

DAVID PLACE
CONSTRUCTION CONSULTANT
2704 NW Starview Drive
Bend, Oregon 97701
(541) 318-5456
E-mail dplace@bendbroadband.com

Summary

Over 54 years of contractor's construction experience; specializing in heavy civil construction of bridges, highways, tunnels, and geo-technical projects.

Licensing and Education

- Formal Education
 - o Montana School of Mines
 - o Stanford University
 - o Montana State University
- BS in Civil Engineering, 1959-Montana State University
- Registered Professional Engineer - Oregon-5240PE (**Active Status**)
- Registered Land Surveyor-Oregon -1405LS (Retired Status)
- Registered Professional Engineer- Montana - 2505PE (Retired Status)
- Registered Professional Engineer -New Zealand (Retired Status)

Organization Memberships

- **Fellow** - American Society of Civil Engineers
- Member of "**The Beavers**" Construction Organization
- Member of Dispute Resolution Board Foundation – NW Region

DRB Professional Training

- DRB Foundation Annual Training and Workshops - Seattle - 2006 to 2015
- Caltrans 2010 and 2014 DRB Training Workshop
- Caltrans 2010 and 2014 DRA & Procedures Workshop
- SureTrak, Micro-Soft Project and Primavera Scheduling Workshops.

Dispute Resolution Board Experience

- Chairman on ITD Project C -7949 to construct 2 Twin Bridges over the Snake River near Declo, Idaho on I-84. R L Wadsworth is the Prime Contractor on this \$18M project to construct 2 steel girder bridges on drilled shaft foundations.
- Chairman on ITD Project C- 7953 to construct a new bridge over the UPRR on SH-5 near Plummer, ID. R L Wadsworth is the prime contractor on this \$9.5M project. The project is staged and built under traffic in a very confining configuration. Foundations are drilled shafts in very hard rock and the superstructure is pre-cast, pre-stressed concrete girders.
- Member on ITD Project C- 7958 to reconstruct US 95 through Worley, ID. M A De Atley is the prime contractor on this \$10M contract on the Indian Reservation to provide drainage, sidewalks, landscaping, illumination, and a new roadbed and HMAC in the city limits of Worley.
- DRB Member on I-90 Snoqualamie Pass East Project for WSDOT. Contract C-8715 is just east of Snoqualamie Pass. Atkinson is the Prime Contractor on this \$78M project to construct 5 major bridges and widen and re-align I-90 in the area. A major wild life crossing over I-90 is one of the key features of the project.
- Member of DRB for Kitsap County Bucklin Hill Bridge Project. The project is located in Silverdale, WA and Granite Construction is the contractor on the \$12.3M project to remove an existing bridge in the tide flats of Puget Sound, construct a new bridge with drilled shafts and pre-stressed girders and reconstruct Bucklin Hill Road and all its drainage structures. All work is in a very tight urban corridor.
- Member for WSDOT SR 167 Design Build Project. WSDOT Contract C 8665. Atkinson is the contractor on this D-B Contract to construct HOT Lane South Bound. The contract Value is about \$55M.
- Third Party Member (Chairman) for WSDOT SR99 Alaska Way Viaduct Replacement - North Access Connection -Seattle, WA. WSDOT Contract C- 8599. Atkinson is the Contractor.
- Third Party Member (Chairman) for WSDOT Biggs Rapids Painting Project. The project involves structural steel repairs and painting of the US 97 Bridge over the Columbia River at Biggs, OR. WSDOT Contract C- 8636. Intech from Lexington, Kentucky is the contractor.
- Contractor Member for I-205 Mill Plain I/C Project in Vancouver, WA. WSDOT Contract No. 8664. The contract involves structures, under-

ground utility re-locations, grading, paving, and landscaping for an upgrade to the existing interchange. Cascade Bridge is the prime contractor.

