which produced valuable design input. This input was incorporated into the project and produced project elements that increased functionality for specialized users including equestrians using the bridge as an undercrossing.

Project Manager: Lois Cohen, Zetlin

Key Staff: Lois Cohen

Agency: ODOT through Oregon Bridge Delivery Partners

Agency PM: Mark Libby/David Irish

Date Completed: Ongoing

Status: The initial public involvement process was completed within the original budget. The scope was subsequently expanded by the client, since Oregon Bridge Delivery Partners decided to bid 2 of the bridges in a later project bundle, and Zetlin is still assigned to do the final PI for these 2 bridges.

2.3.1b Environmental

The Otak team has completed over 100 projects including environmental permitting and mitigation tasks in the past four years. Our team includes environmental scientists, cultural resources professionals, wetlands scientists, and hazmat specialists. Two representative projects are shown below:

Grave Creek (Beecher Road) Bridge Replacement Project, Josephine County, OR - MB&G prepared Endangered Species Act, wetland, and rare plant documentation for the replacement of a steel truss bridge over Grave Creek in rural Josephine County, Oregon. Wetland documentation included a wetland delineation and the preparation of a wetland delineation report. MB&G biologists prepared a Biological Assessment to document potential impacts on federally listed coho salmon, bald eagle, Northern spotted owl, and Gentner mission-bells. Section 404 and Oregon Removal/Fill permitting was also conducted for this project. MB&G is currently conducting environmental monitoring for the construction phase of this project.

Project Manager: Ron Jee, Otak

Key Staff: Justin Isle, MB&G

Agency: ODOT Region 3

Agency PM: Chuck DeJanvier, PE

Date Completed: 2005

Status: On-time and within budget

South Medford Interchange EIS, OR - MB&G led the Natural Resources team in preparing a NEPA Environmental Impact Statement (EIS), analyzing various configurations for a new I-5 interchange in Medford. Responsibilities included inventorying, mapping, and impact analysis of wetlands, fisheries, rare plants and biological resources within a 514-acre study area. MB&G staff conducted wetland delineations and preliminary functional assessments. Results of the wetland and biological fieldwork were documented in Biological Resource Technical Reports used to prepare the Draft EIS. During the subsequent ESA consultations for the project, MB&G prepared a BA on an aggressive time schedule to facilitate the issuance of a NEPA Record of Decision for the project. The BA addressed potential impacts to Coho salmon from construction of four new bridges and replacing one bridge. Recently completed Joint Permit Application to USACOE and DSL for Individual Wetland Fill Permit. Currently coordinating with regulatory agencies on permit application review.

Project Manager: Mark Hynson, MB&G

Key Staff: Jon Adkins, MB&G

Agency: ODOT Region 3

Agency PM: Debbie Timms

Date Completed: 2005

Status: Budget amended due to project changes and amended scope of work, within amended budget. Completion date extended by ODOT for project design and documentation changes.

2.3.1.c Right-of-Way

The Otak team has completed over 380 right-of way projects in the past four years. Otak and its subconsultants have worked together on multiple ODOT Local Agency On-Call contracts and are highly experienced in performing right-of-way acquisition in conformance with the Uniform Relocation Act and State and Local laws. Two examples of recent right-of-way projects are shown below:

East Creek – Moon Creek Bridge: Region 2; Tillamook County, OR - This Tillamook County project funded with OTIA III monies repaired the East Creek (Moon Cr. Road) Bridge. ROWA successfully negotiated to acquire partial fee takings from two property owners. ROWA obtained appraisals, and coordinated review by the County.

Project Manager: R. David Feinauer, ROWA
Key Staff: Genesee Jayasuriya, Project Coordinator (one year experience at ROWA); Nate Pool, Negotiation Agent (Licensed Real Estate Broker, Certified Appraisers Assistant, and 33 years experience)
Agency: Tillamook County
Agency PM: Patrick Oakes
Date Completed: 2005
Status: On-time and under budget

Roseburg Airport Extension; Roseburg, OR - Universal is in the process of acquiring 121 mobile homes and relocating the occupants from a mobile home park for the City of Roseburg Airport extension. This park is a seniors-only park and involves multiple relocation issues, primarily the fact that the average age of the occupants is 75 years old and the income levels are low. The project was started in February of 2002 with several public meetings and then the development of a relocation plan. The objective was to acquire the hardship cases first, followed by volunteers to move, and finally acquire and relocate those remaining from the south end of the park to the north. This was to accommodate funding with FAA and also to prevent a burden on the market of trying to find replacement housing all at once. Appraisals and acquisitions were handled in batches of six to seven at a time. The project was scheduled for 5 years but was completed in a little over 3 years.

