



Statement of Qualifications

North Beach Water District Proposal for the Birch Place Booster Station



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ATTACHMENT "A" - PROPOSAL SUMMARY FORM

RFQ Birch Place Booster Station

General Information:						
Legal Name of Applicant Firm: Gray & Osborne, Inc.						
Street Address: 2102 Carriage Drive SW Building I						
City: Olympia State: WA Zip: 98502						
Contact Person Title: Mike Johnson, P.E.						
Phone: 360-292-7481 Fax: 360-292-7517						
E-mail address: mjohnson@g-o.com						
Tax Identification Number: 91-0890718						
Did outside individuals or agencies assist with preparation of this proposal?						
Yes: No: X If yes, describe.						
I certify that to the best of my knowledge the information contained in this proposal is accurate and complete and that I have the legal authority to commit this firm to a contractual agreement. I realize the final funding for any service is based upon available funding levels, and the approval of the Clark Regional Wastewater District Board of Commissioners.						
Michal B. John 7/13/15 Signature Date						

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July 14, 2015

Mr. Bill Neal General Manager North Beach Water District 25902 Vernon Ave., Suite C Ocean Park, WA 98640

SUBJECT:

PROPOSAL FOR ENGINEERING SERVICES FOR THE BIRCH

PLACE BOOSTER STATION PROJECT

NORTH BEACH WATER DISTRICT, PACIFIC COUNTY,

WASHINGTON G&O #20152.53

Dear Mr. Neal:

Gray & Osborne, Inc. is pleased to submit this letter of interest and proposal for for the Birch Place Booster Station Project. For over 80 years, Gray & Osborne has been helping communities and special purpose districts in Washington State plan, design, and construct utility infrastructure. Our enclosed submittal demonstrates that we have extensive experience in the evaluation of water distribution systems and the design and construction of water booster stations to correct water distribution system deficiencies. Our staff is ready and available to complete this work within the District's stated timelines. Per Part 2.5 of the RFP, we certify that that no employee or official of the District has any interest, financial or otherwise, in our firm or the proposed project. Per Part 2.8 of the RFP, we certify that Gray & Osborne is not debarred, suspended, or otherwise excluded from, or ineligible for, participation in Federal Assistance Programs. We also certify that we will not contract with a subcontractor that is debarred or suspended.

We have enjoyed working with the District to successfully complete the DWSRF Water Main Project and Water System Plan. We would welcome the opportunity to assist you with completing this booster station project. Please contact me at 360-292-7481 or mjohnson@g-o.com with questions concerning this submittal.

Sincerely,

GRAY & OSBORNE, INC.

Michael B. Johnson, P.E.

MBJ/dp Encl.

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PROJECT UNDERSTANDING AND APPROACH

PROJECT UNDERSTANDING

We understand that the North Beach Water District would like to construct a new booster station along Birch Place near the intersection of Birch Place and 227th Place. The booster station will help correct an issue with low water service pressure in the south east corner of the NBWD service area. In the 2015 Water System Plan Gray & Osborne evaluated various methods to correct this deficiency and determined that a booster station at this location would be most cost effective. We understand that the District would like the booster station to consist of 4 pumps (2 domestic pumps and 2 fire pumps) located in pitless units. No building will be provided. Electrical and control equipment will be located in locked, weatherproof enclosures. A standby generator will also be provided. The following are key issues that will need to be addressed during the design of the project.

- 1. Acquisition of an easement from the Sunset Sands Community
- 2. Landscaping and screening of the booster station facility to limit is visual impact.
- 3. Development of a control scheme and telemetry system for the booster station that provides necessary controls and alarms, but is simple to operate and maintain.

PROJECT APPROACH

From the above Project Understanding, we have developed the following project approach.

Task 1 - Project Management

Throughout the duration of the project, Gray & Osborne would provide project management services to ensure the project stays on schedule and on budget. This task would include coordinating and managing the schedule and budget for the project team, coordinating with regulatory and permitting agencies, and communicating with NBWD staff. NBWD would be provided with budget updates on a monthly basis.

Task 2 - Data Collection and Review

Gray & Osborne would begin by obtaining available information on existing utilities in the area from the various utility companies and requesting a field utility locate. We would then complete a site visit to identify project site constraints and the project boundary. Following our site visit, we would complete a topographic survey of the project area.

Task 3 - Pre-Design

Prior to beginning detailed design, Gray & Osborne would complete a number of pre-design activities. During this task we would identify key project components, complete alternatives evaluations, and develop preliminary design criteria. We would summarize this analysis in Pre-Design Report that would meet the requirements WAC 246-290-110 for a project report. As part of this effort, Gray & Osborne would complete the following tasks:

- · Review site topographic survey data and develop a preliminary site plan.
- · Develop a preliminary legal description for the easement area.
- · Using the hydraulic model, we would develop design criteria for the pumps in the booster pump station.
- · Evaluate alternatives for pumps including number, capacity, and configuration.
- · Prepare a preliminary mechanical piping plan.
- · Identify electrical telemetry, control, and instrumentation needs.
- Prepare a preliminary cost estimate.



We would summarize the results of the above evaluations in a Pre-Design Report. Upon completion, the Pre-Design Report would be submitted to the District for review. Gray & Osborne would meet with the District to discuss any comments. Gray & Osborne would then revise the document based on these comments and prepare final copies for submittal to the Department of Health.

Gray & Osborne has extensive experience in the development of hydraulic models and the use of them to evaluate water systems and develop cost effective solutions to water system deficiencies. Over the last 10 years we have completed over 50 water system plans that have used hydraulic models to identify deficiencies and evaluate alternatives to correct them. As part of development of the NBWD Water System Plan we developed and calibrated a hydraulic model to evaluate the NBWD water distribution system. We then used this model to evaluate alternatives for correcting deficiencies including identifying the Birch Place Booster Station project to correct the pressure deficiency in the Sunset Sands area. In completing this evaluation were able to ascertain that in the interim, until the Birch Place Booster Station is constructed, some improvement in pressure in Sunset Sands area could be obtained by operating the South Wellfield Booster Station more frequently during high demand periods.

Task 4 - Complete Design and Prepare Project Plans and Specifications

Following Pre-Design, Gray & Osborne would prepare detailed plans, specifications, cost estimates, and construction contract documents for the booster station. Plan sheets would include civil, mechanical, and electrical plans. Plans would detail all work described in the Pre-Design Report, including preparing the site, site piping and utilities, booster station mechanical layout, and electrical, telemetry, and controls.

The specifications would be prepared following CSI format.