- Contractor Member and Chairman for I-5, “M” St. to Portland Ave Project at Tacoma, WA. WSDOT Contract No. 8607. The \$100M contract involves new bridge structures, demolition of exiting structures, underground utility re-locations, multiple shoring walls, grading, paving, and landscaping for a widening of I-5 just north of the Nalley Valley SR16 Interchange. Max J. Kuney Co. is the prime contractor.
- Chairman for Idaho Transportation Department Project, Key No. 12095 on US 30 and SH61 to Wyoming State Line. Project is 6 miles of “mill and fill” HMA in the very remote SE corner of the state.
- Third Party Member (Chairman) for WSDOT I-5, North Fork Lewis River, \$15M Bridge Painting Project near Woodland, WA. Jct. project at Centralia/Chehalis, WA. WSDOT Contract C- 8499
- Third Party Member (Chairman) for WSDOT on \$75M Nalley Valley I/C Project at Jct. of I-5 and SR16 just south of Tacoma. The project is basically all bridge work.
- Third Party Member (Chairman) for WSDOT I-5, Mellen St. to Blakeslee Jct. Project at Centralia/Chehalis, WA. WSDOT Contract C- 8473 is a \$48M widening I-5 project.
- Third Party member (Chairman) for WSDOT Rock Creek Bridges west of Chehalis, WA. WSDOT Contract C-7952. The \$10M project re-aligned portions of SR 6 and constructed 2 long span bridges over the environmentally sensitive stream.
- Member of DRB for Caltrans Contract 07-245404, Baldwin Park, CA. Contractor is MCM on a +\$55M Design-Build Project for balanced cantilever, post-tensioned fly-over bridge structure.
- Chairman for DRB for ITD and Staker Parson on US 30 Lund Project – SE of Pocatello, ID. The Project was a \$12M embankment and HMA paving project. The DRB was convened 2 years after the project completion to help sort out contract time and quantum issues.
- Chairman for DRB for ITD and Staker Parson on US 89 project at St. Charles and Fish Haven, ID – bridge and roadwork construction.
- Chairman for DRB for ITD and Staker Parsons on a \$15M full depth reclamation and HMA overlay Project on I-86 west of Pocatello, ID.

- DRB Member for WSDOT and Kuney Construction, and Malcolm Drilling on a \$15M test shaft project for the new Columbia River Crossing on I-5 in Vancouver, WA.
- Chairman of DRB for WSDOT and Kuney Construction on \$44M project to construct a new fly-over structure and interchange over I-5 at the intersection with I-205 just north of Vancouver, WA.
- DRB Member for US Hwy 97 HMAC paving and Dorris, CA Main Street rebuild for Caltrans and Klamath Pacific Corporation. This is a \$14M – 2 season project.
- Chairman of DRB for WSDOT and Atkinson Construction on \$170M project to widen I-90 on top of the Snoqualmie Pass near Hyak, WA. This is a very challenging project to replace an existing snowshed and protect the freeway from +/-10 avalanche chutes. All the excavation for the freeway widening is on steep rock slopes that require dowel pinning, rock bolts, soil nails, and gunite.
- DRB Member for Caltrans and Road and Highway Builders of California on a \$44M project to replace the existing concrete pavement on I-5 at the Anderson Grade Summit north of Yreka, CA.
- Chairman of DRB for WSDOT and Scarsella Bros. \$75M project to construct a new bridge over the Snohomish River and accompanying road work on SR522 just west of Monroe, WA.
- DRB Member for WSDOT and Flatiron Constructors on \$175M design-build project on I-405 north of Bellevue, WA. The project is widening the existing freeway to be used in the future as a toll road.
- Chairman of DRB for WSDOT and Tapani Underground on a \$25M project to construct a new interchange on SR500 in Vancouver, WA.
- DRB Member for the Manette Bridge Project on SR303 in Bremerton, WA. This project involves construction of a new bridge across Puget Sound to replace a 1930's structure. Manson-Mowat JV is the prime contractor and WSDOT is the Owner of this \$44M dollar project.
- DRB Chairman for I-5 at Maytown Project for WSDOT. Scarsella Bros. Construction is the Prime Contractor. This is a \$61.5M project involving grading, paving, structures, etc. on I-5 south of Olympia.
- DRB Chairman for I-90 Spokane Port of Entry at the Washington-Idaho State Line for WSDOT. Selland Construction from Wenatchee is the prime

Contractor. This is a \$6.7M project to construct a new Port of Entry for the Washington State Patrol as well as WSDOT.