Project Manager: Leslie Benckendorf, UFS
Key Staff: Lou Schwab, Project Manager, Allen Anderson, Sr. Relocation Specialist and Mary Henderson, Sr. Right of Way Agent
Agency: City of Roseburg
Agency PM: Chris Berquist, Public Works Director, (retired) Sheila Cox.
Date Completed: 2005
Status: Completed ahead of schedule and under budget

2.3.1.d Roadway

The Otak team has completed over seventeen significant roadway projects in the last 4 years. The following are two project examples that describe Otak's experience and outcomes with alternatives analysis and design of roadway projects.

Warner Highway Curves; Lake County, OR - Otak provided preliminary engineering and is providing construction engineering services for this OTIA-funded project. This modernization entailed realigning and reconstructing the highway to eliminate substandard curves and install new safety features. This highway is an important transportation link in south-central Oregon and this project is the first phase of several projects to improve the accessibility and safety of the route. The project includes environmental concerns related to potential archaeological sites, wetlands, and threatened and endangered species. Otak prepared and evaluated several alternatives to balance the highway design needs against the environmental concerns. The selected alternative includes a fish-friendly culvert crossing and minimized environmental impacts and achieved the project goals for 4R standards including superelevation, and horizontal and vertical alignment.

Project Manager: Dick Yano, Otak
Key Staff: Terry Song, Roadway Task Leader; Allan Grabinski, Roadway Project Engineer (Allan Grabinski, PE has 18 years of civil engineering experience and is a project engineer designing ODOT and Local Agency projects.)
Agency: ODOT
Agency PM: Stephanie Serpico
Date Completed: 2005
Status: Project was delayed as ODOT needed to secure additional funding for the project. Project budget increased due to adding preservation work to original modernization project.

9th Street Extension/Deer Street Bridge; Prineville, OR - Otak provided project management and design services for this OTIA-funded project in the City of Prineville. 9th Street was a long-identified link in the City's Transportation System Plan. The existing alignment of US 26OR 126 along Third Street operates below Oregon Highway System operational standards. By improving and extending 9th Street from Main Street to US 26 in Northwest Prineville, a parallel grid was created that will provide immediate relief to traffic congestion by improving the efficiency, capacity, and safety of the roadway system. The project included 680 m of new and 700 m of rehabilitated roadway, with elements that included two travel lanes, bike lanes, curbs, sidewalks, and left turn lanes at selected intersections. The

replacement of a load-limited bridge on Deer Street and the provision of a new bridge on 9th Street were required as part of the new roadway to span Ochoco Creek, a Federal Emergency Management Act (FEMA) regulated floodway. As such, these bridges necessitated an extensive bridge alternatives and hydraulics analysis to minimize impacts to the floodway. New water quality facilities were provided for stormwater treatment at the creek outfalls and improved bicycle and pedestrian linkage and access were integrated into the design to improve livability in downtown Prineville. The project team worked on an aggressive schedule, completing project design and permitting in three months with construction to be completed four months later.

Project Manager: Dick Yano, Otak

Key Staff: Terry Song, Roadway Task Leader; Amy Jones and Monica Krueger, Roadway Project Engineers (Amy Jones, PE, BSCE, has 9 nine years of civil engineering experience and is a project engineer designing ODOT and Local Agency projects; Monica Krueger, PE, BSCE, has 8 years of civil engineering experience and is a project engineer designing ODOT and Local Agency projects. Monica was formerly a roadway designer in ODOT Region 1.)

Agency: City of Prineville

Agency PM: Ron Kleinschmit

Date Completed: 2004

Status: On schedule/within budget

2.3.1.e Enhancements

Otak has completed four ODOT Enhancement projects under ODOT contracts including the ODOT Statewide Landscape Architecture On-Call ATA, and multiple local agency streetscape projects in the past four years. Otak has in-house landscape architecture and visualization departments. Otak's landscape architects and engineers have collaborated on many enhancement projects including roadside plantings, wetlands mitigation, integrated streetscaping, design standards, comprehensive streetscape plans, and environmental restoration. Two example projects are shown below:

Kingwood Street - Armory Way Streetscape; McMinnville, OR - This project provides landscape architectural services to mitigate for impacts of highway construction on the Salmon River highway from just east of the Yamhill Market

place in McMinnville to the new air museum access. The project consists of streetscape, water quality filtration zone planting, as well as extensive buffer planting. The plant material consists of a combination of native and drought tolerant plant material.