Prepare Cost Estimates

At each milestone, an updated construction cost estimate would be prepared. Cost estimates would be prepared based on Gray & Osborne's experience on previous similar type projects. Gray & Osborne has an extensive database of construction costs for water system improvement projects completed in Washington State.

Conduct QA/QC Reviews

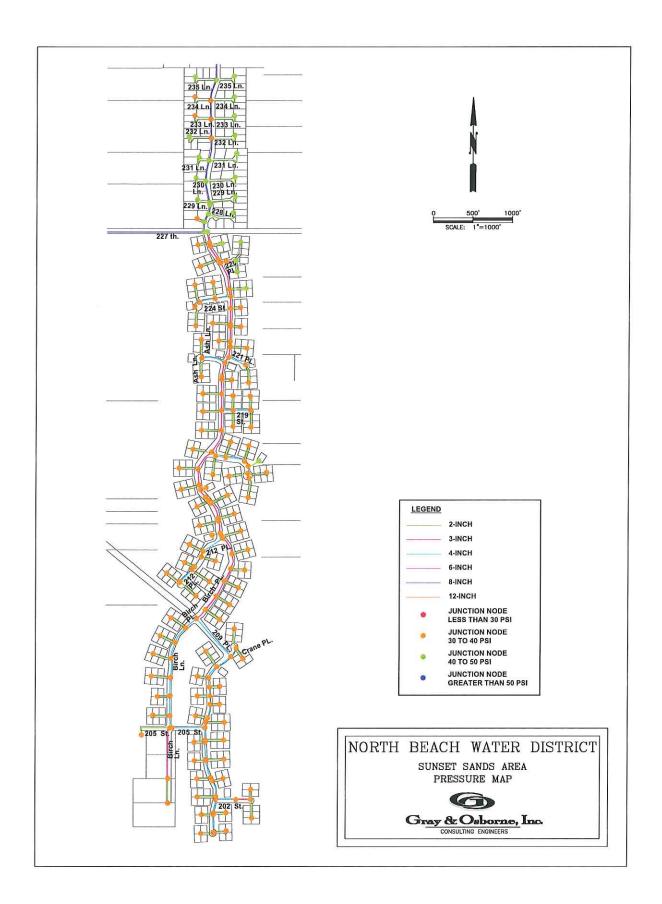
At 30% design, 50% design and 90% design milestones, draft plans, specifications, and cost estimates would be prepared. At each of these milestones, Gray & Osborne would conduct an internal Quality Assurance/Quality Control (QA/QC) review. QA/QC reviews include the project team and senior staff not directly involved in the project. These reviews provide an opportunity for value engineering and help ensure the plans are consistent and constructable.

Following the QA/QC review, the plans, specifications and cost estimates would be submitted to the District for review. Gray & Osborne staff would then meet with the District staff to discuss comments.

Task 5 – Obtain Permits

During the design process, Gray & Osborne would assist NBWD in preparing applications and providing supporting documentation for required permits. Permits likely will include the following:

- SEPA Determination
- · Pacific County General Permit for Construction
- Pacific County Road Right-of-Way Permit
- Department of Health Project Approval



Gray & Osborne would also prepare a final legal description and easement for the property so that the District can obtain an easement from the Sunset Sands Community.

Gray & Osborne would also assist the NBWD in applying for a 3 phase power service from Pacific County PUD No. 2.

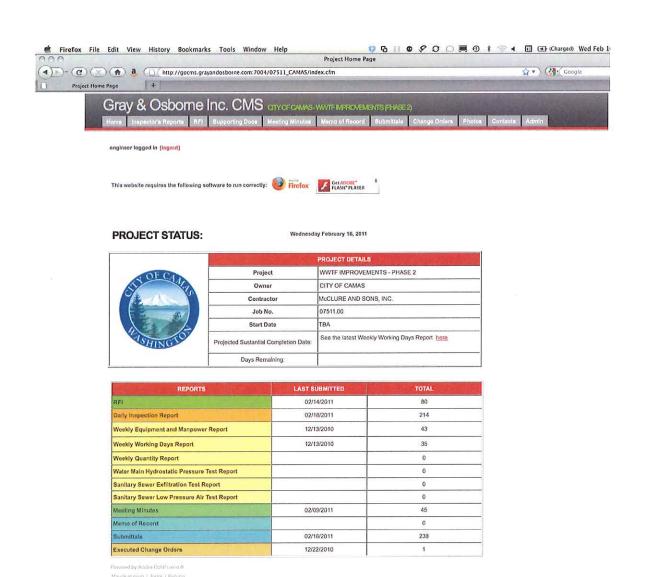
Task 6 - Bid and Award

Upon completion of design Gray & Osborne would assist the NBWD with providing bid and award services. If desired, Gray & Osborne could distribute plans and specifications to contractors and maintain a plan holder's list. During the bid period, Gray & Osborne would be available to answer bidder questions and prepare any necessary addenda. Gray & Osborne could also assist with any pre-bid meetings or pre-bid walkthroughs. Upon bid opening, Gray & Osborne could prepare a bid tabulation, assist in evaluating bids or bidder qualifications, and prepare a recommendation of award.

Task 7 - Construction Management Services

Upon award of the contract, Gray & Osborne would assist the District with construction management activities. If desired, Gray & Osborne could provide a field inspector to review and document the work of the contractor and coordinate with the District, neighbors, and permitting agencies. Gray & Osborne would review material and equipment submittals and would review and respond to requests for information. We would also assist with the review and negotiation of change orders as necessary. We would be available to attend and participate in construction meetings and make site visits as necessary to resolve construction issues. Upon completion of the project, Gray & Osborne could provide start-up assistance and operator training and prepare an Operations and Maintenance Manual for the new facility. We would also prepare record drawings in AutoCAD format for the District.

One additional tool that we can offer is our Construction Management Software (CMS) system. The CMS is a web-based database to house project documents including submittals, photographs, RFIs, change orders, pay requests, etc. The software allows the various parties to access the documents by logging in to the CMS. Different levels of password access can be configure to allow certain users access to only parts or all of the site or to allow certain users read only privileges while others are allowed the ability to post documents.