- DRB Chairman on ITD I-90 West of Coeur d' Alene Bridge Overlay Project, 8 bridges on I-90 between Coeur d' Alene and the Washington State Line. Penhall Construction from Seattle is the prime contractor.
- DRB Chairman on ITD I-90 East of Coeur d' Alene Bridge Overlay Project for 11 bridges on I-90 between Coeur d' Alene and the Montana border. Penhall Construction from Seattle is the prime contractor.
- DRB Chairman on WSDOT SR522/US 2 Fly-over Project at Monroe, Washington. Scarsella Bros. Construction is the prime contractor. This is a \$15.5M project involving grading, large MSE walls, structures, etc at the intersection of US2 and SR522 at Monroe, WA.
- DRB Member for Washington State Department of Transportation's Hyak to Snowshed Project on I-90 on the Snoqualamie Pass, east of Seattle. The project involves heavy rock excavation to widen the roadway, multiple detours to construct, as well as several long span bridges and the environmental restrictions associated with Lake Keechles almost the full length of the project. Max J Kuney is the Prime Contractor.
- DRB member for Idaho Transportation Department's Sandpoint By-Way Project; a \$98,000,000 re-route of Hwy 95 around Sandpoint. Work involves multiple cofferdams, steel superstructure bridges, geo-technical soils issues and multiple schedule impacts for environmental issues re: Lake-full, Lake-down, etc. Parsons Construction from Seattle, WA is the Prime Contractor.
- DRB member for Idaho Transportation Department's Robinson and Black Cat Road Project, involving 2 new structures over I-84 west of Boise, ID. The structures were to be constructed using "rapid bridge construction" methods and the first Robinson Rd. super-structure collapsed during construction. Graham Construction from Spokane, WA is the Prime Contractor.
- Work with Skagit County PUD on development of an alternative dispute resolution procedure on the construction of a major water pumping plant on the Skagit River in NW Washington. The key issue on this project is the construction of a very difficult 3-sided cofferdam connected to a tied-back retaining wall. The owner selected me for this project because of my extensive cofferdam and tie-back wall experience.
- Independent Technical Reviewer; Port of Seattle and Sound Transit. 160th Street Loop Ramp/NER Phase 1. \$95M project to extend Sound Transit's

light rail system to SEA-TAC Airport. Mowat Construction Company is the prime contractor.

- DRB Chairman. Idaho Department of Transportation, Rainbow Bridge Project on the North Fork of the Payette River, Highway 55, 70 miles north of Boise, Idaho. Mowat Construction from Bellevue, WA is the Contractor.
- DRB Member. Lewis and Clark Bridge 433/1 Deck Replacement for WSDOT. The bridge spans the Columbia River between Longview, WA and Hwy 30 in Oregon. Max J. Kuney is the contractor on this \$18,000,000 project.
- DRB Member. Maple Valley to Hobart on State Rte. 18 for WSDOT. Project is a \$55,000,000 modernization with grading, paving and 14 structures through a very environmentally sensitive corridor. Guy F. Atkinson is the contractor.
- Third Party Facilitator for JW Fowler Construction on I-5, North Medford Interchange Project with the Oregon Department of Transportation; a \$15,000,000 Project.
- Third Party Facilitator for Laskey-Clifton Construction Co. on ODOT Hwy 101 to Shinglehouse Slough Project in Coos County, OR; and the Sutherlin Creek Project, David Evans is the Engineer, and the City of Sutherlin is the Owner in Douglas County, OR.
- Miscellaneous bridge projects acting as a construction consultant to bring the Owners and Contractors together to work out entitlement issues to avoid the claims and litigation process.

Construction Experience

HAMILTON CONSTRUCTION COMPANY – Springfield, OR *Owner, Vice President, and General Manager*

1989-2004

- Directed highway, bridge, and hydroelectric projects in the Pacific Northwest and Northern California. Supervising project managers, superintendents, equipment purchasing, and equipment repair and servicing.
- Directly involved with “hard dollar” estimating process for all projects as well as initial project planning, scheduling and field construction.
- Sponsor and proponent of “Partnering” for all major projects.
- Sponsor of first two ODOT Design-Build Projects in Oregon.

- Responsible for contractor change order negotiations with Owners and subcontractors; including claims, claim review boards, and mediation.

Owner, Vice President, and Operations Manager

1980-1989

- Directed highway, bridge, dam and tunnel repairs, and hydroelectric projects in the Pacific Northwest, Idaho and California. Supervising project managers, project engineers and superintendents.

Work included new bridge construction and widening both land based and water based (barge work), detour bridges, lift-span bridges, structural steel bridges, CIP-balanced cantilever bridge construction, CIP-PT bridges with high false-work, bridge raisings, bridge deck overlays, design-build access bridges for timber companies, dam and tunnel rehabilitation, and railroad bridge swing span rehabilitations.