Project Manager: Kerry Lankford, Otak (Kerry Lankford, LA, has 12 years of landscape architecture experience and is the task manager for Otak's ODOT Statewide Landscape Architecture On-Call ATA.)

Key Staff: David Dryer- Landscape Architect, Lisa Bosca- Drafting

Agency: ODOT

Agency PM: Alan J. Fox, Project Team Leader

Date Completed: Drawings completed March 2002; Construction completed summer 2002

Status: On schedule and within budget

Central Point Corridor Plan; Central Point, OR - The City of Central Point took jurisdiction of the portion of Highway 99 that passes through their revitalizing Central Business District. The change in jurisdiction is an opportunity for the City to explore ways of changing the character of the roadway from highway to community street. Otak led a focused effort with the City staff, affected property owners and public at large to develop design concepts for that change in character. The project involved a week long design charrette to multiple business owner workshops to create an overall schematic plan and "tool kit" for calming traffic speeds, providing on-street parking and enhancing both the visual appeal and pedestrian environment of the street. An implementation plan for specific projects was also developed.

Project Manager: Tom Litster, Otak (Tom Litster has 20 years of experience as a urban designer/landscape architect and was the Task Manager for Context Sensitive Design Solutions for the Newberg-Dundee Transportation Improvements Project for ODOT.)

Key Staff: Tom Litster, Kate Schwarzler, Anne Samuel, Otak; Brian Copeland, DKS

Agency: ODOT TGM Program

Agency PM: Shirley Roberts

Date Completed: June 2005

Status: On schedule and within budget

2.3.2 Structures

2.3.2.a Restoration Projects

The Otak team has completed over a dozen restoration projects on historic timber, steel and concrete bridges in the past four years. Two example projects are listed below:

Escure Ranch Bridge Historic Bridge Replacement/ Rehabilitation; Whitman County, WA - The 216-foot-long Escure Ranch Bridge provides the only access to the Escure Ranch, a historic ranch facility now managed by the U.S. Bureau of Land Management. The project involved the replacement of six existing timber approach spans and the rehabilitation of the 66-foot-long steel through truss main span. The new timber replacement spans replicated the appearance of the original bridge and utilized solid sawn 8"x18" timbers and timber decking. The existing steel truss was strengthened and painted to match the bridge's historic appearance. Otak designed a timber bridge rail that meets current safety standards while minimizing changes to the original appearance of the bridge.

PE Budget: \$48,000

Bridge Project Manager: Ron Jee, PE, Otak

Agency: U.S. Department of the Interior, Bureau of Land Management

Agency PM: Dana Cork

Date Completed: 2003

Status: Completed on-time and on-budget

South Fork Snoqualmie River Bridge Replacement Design - The historic South Fork Snoqualmie River Bridge is a 90-foot-long steel truss bridge built in 1914. CES completed a replacement design TS&L and preliminary engineering report including Section 106 historical evaluation, hydraulic analysis and approach roadway realignment design. As part of the historic impact study, CES performed a preliminary design for strengthening of the existing truss. The project was completed under a design-build contract.

PE Budget: \$99,000

Project Manager: Raj Bharil, CES

Agency: USDA Forest Service, Mt. Baker-Snoqualmie Forest

Agency PM: Peter Wagner

Date Completed: 2004

Status: Project was completed on-time and within budget.

2.3.2.b New Concrete Structures

The Otak team has completed over 55 new concrete structure designs in the past four years including precast prestressed concrete slabs, box beams or girders; precast segmental post-tensioned girder or box girder; cast-in-place concrete (reinforced concrete deck girder), slab, or post-tensioned box girder. Otak is highly experienced in delivering these types of projects under the ODOT Local Agency program.

Little Butte Creek (Loto Street) Bridge; City of Eagle Point, OR - The new Loto Street Bridge crosses Little Butte Creek in the City of Eagle Point. This OTIA I funded project completed a key link in the City's Transportation System Plan and functionally replaced the nearby Main Street Bridge. The 180-foot-long three-span bridge features colored precast and cast-in-place concrete elements, ornamental streetlights and railing and is part of an integrated streetscape. The bridge width provides for sidewalks, bike lanes, two travel lanes and a center turn lane. The project included a TS&L report, environmental clearances, right-of-way acquisition, hydraulic studies, utility relocations, and roadway, water line, drainage and bridge design. Computer-generated images were used to present the bridge aesthetic and streetscape concepts to the City Council and public.