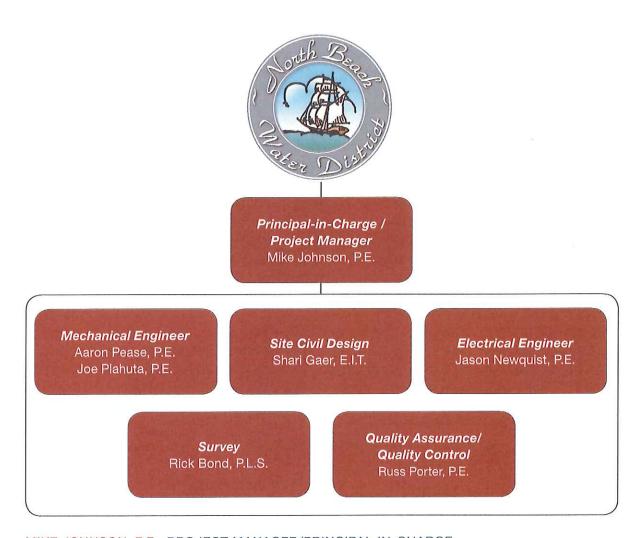


Online Construction Management Software (CMS) Dashboard

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PROJECT TEAM

Gray & Osborne would provide a talented team of experienced professionals to complete the Birch Place Booster Station project. Our team members all have extensive booster station experience and most also have experience working with North Beach Water District. An organization chart and brief bios follow. Full resumes of team members are included in the Appendix.



MIKE JOHNSON, P.E., PROJECT MANAGER/PRINCIPAL-IN-CHARGE

Mike is a Principal and the Office Manager of Gray & Osborne's Olympia Office. Since joining the firm in 1997, he has acted as the Principal-in-Charge or Project Manager on numerous public works projects for agencies throughout Washington State. Mike has successfully completed a wide variety of potable water, wastewater, stormwater, projects providing him with a wide range of experience and expertise. His experience includes the design of ten water booster stations ranging in capacity from 60 gpm to 2,700 gpm. Mike understands that maintaining good communication between client staff, stakeholders, and project team members is critical to the success of a public works project. He excels at understanding the needs of each client and ensuring that those needs are met throughout the project. Mike's familiarity with District staff should help facilitate coordination and

communication for this project. Mike has demonstrated his ability to successfully manage projects through his experience on the NBWD DWSRF Water Main Project and the Water Supply and Treatment Project.

Education:

B.S. Civil Engineering, 1995, University of Washington/M.S. Civil Engineering, 1997, Stanford

University

Registration:

Civil Engineer, 2000, Washington (36498)

AARON PEASE, P.E., LEED A.P., PROJECT ENGINEER

Since joining Gray & Osborne in 1998, Aaron has prepared construction drawings, specifications, and contract documents for numerous water system, wastewater system, and building projects. Aaron has gained valuable experience in the planning, design and construction of wells, booster stations, interties, treatment plants (water and wastewater), including associated transmission and distribution systems. Aaron's booster station experience includes the planning, design and construction management for small to large booster stations including the Angelo, Upper Prune Hill, and Lower Prune Hill booster stations for the City of Camas, the Corridor Well booster station for the City of Milton, and the Farnham booster station for the City of Chelan. Aaron has also been a member of the QA/QC team for the Tulalip Marin Drive booster station for the Indian Health Service, and the Mountain Park booster station for the City of Issaquah. Since gaining his LEED accreditation and his secondary professional engineering license in building systems (architectural engineering), Aaron has served as project engineer for several water system projects.

Education:

B.S. Civil/Environmental Engineering, 1998, Iowa State University

Registration:

Civil Engineer, 2003, Washington (40276)/Building Systems Engineer, 2008, Washington

(40276)/LEED Accredited Professional Building Design + Construction, 2010

SHARI GAER, E.I.T., SITE CIVIL DESIGN

Shari has over 19 years of experience in civil design of public works projects. At Gray & Osborne, Shari has developed pre-design reports, plans, specifications, and construction cost estimate packages for site improvements and utilities on reservoirs, wells, booster stations and water treatment plants projects. She has completed civil site design for booster station projects for Boistfort Valley Water, and the City of Kalama and the Towns of Coulee Dam and Pe Ell. She worked on the site improvements and utilities for the NBWD Water Supply and Treatment Project. Shari is also proficient in ACAD and Civil 3d design.

Education:

B.S. Civil Engineering, 1995, Saint Martin's College

Registration:

Engineer in Training, Washington (23490)

RUSSELL PORTER, P.E., QA/QC

Mr. Porter joined Gray & Osborne in 1994 and he is head of the drinking water group. While at Gray & Osborne, Russ has provided water system planning and design expertise. He is familiar with all aspects of water system design including source development, treatment, pumping, storage, and distribution. Mr. Porter has extensive booster station design and project management experience including new system design, both compact package systems and larger in-place construction, as well as retrofits, upgrades, and existing system analysis and optimization. His projects have included City of Lacey 380-400 booster station, City of Camas Angelo, Lower Prune Hill, and Upper Prune Hill Booster Stations, City of Roy diesel-fired booster station, Indian Health Service Tulalip Marine Drive and Mission Highlands Booster Stations, City of Issaquah Mountain Park and Mt. Hood Booster Stations, and City of Oak Harbor Ault Field Booster analysis and retrofit.

Education:

B.S. Chemistry, 1988, University of Montana/M.S.E. Environmental Engineering, 1992, University

of Washington

Registration:

Civil Engineer, 1998, Washington (35688)/Chemical Engineer, 2001, Washington (35688)/

Environmental Engineer, 2004, Washington (35688)

JASON NEWQUIST, P.E., ELECTRICAL ENGINEER

Jason has worked with Gray & Osborne since early 2006. He has participated in all phases of water and wastewater treatment system from pre-design, into design and specification, submittal review, and into construction management. He has also provided electrical development review services. He has participated in all aspects of electrical design from low voltage loading and distribution, analog and digital instrumentation, and down to lighting and receptacles. He also has experience in backup relay logic and generator sizing.

Education:

B.S. Electrical Engineering, 1999, Boston University

Registration:

Electrical Engineer, 2008, Washington (45311)

RICK BOND, P.L.S., SURVEY GROUP MANAGER/PROFESSIONAL LAND SURVEYOR

Rick is a Washington State licensed professional land surveyor with over 21 years of experience, including 13 years as a licensed land surveyor. He has provided ground control, topographical survey, right-of-way calculations, legal descriptions, right-of-way mapping, and has worked with a variety of aerial photogrammetrists. He is well versed in electronic data collection, data transfer, and automated data reduction for geodetic control, cadastral, topographic, boundary, subdivisions, and construction surveys. Rick is proficient in terrestrial observation utilizing total station with electronic data collection, data transfer, automated data reduction, and writing and interpreting legal descriptions. He routinely works with a variety of software such as AutoCAD, Civil 3D, Starnet, Leica Geo. Rick manages day-to-day operations of our survey crew(s), write, and/or supervise preparation of legal descriptions and right of way mapping, coordinate with property owners, prepare estimates, supervise personnel, and answer inquiries from the owner or other team members.