Project Manager/Superintendent/Project Engineer/Estimator

1970-1980

- Projects:
 - Tieton Dam – Yakima, Wa. – USBR
 - Marquam Bridge Deck Overlay – I-5, ODOT
 - John Day Dam Navigation Lock Repair – US Army Corp of Engineers
 - Mt. St. Helens Eruption – Road and Railroad Access Bridge Replacements
 - Willow Creek Dam – Concrete Structures, US Army Corp of Engineers
 - Fly Ash Modifications – Pozzolanic NW, Centralia, WA Power Plant
 - Klamath River (Keno) Bridge, ODOT

BECHTEL PACIFIC CORPORATION (1964-1970)

Senior Field Engineer

- Construction of 700 MW Underground Hydro-electric Power Station on Lake Manapouri, New Zealand. Included on this project was the construction of a 1-1/4 mile by 24 ft. diameter by 6000' spiral access tunnel down to the power station. The power station excavation was 60 ft. wide by 120 ft. tall by 360 ft. long. The underground work also included the construction of 7-700' deep penstock shafts, 7-900' deep cable shafts, draft tube chamber, surge chamber shaft and tunnel as well as the transition in to a 40' diameter by 6 mile long tailrace tunnel that emptied into a fiord.
- Field reconnaissance, field surveying, road design, and layout for 40 mile transmission line access road through Fiordland National Park, previously un-mapped or surveyed.

Bechtel Corporation (1963-1964)

Estimator

- Estimator in Hydro Estimating Group in San Francisco. Worked on estimates, schedules, cash flows, and constructability reviews for Hells Canyon Dam for Idaho Power; Wells Dam for Chelan Co. PUD; Multiple tunnel projects for Sacramento Utility District Projects east of Placerville, CA; and preliminary work for the Bay Area Rapid Transit construction.

Bechtel Corporation (1960-1963)

Field Engineer

- Field Engineer on the Carmen-Smith Hydroelectric Project on the Upper Mckenzie River in Oregon. The Eugene Water & Electric Board was the owner on the project that included 3 earth fill dams, 3 tunnels, and 2 powerhouses.

PROFESSIONAL EXPERIENCE

Heavy Civil Construction Consultant

2002 to Present

- Port of Anchorage Alaska. Working on constructability reviews for Oles-Morrison, a legal firm from Seattle, WA on a large lawsuit regarding an Open Cell Cofferdam Design and Construction, and it impacts to contract time, and change order dollars for Quality Asphalt Paving, the Prime Contractor.
- Presently working on a Special Task Force for AECOM (URS) and Caltrans on how to replace a bridge deck on the Alemany Circle Structure which is the southerly approach to the Bay Bridge on Hwy 101 and I-280.
- Presently working for HDR on the Willamette River Burnside Bridge Rehabilitation Project. My role is constructability, costs, and schedule on this \$24M upgrade to give the lift span and approach structures 20 more years of life.
- The City of Vancouver, WA is developing the river front property formerly occupied by a Boise Cascade Paper Mill.
- SNC-Lavalin constructed a remodel of the Issaquah Creek Fish Hatchery Intake works for the Washington Department of Fish and Wildlife. The project did not go well due to groundwater problems affecting the excavation, shoring, and pumping. I worked with Oles-Morrison, Seattle Attorneys to negotiate a cost settlement and avoid litigation.
- The 50 year old South Fork Yamhill River Bridge needs updating or replacing. The County does not have the funds for a new structure so re-

modeling the existing structure to get 50 years more design life is the goal. Working with HDR Engineers we have developed a plan to replace the existing wood trestle but retain the existing concrete deck by using drilled shafts outside the drip line, false-work to support the existing super structure, and installing a new reinforced concrete cap on 7 bents. My role was constructability and costs.