PE Budget: \$308,282

Project Manager: Terry Song, PE, Otak

Bridge Task Manager: Ron Jee, PE, Otak

Agency: City of Eagle Point

Agency PM: Gary Shipley

Date Completed: 2005

Status: Completed on-time and on-budget

I-5: Seven Oaks Bridge Package; Jackson County, OR - Otak provided preliminary engineering for this OTIA-funded project. This \$25 million project included the northbound and southbound I-5 bridges over the Central Oregon and Pacific Railroad and the Highway 99 overcrossing at the Seven Oaks interchange north of Medford. The Seven Oaks interchange was also reconfigured as part of the project to correct ramp and adjacent intersection geometric deficiencies. The preliminary engineering included the Design Acceptance and Final PS&E phases of the project. The Design Acceptance phase of work included an extensive

alternatives analysis to evaluate interchange options and structure types. The I-5 bridges were replaced with side-by-side bridges between the existing structures to eliminate the need for a detour structure to maintain traffic. The Highway 99 bridge was shifted north of the existing bridge to accommodate staging of traffic. The project included cultural/historic, natural resource, hazardous materials, and noise evaluation and studies. The project concluded with preparation of plans, specifications, and estimates in accordance with ODOT requirements for construction contracting. Otak will also be providing Construction Engineering services for ODOT.

PE Budget: \$1,800,000

Project Manager: Dick Yano, PE, Otak

Bridge Task Manager: In-Tae Lee, PE, SE, Otak

Agency: ODOT

Agency PM: Tim Fletcher

Date Completed: 2005 (PE Phase)

Status: Project was delayed due to change in design direction after DAP was submitted and delay in right-of-way acquisition. Project was on budget.

2.3.2.c New Steel Bridges

Rte 265 Danville Expressway and Dan Daniel Memorial Highway; Danville, VA - As subconsultant, M&N provided complete right-of-way and roadway construction plans for two miles of roadway, as well as bridge construction plans for two bridges. The expressway was built in two phases. The first phase was constructed in the early 1990's and was limited to the design and construction of the SBL side of the future Route 265 alignment with striping for two lanes of opposing traffic. The second phase of the expressway project required the design and construction of the median and the NBL side of the alignment. The design typical section provided two through lanes in each direction separated by grass median. M&N developed roadway construction plans for a 2-mile-long segment of the proposed NBL Route 265 alignment. M&N designed a 137-foot-long bridge carrying two lanes of NBL Route 265 over the Norfolk Southern Railway (NS) to complement the existing, 3-span SBL bridge. However, M&N utilized high strength steel to design a single, simple span structure that spanned the railroad, eliminating the need for piers with crash walls, as required on the adjacent SBL bridge.

M&N provided slopes in front of the abutments that allow NS additional clearance to construct an additional track in the future. To reduce maintenance costs, bridge girders were constructed of weathering steel and deck joints were eliminated by designing integral abutments. M&N also designed the grade separation structure at the project's interchange with Route 41 Franklin Turnpike. The bridge structure was designed with two 111-foot spans carrying six lanes of Franklin Turnpike over six lanes of Route 265. High strength steel was used to construct the continuous span plate girders. The bridge length was minimized by using integral abutments atop mechanically stabilized earth (MSE) walls. Movement of the abutment piles was isolated from the MSE soil mass by driving steel H-piles through vertical steel pipes filled with sand.

PE Budget: \$409,564

Project Manager: Eric Vugteveen, PE

Bridge Task Manager: Eric Vugteveen, PE

Agency: Virginia Department of Transportation

Agency PM: Larry G. Hedgepeth

Date Completed: 2004

Status: On Schedule and on budget

Route 234 Bridges over Occoquan River; Prince William County, VA - M&N was the prime consultant for the design of dual 4-span, 550-foot structures carrying eastbound and westbound lanes of Route 234 over the Occoquan River near Lake Jackson. The existing 2-lane bridge carrying Route 234 was in very poor condition and needed to be closed to traffic. At the request of VDOT, M&N accelerated the design schedule to provide complete bridge replacement plans in three months. M&N met the accelerated schedule and the critical advertisement date. After award of the construction contract, the Contractor had incentives to construct the westbound bridge as quickly as possible so that traffic could be detoured off of the existing bridge and onto the new bridge. The existing bridge was demolished and the eastbound bridge was constructed along with the remaining roadway project. The westbound-lane bridge superstructure was designed to carry two lanes of traffic with shoulders. However, the eastbound bridge superstructure was required to carry an additional 10-foot bike path. Span arrangement was set at 106'-125'-178.5'-106' to keep the piers out of the hydraulic section for

Ordinary High Water. Each bridge superstructure used 4-span continuous, high strength weathering steel plate girders to support the design loads. The rugged terrain on either side of the river required a long bridge with piers up to 50 feet in height. Hammerhead piers were designed with spread footings founded on rock. Shelf abutments were supported by steel H-piles.