Education:

Associate of Applied Science, 1991, ITT Technical College

Registration:

Professional Land Surveyor, Washington, 2003 (40097); Utah, 2001 (4804680-2201)

STAFF AVAILABILITY

Our project team is ready and available to complete the design work for this project in 2015 so that it can be constructed in 2016. While each of our project team members are currently working on existing projects, they all have availability in 2015 and 2016 to be of service to the North Beach Water District. The following table provides an estimate of the percentage of time that each of the key team members would be devoted to this project throughout project duration.

-	2015		2016		
Team Member	3rd	4th	1st	2nd	3rd
Mike Johnson	20%	20%	20%	20%	20%
Aaron Pease	25%	25%	25%	25%	25%
Joe Plahuta	25%	25%	25%	25%	25%
Russ Porter	5%	5%	5%	5%	5%
Shari Gaer	30%	30%	30%	10%	10%
Jason Newquist	5%	15%	15%	10%	10%

EXPERIENCE

Gray & Osborne has extensive experience in the design of water booster stations. In the last 15 years we have designed over 30 water booster stations including booster pump stations using pitless units. Below is a list of water booster projects that Gray & Osborne has completed.



City of Sequim Booster Station with Pump in Pitless Unit

PUMPING AND BOOSTER STATIONS

Client	Project Description
City of Camas	(2) 3,000 gpm Booster Pump Stations 2,500 gpm Booster Pump Station, Pump Station Retrofit
City of Chelan	700 gpm, 500 gpm Booster Pump Stations
Confederated Tribes of Chehalis	240 gpm Booster Pump Station
Town of Coulee Dam	2 X 1,400 gpm Pump Stations
City of DuPont	4,000 gpm Booster Pump Station
City of Grand Coulee	400 gpm Booster Pump Station
Heights Water Association	2,000 gpm Booster Station
Indian Health Service/Tulalip Tribes	180 gpm, 750 gpm Booster Pump Stations
City of Kalama	2 X 2,700 gpm Pump Stations, 1 X 100 gpm booster station
City of Lacey	250, 2,500, and 4,500 gpm Booster Pump Stations
City of Milton	2,500 gpm Booster Pump Station
Mukilteo Water & Wastewater District	1,000 gpm Booster Station
City of Napavine	1,160 gpm Booster Pump Station
City of Puyallup	3,000 gpm Booster Pump Station
City of Roy	1,000 gpm Diesel-Fired Booster Station
City of Sequim	300 gpm Booster Pump Station
Silver Lake Water & Sewer District	1,500, 2,500, and 4,000 gpm Booster Pump Stations
City of Snoqualmie	1,000 gpm Booster Pump Station
Surfside Homeowners Association	700 gpm Booster Pump Station
Wahkiakum County PUD	60 gpm Booster Pump Station

REFERENCES

The following references can provide you with information about our performance on recent water booster station projects:

Mountain Park Booster Station

Owner:	City of Issaquah				
Project Funding:	City				
Contact:	Tony Nguyen (425) 837-3437 Email tonyn@issaquahwa.gov				
	P.O. Box 1307, Issaquah, WA 98027				
Project Cost:	\$1.36 million				
Gray & Osborne, Inc.:	Predesign and Alternatives Analysis, Permitting Assistance, Design Plans and				
	Specifications for Public Works Bidding, Submittal Review				

Brief Description

Gray & Osborne provided planning, design, and limited construction assistance for the installation of the Mountain Park Booster Station. The new facility replaced an older, substandard facility.

The facility contains three 100 HP, 2,000 gpm pumps powered with variable frequency drives. The station pumps water from the 297 Valley Pressure Zone to the 483 Mt. Hood Pressure Zone. The booster station also have a 230 kW diesel generator installed in the building for auxiliary power.

The project site had several constraints. The building was located on a small parcel bounded by an condominium complex, a major arterial, and the entrance to the City's cemetery. Puget Sound Energy maintains a high voltage electrical transmission line on an easement across a portion of the property and a City stormwater line also bisects the site making site design and utility layout challenging.





Tulalip Marine Drive and Mission Highlands Booster Stations

Owner:	Indian Health Service, Tulalip Tribes				
Project Funding: Indian Health Service					
Contact:	Jason Lovett, (503) 414-5531 Email jason.lovett@ihs.gov 1414 NW Northrup S., Room 800, Portland 97209				
Project Cost:	\$600,000 (Marine Drive BPS - \$390,000, Mission Highlands BPS - \$210,000				
Gray & Osborne, Inc.:	Predesign and Alternatives Analysis, Permitting Assistance, Design Plans and Specifications for Public Works Bidding, Construction Management Services for Startup Assistance				

Brief Description

Gray & Osborne provided planning, design, construction management, and startup assistance for the installation of the Marine Drive and Mission Highlands Booster Stations, which were completed for the Tulalip Tribes with funding and technical assistance from the Indian Health Service.

The Marine Drove Booster Station pumps water from the Tribes' Quilceda Village zone to the main pressure zone. The Marine Drive Booster Station has a skid-mounted pump station containing three close-coupled, end suction centrifugal pumps with a total capacity of 500 gpm. The Marine Drive Booster Station included the pumps with controls and electrical, a CMU building, and a 80-kilowatt auxiliary generator.

The Mission Highlands Booster Station pumps water from the Tribes' main pressure zone to a new residential development. The Mission Highlands Booster Station has a skid-mounted pump station containing two close-coupled, end suction centrifugal pumps with a total capacity of 180 gpm. The Mission Highlands Booster Station project included the pumps with controls and electrical, a CMU building, and a receptacle for a portable emergency generator.