- Working with OTAK and ODOT on the replacement of the Beaver Creek Bridge on Hwy 47 near Vernonia, OR. My assignment is constructability and staging on a very challenging bridge alignment to avoid environmental impacts and still maintain traffic.
- Develop Constructability Review and preliminary costs for KPFF on 6 bridges in Klamath County for ODOT. One bridge over Lower Klamath Lake will require marine access for the work.
- I am presently involved with the Port of Portland and David Evans and Associates developing construction schedules and cost estimates for mass-grading and street and highway improvements on the site of the old Reynolds Metal Aluminum Smelter at Troutdale, OR. This proposed contract will be +/- \$40M and is titled TRIP 2.
- Develop Construction Schedule for Caltrans / Caltrop on \$125M Hwy 58 Project near Hinkley, CA. Project includes 3 major bridge structures, 3M cy of embankment and 6 miles – 4 lanes of plain concrete pavement; including interchange ramps.
- Develop “hard dollar” cost estimate and for “down stream” fish passage structure at proposed Keeyask Hydro- electric Project on the Nelson River in Manitoba, Canada. My work for R2 Resource Consultants includes cost estimates for circular cell cofferdams, the dewatering system and sub-structure concrete.
- Develop Construction schedule and cost estimate for ODOT/OBEC for I-205 Sunrise Corridor Project in Portland, OR. This project is a \$50M project on new alignment with steel bridges over I-205 and the UPRR with new alignment roadwork with 700K of stone embankment, etc.
- Develop contractor’s “hard dollar” type cost estimate for Caltrans and the California DOJ on a large drilled shaft claim on I-15 in the San Diego area.
- Develop contractor’s “hard dollar” type cost estimate for FM Global from Seattle, for repair and re-construction of collapsed fish intake structure at Round Butte Dam in Oregon; involving barge erection and salvage work, as well as structural steel erection, etc.

- Develop contractor's "hard dollar" cost estimate for OBEC and Tri-Met of Portland for the new weathering steel West Harbor Bridge involving structural steel erection, drilled shaft foundations, etc. This structure will be the west approach to the new structure over the Willamette River for the new Milwaukie Light Rail Project.
- Member of Schedule Analysis, Constructability, and Risk Analysis Team for Caltrop Corp. of Emeryville, CA on Doyle Drive Project, south approach to the Golden Gate bridge
- Preparation of "hard dollar" construction estimates for Portland General Electric and FM Global (PGE Insurance Carrier) for Vertical Flow Conduit failure/recovery and repair on PGE's Round Butte Dam Hydro-electric project on the Deschutes River in Central Oregon.
- Developed initial construction schedules and cost estimates for Moyano Leadership Group for site work for the Port of Portland's Troutdale Industrial Park, Phase 2, on the site of the old Reynolds Metal Aluminum Plant, as preparation for development of the remaining parcels for industrial development.
- Member of Black and Veatch and OBEC team for RFP for the relicensing of the Carmen-Smith Hydro Project on the upper McKenzie River in Oregon. I prepared the initial schedules and preliminary constructability write-ups for all the tunnel and penstock work
- Member of Value Engineering Team for Brown and Caldwell and the City of Portland for the construction of a new UV water treatment facility at the Bull Run River site.
- Hebgen Dam, MT. Prepare for PPL MT and OBEC Consulting Engineers construction cost estimates and schedules for repair and rehabilitation of the intake structure for Hebgen Dam near West Yellowstone, MT.
- Prepare contractor's type cost estimates, constructability reviews, and schedule preparation for the rehabilitation of the Oregon City Arch Bridge over the Willamette River at Oregon City for ODOT and OBEC Consulting Engineers.
- Prepare contractor's type cost estimates, constructability reviews, and schedule preparation for the remodel of the Wilsonville Interchange on I-5, south of Portland, for ODOT and OTAK Consulting Engineers.
- Member of Schedule Analysis, Constructability, and Risk Analysis Team since 2005 for Caltrop Corp. of Emeryville, CA on San Francisco Oakland Bay Bridge Self Anchored Suspension Span Contract. (\$1.4 Billion Con-

tract); South-South Detour (\$450,000,000 Contract); Yerba Buena Island Box Girder Structure, (\$85,000,000 Project) and Oakland Touchdown, OTD #1, (\$175,000,000 Project).