PE Budget: \$250,722

Project Manager: T. Michael Harris, PE

Bridge Task Manager: T. Michael Harris, PE

Agency: Virginia Department of Transportation

Agency PM: Mir Ali

Date Completed: 2003

Status: On Schedule and on budget

2.3.2.d Complex Steel or Concrete Bridges

The Otak team has completed two complex bridge projects of widely varying scope. The San Francisco Oakland Bay Bridge project demonstrates our team's ability to design the most complex of structures. The Perry Arch Bridge Assessment demonstrates our team's ability to perform complex bridge analysis of an existing concrete arch bridge typical of a local agency's existing structure. In addition, Hamilton Engineering, a mechanical engineering firm specializing in moveable bridge mechanisms is a part of the Otak team.

San Francisco Oakland Bay Bridge East Span Safety Project

- In a joint venture, Moffatt & Nichol was the project manager for the structural design of the \$2.5 billion San Francisco-Oakland Bay Bridge East Span replacement. The joint venture completed 30% complete concept design for the entire structure together with two cable-supported bridge design concepts for the main span – a cable-stayed alternative and a self-anchored suspension alternative. The Metropolitan Transportation Commission chose the self-anchored suspension bridge concept. The joint venture then developed the final PS&E for the entire structure. The San Francisco-Oakland Bay Bridge East Span is a 2.2-mile dual segment parallel deck structure on Interstate 80. The signature portion of the new bridge is a single-tower, self-anchored suspension segment with a 1,263-foot main span and a 590-foot back span.

PE Budget: \$8.4 million (M&N portion only)

Project Manager: Allen L. Ely

Bridge Task Manager: Jal N. Birdy

Agency: California Department of Transportation (Caltrans)

Agency PM: John Mook

Date Completed: 2003 (design)

Status: The design schedule and, consequently, the construction cost were impacted a number of times by controversial issues within the community. The most significant issue was the denial of access to Yerba Buena Island to perform geotechnical explorations and a late-in-the-process decision to incorporate Buy America requirements into the project.

Perry Arch Bridge Assessment; Perry, OR - ODOT Region 5, selected Otak to provide engineering services to assess the structural integrity of the existing Perry Arch Bridge and develop conceptual rehabilitation recommendations to accommodate HS-20 design truck (80,000 pounds) including construction cost estimate, a testing plan, and implementation of the testing plan. The existing Perry Arch Bridge is a reinforced concrete deck arch with reinforced concrete deck girder approach spans for a total length of 309-foot, constructed in 1924 and considered historic. The bridge is severely deteriorated and is load posted for 5-tons.

PE Budget: \$23,000

Project Manager: In-Tae Lee, PE, SE, Otak

Agency: ODOT Region 5

Agency PM: Craig Sipp, PE

Date Completed: 2005

Status: On Time and Within Budget

2.3.2.e Pedestrian Bridges

The Otak team has completed eight pedestrian bridge projects in the past four years.

Shevlin Park Pedestrian Bridge; Bend, OR - This project replaced two trail bridges in Shevlin Park, a Bend Metro Park and Recreation District facility. The bridges were washed out in a flood event on Tumalo Creek. The project consisted of single-span glue-laminated timber bridges, one 60-foot span and one 40-foot span. The material selected was non-pressure treated Port Orford cedar which was more economical than pressure treated Douglas Fir.

PE Budget: \$6,000

Project Manager: In-Tae Lee, PE, SE, Otak

Agency: Bend Metro Park and Recreation District

Agency PM: Pat Erwert

Date Completed: 2004

Status: Completed on-time and on-budget

SR 525 Walkway; Mukilteo, WA - Otak designed this pedestrian walkway/bikeway facility that provides an important link in pedestrian facilities along SR525 in Mukilteo, WA. SR525 was a two-lane, two-way road with narrow shoulders and was unsafe for pedestrian and bike users. Otak designed two multi-span precast prestressed beam bridges of 468-foot and 288-foot lengths to span environmentally sensitive areas. The 10-foot wide structure is illuminated with ornamental lights and incorporated color to visually subordinate the structure into the forested park setting.

PE Budget: \$106,000

Project Manager: In-Tae Lee, PE, SE, Otak

Agency: City of Mukilteo, Washington

Agency PM: Tom Hansen

Date Completed: 2002

Status: Completed on schedule and within budget