Marine Drive Booster Station Building



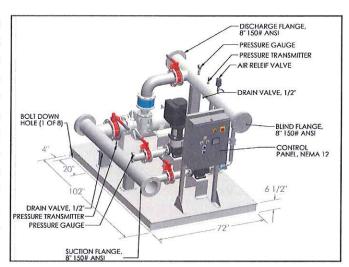
Mission Highlands Booster Station Pumps

Wollochet Harbor Club Booster Station

Owner:	Wollochet Harbor Club
Project Funding:	USDA Rural Development
Contact:	Kevin "Kit" Jacobsen, (253) 225-0864
	PO Box 2166, Gig Harbor, WA 98335
Project Cost:	\$1.36 million (including booster station, well and treatment facility)
Gray & Osborne, Inc.:	Provided planning, pre-design, permitting assistance, design services, bid and
	award services, construction management, and start-up and training

Brief Description

The Wollochet Harbor Club wanted to provide fire flow to its service area. Gray & Osborne evaluated alternatives and assisted the Wollochet Harbor Club with developing a project that included construction of a new water booster station and replacement of most of its distribution system piping. The booster station consisted of 3 pumps (2 domestic and 1 fire) with a capacity of 850 gpm. As part of this project, the Wollochet Harbor Club also drilled and equipped a new well and constructed a new iron and manganese treatment facility in the same building as the booster pump station.



APPENDIX

- Addendum Acknowledgement Form
- Resumes
 - · Mike Johnson, P.E.
 - · Russ Porter, P.E.
 - · Aaron Pease, P.E.
 - · Shari Gaer, E.I.T.
 - · Jason Newquist, P.E.
 - · Rick Bond, P.L.S.

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From: Bill Neal [mailto:bneal@northbeachwater.com]

Sent: Tuesday, June 16, 2015 10:18 AM

To: tzerkel@g-o.com

Subject: North Beach Water District - RFP

Date of Addendum: 6/16/2015

To: Thomas Zerkel, P.E., Gray and Osborne, Inc.

Via E-mail: tzerkel@g-o.com

RFP---- Birch Place Booster Station Release Date----- 6/17/2015 Due Date----- 11:00 AM 7/15/15

NOTICE TO ALL PROPOSERS

The specifications for the above-referenced RFP are modified as set forth in this Addendum. The original RFP Documents and any previously issued addenda remain in full force and effect, except as modified by this Addendum, which is hereby made part of the RFP Documents. Proposer shall take this Addendum into consideration when preparing and submitting a Proposal, and shall acknowledge receipt of this Addendum by signing in the space provided below and submitting this addendum with Proposal.

BID SUBMITTAL DEADLINE

The bid submittal deadline remains the same and is not changed by this Addendum.

Change/Addition to RFP:

3.0 - Proposal and Submittal

Item	Section No.	Description of Change
3.8	Delivery Format	Proposers shall submit a total of five copies of the proposal in a sealed envelope clearly marked in the lower left-hand corner "RFP - Birch Place Booster Station

The undersigned hereby acknowledges receipt of the above addenda to the Birch Place Booster Station RFP.

Michel B. Jelen

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From: Bill Neal [mailto:bneal@northbeachwater.com]

Sent: Wednesday, June 17, 2015 12:47 PM

To: tzerkel@g-o.com

Subject: NBWD - RFP - Addendum #2

To: Thomas Zerkel, P.E., Gray and Osborne, Inc.

E-mail: tzerkel@g-o.com

ADDENDUM #2

Date of Addendum: 6/16/2015



RFP Birch Place Booster Station
Release Date 6/17/2015
Due Date 11:00 AM 7/15/15
NOTICE TO ALL PROPOSERS:
The specifications for the above-referenced RFP are modified as set forth in this Addendum. The original RFP Documents and any previously issued addenda remain in full force and effect, except as modified by this Addendum, which is hereby made part of the RFP Documents. Proposer shall take this Addendum into consideration when preparing and submitting a Proposal, and shall acknowledge receipt of this Addendum by signing in the space provided below and submitting this addendum with Proposal.
BID SUBMITTAL DEADLINE:
The bid submittal deadline remains the same and is not changed by this Addendum.

CLARIFICATION TO RFP:

Item----- Section No.----- Description-----1.3 Project Description- Evaluate and verify hydraulic analysis of the distribution system in Sunset Sands development performed by Gray & Osborne, Inc. (2014)

----- Question-----

To what extent does the District expect the selected consultant to verify the prior analysis?

----- Answer-----

The District has no concerns or doubts regarding the hydraulic analysis model performed by Gray and Osborne, Inc. in 2014 and believe it to be a quality analysis that accurately represents the actual conditions in the system. However, the engineer responsible for the design of the Birch Place Booster Station will be required to test the data, to a reasonable degree, before relying on it in their design and, if in their professional opinion there are gaps or flaws in the data, recommend that the G & O hydraulic analysis modeling be verified, expanded, or replaced completely before proceeding with final design.

The undersigned hereby acknowledges receipt of the above addenda to the Birch Place Booster Station RFP.

Michol Jellands Jellands Signature 7/10/15

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Michael Johnson, P.E.

Principal

Education

- Bachelor of Science, Civil Engineering, University of Washington
- · Master of Science, Civil Engineering, Stanford University

Professional Registration

Civil Engineer: Washington

Professional Experience

Mike joined Gray & Osborne, Inc. in 1997. He is a Principal in the firm and is currently the manager of Gray & Osborne's Olympia Office. His experience includes project management, project engineering, and design engineering duties on numerous water system source, treatment, storage, and distribution projects. Mike's water treatment experience includes iron and manganese removal, rapid sand, slow sand, membrane, and diatomaceous earth water filtration plants, and various types of disinfection systems. Mike is also familiar with the water comprehensive planning process, having been the project manager for several water system comprehensive plans.

Mike has completed several contract projects for the Washington State Department of Health including a *Guidance Manual for Slow Sand and Diatomaceous Earth Filtration for Small Water Systems* and a Database of Surface Water Treatment Plants and Groundwater Disinfection Systems.

Water Treatment Plants

- Project Manager or Project Engineer for the following Water Treatment Plant projects:
 - North Beach Water District North and South Wellfield Iron/Mn Removal
 - City of McCleary 500 gpm Iron/Manganese Removal
 - Wollochet Harbor Club 160 gpm Iron/Manganese Removal
 - Naselle Water Company 480 gpm Roughing Filter
 - City of Castle Rock 2.0 MGD Conventional WTP Improvements
 - Town of Coulee Dam 2.0 MGD Slow Sand WTP
 - Town of Pe Ell 0.5 MGD Slow Sand WTP
 - City of Kalama 3.9 MGD Diatomaceous Earth WTP
 - Hat Island 40,000 gpm Reverse Osmosis Membrane WTP
 - Roche Harbor 0.5 MGD Slow Sand WTP with Ozone
 - Town of Pe Ell 200 gpm Conventional WTP Modifications
 - City of Roslyn 1.0 MGD Slow Sand WTP