- Member of Cost Analysis, Scheduling, and Constructability Team for Cal-trop Corp. for Trans Canada/GTM (Palomar) natural gas pipeline from Central Oregon to Westport, OR on the Columbia River. This is projected as a \$750M project.
- Member of Cost Analysis, Scheduling, and Constructability Team for the raising of Scoggins Dam 40 ft. This work was for Parsons Brinkerhoff/Shannon and Wilson, and the Client is Tualatin Valley Water District. The project involves raising an existing USBR dam 40 ft. to provide more water storage for drinking water for the communities served by TVWD on the west side of Portland. This project has a projected cost of \$300,000,000.
- Member of OBEC Design Team for 53rd Ave. Project in Albany, OR providing construction schedules, cost estimates, and drawing and specification reviews for an Economic Development Project to provide access for a new Pepsico (Gatorade) Plant.
- Member of OBEC/TY Lin design team for the construction of the new, \$150M, Willamette River Bridge on I-5 in Eugene, OR. I prepared the cost estimates for the 6 alternative type structures as well as the initial construction schedules for the project.
- Developed initial construction schedules for David Evans and Associate's, for site work for the Port of Portland's Troutdale Industrial Park, Phase 1, (TRIP 1) on the site of the old Reynolds Metal Aluminum Plant, as preparation for the construction of a \$100M Fed Ex Facility.
- Member of Value Engineering Team for OTAK Engineering for the Sandy River (Ten Eyck) Road Bridge. The mission is to develop alternative design solutions for a bridge at an extremely difficult construction site that previously bid and the bids were much higher than the Engineer's estimate.
- Member of Value Engineering Team for Lander St. Bridge Project for the City of Seattle. The main component of the Project is a bridge over the mainline of the BNRR near Qwest Field in Seattle and the purchasing of right of way for a construction detour, relocation of major utilities, MSE Wall construction, etc.

- Develop Construction Schedule (P-3) for OBEC Consulting Engineers and ODOT for the I-205 Project from I-5 to Oregon City. This a very complicated project to reconstruct I-205 in a 2 year time frame.
- Member of Cost and Schedule Analysis Team for Pinnell-Busch of Portland, OR on City of Portland Aerial Tramway for OHSU Project.
- Member of Value Analysis Team for SFOBB East Span (YBI Split) VA Study of Yerba Buena Island Viaduct in San Francisco Bay.
- Preliminary constructability analysis for SOJ for replacement of Rawl Wheels on the Broadway Bridge Lift Spans over the Willamette River in Portland, OR. For the Portland Street Car Project.
- Cost preparation, schedule, staging review, and constructability review for the MLK/Grand Ave. Viaduct Project for David Evans and ODOT in Portland, OR.
- Claims review for Pinnell Busch, Legal Firm and Bonding Company for removal of Laast Construction from a very complicated drilling, tie-back walls project for the FHWA in Glacier Park, MT.
- Cost estimates, schedules, and constructability review for OBEC Consulting Engineers on I-5/Belt Line Fly-over Project in Eugene, OR.
- Claims preparation, schedule and cost reviews for Pinnell Busch representing clients on the Big Y Interchange Project, I-84, in Boise, Idaho.
- Construction costs, scheduling, and construction methods review for Wildish Standard Paving on rehabilitation of the Historic Monroe St. Bridge over the Spokane River in Spokane, WA.
- Change order estimating and entitlement reviews for Pinnell-Busch Inc. out of Portland, OR. on the Sitka Harbor Bridge at Sitka, Alaska. The Alaska DOT is the owner and the project was to seismic retrofit the existing cable stayed structure.
- Construction estimates, schedules, and constructability reviews for OBEC Consulting Engineers on the Burnside Bridge over the Willamette River in Portland, OR. Work involves the retrofit of the mechanical, electrical, and civil work on a Strauss-type Bascule Bridge built in 1926.
- Construction cost estimates and schedules for URS Corporation's Portland office for 3 bridges on US 26 west of Mitchell, OR. ODOT is the owner on this remote project.

- Bid estimate for Hamilton Construction on I-5 Columbia River Bridges for mechanical, electrical, and civil retrofit of lift spans, a \$12M project. Hamilton was the low bidder on this ODOT Project.
- Construction Estimating and Scheduling for David Evans and Associates on the Murray Morgan Lift Span Bridge for the City of Tacoma, WA. The project involves design and cost studies to either replace or rehabilitate the existing lift span structure over the Tacoma waterway.
- Constructability Review for Washington Department of Transportation and Skillings-Connolly Consulting Engineers on I-5, South 48th to Pacific Avenue. The project is a \$90,000,000 modernization of I-5 at the SR5/SR16 Interchange near the Tacoma Dome.
- Construction Estimating and Scheduling for Sauvie Island Bridge in Multnomah County, Oregon for David Evans and Associates. The \$40,000,000 project includes a 1500 foot long weathering steel tied arch bridge on deep drilled shaft foundations.
- URS Corporation, Portland, Oregon. Washington County Baseline Road VE Study on complex road, wall, and bridge project near Hillsboro, OR.
- Oregon Department of Transportation. Numerous constructability, staging, scheduling, and permit reviews for statewide bridge and freeway projects.
- Eugene Water and Electric Board. Tunnel inspections for FERC licensing on the McKenzie River, Carmen-Smith Hydroelectric Project.