Wells

- Project Manager or Project Engineer for the following well projects:
 - City of Olympia McAllister Wellfield
 - Wollochet Harbor Club Well No. 2
 - Mission Creek Corrections Center Well No. 3
 - Olympic Corrections Center Reequip Well No. 1
 - City of Ridgefield Construct Well Houses for 3 Wells and Reequip 1 Well
 - City of Ridgefield Abrams Park Well No. 10
 - Cedar Creek Corrections Center Equip Well No. 3
 - Hat Island Two seawater wells

Water Storage Reservoirs

- Project Manager or Project Engineer for the following reservoir projects:
 - City of Ridgefield 1.0 MG welded steel reservoir
 - City of Olympia 1. 0 MG welded Steel reservoir
 - Wahkiakum PUD 80,000 gallon concrete reservoir
 - City of Long Beach 1.0 MG welded steel reservoir
 - ◆ Town of Pe Ell 200,000 gallon concrete reservoir
 - ♦ Boistfort Valley Water 200,000 gallon concrete reservoir
 - City of Roslyn Two 200,000 gallon concrete reservoir
 - City of Roslyn Liner and floating cover for 1.0 MG concrete reservoir

Water Booster Stations

- Project Manager or Project Engineer for the following booster station projects:
 - Wollochet Harbor Club 850 gpm booster station
 - Town of Pe Ell Chehalis River Pump Station
 - City of Castle Rock Carpenter Road Booster Station pre-design
 - Wahkiakum PUD 60 gpm booster station
 - Town of Coulee Dam -1,400 gpm raw and finished water pump stations
 - City of Kalama 2,700 gpm raw water and finished Water pump stations
 - Town of Pe Ell Hill Street Booster Station pre-design
 - Boistfort Valley Water Three 200 gpm booster stations

Water Main Replacement

- Project Manager or Project Engineer for the following water main projects:
 - North Beach Water District 5,000 If of 8-inch and 12" water main
 - Boistfort Valley Water 22,000 lf of 8-inch water main
 - Wollochet Harbor Club 8,000 lf of 4-inch, 6-inch, and 8-inch water main
 - Cedar Creek Corrections Center 1,700 lf of 8-inch water main
 - Wahkiakum PUD 35,000 If of 4-inch water main
 - City of Long Beach 5,800 If of 12-inch water main
 - Town of Pe Ell 3,200 If of 8-inch water main
 - Boistfort Valley Water 5,000 lf of 8-inch water main
 - Olympic Corrections Center 5,000 If of 4-inch water main
 - City of Kalama 1,500 If of 8-inch water main

Water System Plans

- Project Manager for the following Water System Plan Updates:
 - Boistfort Valley Water
 - City of Buckley
 - City of Castle Rock (2006 and 2012)
 - Town of Cathlamet
 - Fort Lewis
 - City of Kalama
 - City of Long Beach
 - Mason County PUD 1 Alderbrook and Hood Canal A and B
 - North Beach Water District
 - Town of Pe Ell
 - Parkland Light and Water Company
 - City of Ridgefield (2006 and 2013)
 - Wahkiakum PUD Puget Island Water and Western Wahkiakum
 - Willapa Valley Water District

Russell Porter, P.E.

Principal

Education

- Bachelor of Science, Chemistry, University of Montana (1988)
- Master of Science, Environmental Engineering, University of Washington (1992)

Professional Registration

Civil Engineer: Washington Chemical Engineer: Washington Environmental Engineer: Washington

Publications

Porter, R. and J. F. Ferguson, *Improved Monitoring of Corrosion Processes*, Journal AWWA, 87:11:85 (November 1995).

Professional Experience

Mr. Porter joined the firm in 1994 and has been involved in water quality and treatment, water system design, water planning, corrosion control, and pilot study work.

Water Systems

- Project Manager, Pump Station No. 2 Waterline, Soos Creek Water & Sewer District, King County. Design of 2,230 feet of 4, 8, and 16-inch distribution piping.
- Project Manager, Cascade Hills Phase II, Soos Creek Water & Sewer District, King County. Design of 3,165 feet of 4, 8, and 12-inch distribution piping.
- Project Manager, North Wellfield Improvements, City of Snoqualmie. Design of 1,650 gpm iron, manganese, and arsenic removal system using on-site-generated sodium hypochlorite and pyrolusite filtration.
- Project Manager, 24-inch Water Transmission Main Project, City of Camas. Design of 1,980 feet of 24-inch transmission main.
- Project Manager, Replacement Well No. 1, City of Snoqualmie. Design of 600 gpm well.
- Project Manager, Washougal Wellfield Improvements, City of Camas. Design of three replacement wells of 3,000 gpm total capacity and disinfection, fluoridation, and pH adjustment facility.
- Project Manager, 250 gpm Pyrolusite Iron and Manganese Removal System, Klickitat Public Utility District.
- Project Engineer, Greensand Iron and Manganese System Rehabilitation and Startup Assistance, Hat Island Community, Inc.
- Project Manager, Slow Sand and Ozonation Water Filtration Facility, Roche Harbor Water Company.

- Project Manager, Alderwood Estates Booster Station, Valley Water District, Pierce County. Design of 1,000 gpm package booster station.
- Project Manager, Fire Booster Station, City of Roy. Design of 2,000 gpm diesel-fired pump station.
- Project Manager, McNeil Island Water Filtration Control System Improvements, Washington State Department of Corrections. Design of instrumentation, control, and HMI retrofit.
- Project Manager, Upper Prune Hill Reservoir and Booster Station, City of Camas. Design of 2.4 MG reservoir and 6.0 mgd booster pump facility.
- Project Engineer, Angelo Booster Station, City of Camas. Design of 6.0 mgd pumping facility.
- Project Engineer, Wells 12 and 14 Corrosion Control Facility, City of Tumwater. Design of 4.3 mgd aeration water treatment facility.
- Project Engineer, Caustic Soda Addition Facility, Town of Eatonville. Design of caustic soda addition to an existing booster pump facility.
- Project Engineer, Washington Corrections Center Disinfection and Piping Improvements, Washington State Department of Corrections. Design of on-site hypochlorination facilities.
- Project Engineer, Water Treatment Facilities and Transmission Main, City of Roslyn. Design of transmission main for slow sand filtration facility.
- Project Engineer, Water System Improvements, Kapowsin Water District, Pierce County Department of Community Development. Design of water distribution system and pump station.
- Project Engineer, McAlder Well Chlorination, Valley Water District, Pierce County. Design of sodium hypochlorite facility.

Pilot Studies

- Project Manager, North Wellfield Iron, Manganese and Arsenic Removal Facility, City of Snoqualmie. Comparison of ozone oxidation with Birm filtration and chlorine oxidation and pyrolusite filtration.
- Project Manager, Manganese and Arsenic Removal Facility, Valley Water District, Pierce County.
- Project Manager, South Wellfield Iron and Manganese Removal Facility, City of Snoqualmie.

Aaron Pease, P.E.

Project Engineer

Education

 Bachelor of Science, Civil/Environmental Engineering, Iowa State University (1998)

Professional Registration

Civil Engineer: Washington (2003) Building Systems/Architectural Engineer: Washington (2008) Leadership in Energy and Environmental Design: Accredited Professional (2004)

Professional Associations

- Member, American Society of Civil Engineers
- Member, Architectural Engineering Institute

Professional Experience

Mr. Pease has over 16 years of experience in civil and architectural engineering. He has provided planning, design and construction management for water and wastewater projects with an emphasis on constructability and conflict identification and resolution between all design disciplines. His water design experience includes source development and approval, well design, water treatment, chemical feed systems, water distribution, and booster stations. Aaron has also provided designs for fleet maintenance, decant, and vehicle wash facilities. Aaron was the first Gray & Osborne engineer to acquire the Leadership in Energy and Environmental Design (LEED) accredited professional status.

Water Systems

- Project Engineer, Farnham Booster Station, City of Chelan.
- Project Engineer, Angelo Booster Station and Upper Prune Hill Reservoir and Booster Station, City of Camas. Design of two 1,400 gpm booster stations and a 2.4 MG steel reservoir.
- Design Engineer, 2000 Water System Improvements, Boistfort Valley Water Corporation, Lewis County. Design of three 200 gpm packaged booster stations, 200,000-gallon concrete reservoir, and associated transmission lines.
- Design Engineer, Chlorination and Booster Pump Improvements, Town of Eatonville. Design of on-site sodium hypochlorite generation system and pump house modifications for control and efficiency.
- Project Engineer, Canyon Springs Disinfection, City of Snoqualmie.
- Project Engineer, South Lake Shore Design Report, City of Chelan.
- Project Engineer, Intertie, City of Milton-Mountain View-Edgewood Water Company.
- Project Engineer, Source Fluoridation Project, City of Puyallup.
- Project Engineer, Disinfection Report, City of Lacey.

- Project Engineer, Reservoir Rehabilitation Report and Design, Fort Lewis, Washington.
- Project Engineer, 14-inch Water Main, City of Camas.
- Project Engineer, Well No. 13, City of Camas.
- Project Engineer, Drinking Water Treatment Facility, City of Kalama. Design of a 4 mgd diatomaceous earth filtration plant.
- Project Engineer, Phase I Washougal Wellfield Improvements, City of Camas.
 Design of two wells (1,200 and 900 gpm, respectively) including centralized chemical feed facilities for the wellfield of five wells.
- Project Engineer, Pyrolusite Iron and Manganese Removal System, Klickitat County PUD. Design of a 250 gpm treatment system to replace failing equipment including a new disinfection system and rehabilitation of the building.

Fleet Facilities

- Project Engineer, District Headquarters Site Expansion, Decant Facility, Fuel Station, Vehicle Wash Bay, Material Storage, Sammamish Plateau Water & Sewer District (2014 – Current)
- Project Engineer, Vehicle Maintenance Facility, Soos Creek Water & Sewer District (2012 – Current)
- Project Engineer, Decant Facility and Vehicle Storage Building, Seattle City Light (2012)

Wastewater Treatment Plants

- Architectural Engineer, Willapa Regional Wastewater Treatment Facilities, 2.9 MGD Activated Sludge Plant, Cities of Raymond and South Bend (2010 – current)
- Architectural Engineer, Wastewater Treatment Facility, 0.18 MGD Membrane Bioreactor Plant, Port Gamble S'Klallam Tribe (2014 – current)
- Architectural Engineer, Wastewater Treatment Plant Expansion, 4.6 MGD to 6.1 MGD, City of Sumner (2014)
- Architectural Engineer, Wastewater Treatment Facility Upgrade, 0.28 MGD Activated Sludge Plant, City of Toledo (2013 – Current)
- Architectural Engineer, Wastewater Treatment Facility Relocation, 0.38 MGD Activated Sludge Plant, City of Cathlamet (2014)

Shari Gaer Civil Engineer

Education

Bachelor of Science, Civil Engineering, Saint Martin's College

Professional Experience Ms. Gaer joined Gray & Osborne, Inc. in May 1995. She has been involved in a variety of water system, roadway, and utility projects and has participated in the preparation of plans, specifications, cost estimates, and construction management.

Water System

- Western Wahkiakum Water System Expansion Project, Town of Cathlamet, Washington. 35,000 linear feet water main, reservoir and booster pump station.
- 2005 Water System Improvements, City of Toledo, Washington. 4,500 linear feet water main replacement.
- 2003 Water System Improvements, Town of Pe Ell, Washington. 1,700 linear feet water main replacement.
- Front Avenue Sewer and North Street Storm, City of Castle Rock, Washington. 335 linear feet parallel sewer and 245 linear feet 18-inch storm replacement.
- Water Treatment Plant Corrosion Control Project, City of Buckley, Washington.
- Slow Sand Water Treatment Plant, Town of Coulee Dam, Washington. 2.0 mgd WTP.
- Water Treatment Plant Upgrade, Town of Pe Ell, Washington. 0.5 mgd SSWTP and Chehalis River intake modifications.
- Reverse Osmosis Water Treatment Plant, Hat Island, Washington. 85 gpm ROWTP.
- 2002 Water System Improvements, Town of Pe Ell, Washington. 3,400 linear feet of water main replacement, State Route 6, Chehalis River Bridge crossing.
- 1 MG Reservoir and Transmission Main, City of Long Beach, Washington.
 1 MG steel reservoir and 3,800 linear feet of transmission main.
- Construction, Development and Testing Of Beach Well, Hat Island, Washington. 50 to 60 foot seawater beach well, cable tool method.

- Drinking Water Treatment Facility, City of Kalama, Washington. 2.6 mgd
 Diatomaceous Earth WTF.
- 2000 Water System Improvements, Boistfort Valley Water Corporation, Washington. 200,000 gallon reservoir, State Route 6, Chehalis River Bridge Crossing, 5,300 linear feet water main replacement, and 3 booster pump stations.

Utility Projects

- Influent Trunk Sewer Replacement Project, City of Castle Rock, Washington. 870 LF of 21" sanitary sewer replacement and 960 LF of 8" sanitary sewer replacement.
- Downtown Flood Prevention and Wastewater Collection System Improvement Project, City of Kalama, Washington. 2,000 linear feet sewer replacement, and (2) storm lift stations.
- State Route 4 Trunk Sewer Project, Town of Cathlamet, Washington. 2,300 linear feet sewer main.
- T-7 Force Mains and Lift Station, City of Ridgefield, Washington. 6,000 linear feet (2) 12-inch parallel force mains.
- 2004/2005 Storm and Sewer Improvement, City of Vader, Washington. 2,450 linear feet 15-inch sewer replacement, 1,000 linear feet 12-inch sewer replacement, and 1,400 linear feet 8-inch sewer replacement.
- Woodard Ave Storm Improvement Phase II & III, City of Castle Rock, Washington.
- Second Street Sewer Repair Project, Town of Pe Ell, Washington. 155 linear feet sewer replacement.
- Sewer Repair Project Phase II, Town of Pe Ell, Washington. 77 sewer spot repairs.
- Cedar Street Water Line Replacement Project, Town of Pe Ell, Washington. 1,550 linear feet replacement.
- Water Reuse Pipeline, City of Sequim, Washington. 22,000 linear feet of reclaimed water pipeline from Water Reclamation Facility to the City Shop, Carrie Blake Park, and bypass rest area.
- Northwest Landing, ULID 90-4, Sewer Force Main and Gravity Pipeline (112th Street SW to Hipkins Road), Pierce County, Washington. 12,500 linear feet of force main and 13,000 linear feet of gravity pipeline.

Jason Newquist, P.E. Electrical Engineer

Education

• B.S., Electrical Engineering, Boston University 1999

Professional Registration

Professional Engineer, Washington, 2008

Professional Experience

Jason joined Gray & Osborne in 2006. He has specialized in low voltage power distribution. Jason also has experience in designing ladder logic control systems and incorporating instrumentation.

Wastewater Treatment Plants

- Electrical Design and Construction Management, Wastewater Treatment Facility Phase 2 Improvements, City of Westport
- Electrical Design and Construction Management, Sludge Dewatering Beds and Headworks Modifications, Washington State DoC – Cedar Creek
- Electrical Design, Mission Beach Wastewater Treatment Facility Improvements, Tulalip Tribes

Water Treatment Plants

- Electrical Design, Water Treatment Plant Improvements, City of Castle Rock
- Electrical Design and Construction Management, 2011 Water System Improvments, Wollochet Harbor Club
- Electrical Design and Construction Management, Arsenic Treatment Facility, City of Electric City

Wastewater System Facilities

- Electrical Design and Construction Management, Wastewater Collection System, Lower Elwha Klallam Tribe
- Electrical Design and Construction Management, LS 3/4, City of Snoqualmie
- Electrical Design and Construction Management, Phase 2A Sewer Collection Systems, and Pump Station Electrical, Town of Skykomish
- Electrical Design and Construction Management, 19th and Pioneer Lift Station, City of Puyallup

Water System Facilities

- Electrical Design, Well Field Improvements, City of McCleary
- Electrical Design and Construction Management, Well No. 3, City of George
- Electrical Design and Construction Management, Paine Field Booster Station, Mukilteo Water and Wastewater District

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Rick Bond, P.L.S.

Professional Land Surveyor

Education

Associates of Applied Science, ITT Technical College (1991)

Professional Registration Professional Land Surveyor: Washington and Utah

Professional Associations Land Surveyors Association of Washington (LSAW) (since 2002)

Professional Experience

Mr. Bond has over 20 years of experience in land surveying. He has extensive experience in boundary resolutions, writing and interpreting legal descriptions, subdivision and platting, GLO retracement, and construction surveying. He was the survey manager for an Auburn engineering office, managing as many as seven employees. He understands budgets, scheduling, and teamwork.

Rick is proficient using a variety of software, including AutoCAD Civil 3D 2011, Land Desktop, and Micro Survey Starnet V7. He has extensive field experience in all phases of surveying and with a variety of surveying equipment.

Wastewater

- ULID No. 6 Sewer Piping Project, North Bend, Washington. This \$10 million project provided for the installation of 64,000 linear feet of gravity sewer main, ranging in diameter between 8- and 27-inch pipes. Mr. Bond was responsible for construction staking calculations and management of survey crew. He prepared legal descriptions and exhibits for portions of public right-of-way to be vacated.
- Willapa Regional Wastewater Conveyance Facilities, Cities of Raymond and South Bend, Washington. This project consisted of the construction of one new pump station in the City of South Bend (Pump Station No. 3), upgrade two existing pump stations in the City of Raymond (Pump Station Nos. 1 and 11), installation a soil preload over the site of the new Regional WWTP, and installation of 6,900 linear feet of 12-inch HDPE force main piping installed by directional drilling. Mr. Bond is responsible for construction staking calculations and management of the survey crew.
- Monroe Correctional Complex Close Sewer Lagoon, Washington State Department of Corrections, Monroe, Washington. Project Surveyor for this project to revise the existing sewer collection system and decommission the existing wastewater pretreatment facility at the Monroe Correctional Complex. Work includes installation of approximately 9,000 feet of gravity sewer pipe, construction of one new screening and sampling building, decommissioning of the existing sewer pretreatment facility, removal of biosolids from an abandoned sewage treatment lagoon, and demolition of three pump stations. Mr. Bond managed the survey crew during utility and topographic survey. He prepared legal descriptions and exhibits for proposed utility easements.

Utilities

 Utility System SCADA Upgrade, Lynnwood, Washington. This \$1.2 million utility project provided for a major upgrade to the City's Supervisory Control and Data Acquisition (SCADA) system for various water, wastewater, and stormwater utility facilities. The project will install fiber optic cable from these facilities to connect to the City's traffic signal fiber optic cable network, providing for communications to City Hall, the City's Utilities and Maintenance Center, and the City's Wastewater Treatment Facility. Responsibilities included management of the survey crew and research and calculations for the establishment of right-of-way.

Transportation

• Milton Way Improvement Project, Milton, Washington. This \$2.5 million street improvement project reconstructed approximately 2,500 linear feet of this arterial street, including storm drainage improvement, sanitary sewer main, water main replacement, curb, gutter, sidewalk, and retaining walls. Mr. Bond provided management of the survey team and prepared construction calculations for all necessary items to be staked. He prepared legal descriptions and exhibits for right-of-way acquisition. He prepared and filed a Record of Survey showing new survey monuments set.



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