

Consultant Proposal  
**Professional Engineering Services  
Birch Place Booster Station**



**North Beach Water District**  
PO Box 618  
25902 Vernon Avenue  
Ocean Park, WA 98640





## ATTACHMENT "A" - PROPOSAL SUMMARY FORM

RFQ Birch Place Booster Station

## General Information:

Legal Name of Applicant Firm: Gibbs & Olson, Inc.Street Address: 1157 3rd Avenue, Suite 219City: Longview State: WA Zip: 98632Contact Person Title: PresidentPhone: 360.425.0991 Fax: 360.423.3162E-mail address: rgushman@gibbs-olson.comTax Identification Number: 91-0727389

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 North Beach Water District Board of Commissioners.



Signature

7/13/2015

Date





## TESTIMONIALS

*"Astoria initially selected Gibbs & Olson to provide engineering services for our 11th Street combined sewer/stormwater separation project. The project limits included several known inactive and active landslide areas. Gibbs & Olson and Shannon & Wilson not only provided sound design solutions to address our pipeline and roadway stability concerns, but also provided regular and consistent communication throughout the project. In large part because of the working relationship we developed with Gibbs & Olson, we selected them again to provide engineering services for our 16th Street combined sewer/stormwater separation project. The technical work and the communication they have provided during design of the 16th Street project is consistent with their 11th Street project delivery."*

Cindy Moore, PE, Assistant City Engineer  
City of Astoria

*"We have worked with Gibbs & Olson since 1995. When our wastewater treatment plant was under an Administrative Order, Gibbs & Olson worked closely with us to carefully evaluate all the feasible alternatives. They took into account how the costs for a new wastewater treatment plant would impact our community and our citizens. The final solution was cost-effective and the resulting plant is affordable to maintain. We appreciate their efforts and approach to solutions that work for us and continue to use Gibbs & Olson for our projects."*

Jim Starks, Director of Public Works,  
City of Elma

*"It is a pleasure to work with Gibbs & Olson. Together we have completed several projects including our new wastewater treatment plant and collection system, several street renovations and water system projects. Gibbs & Olson is readily available to answer questions. If my main contact isn't available there is always another knowledgeable engineer available to assist in resolving a challenge. Their planning experience, design work and construction oversight is top quality."*

Dave Dafoe, Public Works Director,  
City of Tenino

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July 13, 2015

William Neal  
General Manager  
North Beach Water District  
PO Box 618  
25902 Vernon Avenue  
Ocean Park, WA 98640

RE: Consultant Proposal | Professional Engineering Services  
Birch Place Booster Station

Dear Mr. Neal:

Thank you for the opportunity to submit our qualifications. In preparing our proposal, we have evaluated your request, discussed the project with you, and performed field reconnaissance of the project site. Based on our project understanding, we have assembled a team of highly qualified design professionals. I will serve as your principal in charge, Mike Olden will be your project manager, Jerrit Jolma will serve as a project engineer, and Rich Williams will oversee our survey work. Our team will build on the existing knowledge we have from working on similar projects to provide you with sensible and practical solutions for successfully and cost-effectively implementing your booster station project.

We have reviewed and fully understand the RFP and no member of Gibbs & Olson has any conflict of interest, financial or otherwise, in regard to the proposed project. Furthermore, we certify that no member of Gibbs & Olson has been debarred, suspended or otherwise excluded from, or ineligible for, participation in Federal Assistance programs under Executive Order 12549 "Debarment and Suspension."

Our first goal is to assist you and the North Beach Water District in implementing a successful project. We also have a much larger goal of building a good relationship with you and the District. If you need any additional information or clarification on our qualifications please feel free to me at 360.425.0991 or by email at [tgower@gibbs-olson.com](mailto:tgower@gibbs-olson.com).

Sincerely,



Tom Gower, PE  
Vice-President | Principal-in-Charge



Mike Olden, PE  
Project Manager





## Project Understanding

The North Beach Water District (District) is a rural water district serving approximately 2,700 domestic and commercial customers. The District's service area is located on the north Long Beach Peninsula including parts of the Ocean Park, Nahcotta, and Klipsian communities. As ocean beach communities with many vacation homes, parks and resorts, water demand is very seasonal. The District operates two well fields that supply an average of 0.25 million gallons per day (MGD) in winter months and 0.75 MGD in the summer months.

The District was formed in 2008 when two investor owned public water systems were purchased and combined into one public water system. Combining of the water systems included construction of an intertie pipeline and improvements to the water storage facilities.

The 2008 and subsequent Draft 2014 Water System Plans identified capital improvement projects needed to correct deficiencies in the infrastructure due to age, deferred maintenance, and conditions related to integration of the two water systems.

The District is requesting proposals to engage a professional engineering consultant to provide final plans, specifications and engineering estimates (PS&E) and construction technical support for implementation of the Birch Place Booster Station. The project will improve system hydraulics (flow & pressure) to the

southeast section of the distribution system. The scope of work includes the design and installation of a series of booster pumps, in pitless booster stations, i.e. Baker Monitor or equal, to provide adequate domestic and fire flow to the targeted area of the distribution system.

## Project Approach

### PROJECT MANAGEMENT

We will deliver this project in accordance with our values:

- We are quality minded in the performance of our daily work and in the services we provide.
- We demonstrate integrity by doing what we say we will do and by holding all team members accountable.
- We partner with all project stakeholders to deliver the most cost-efficient project possible.
- We work to resolve issues at the lowest possible level through direct and honest communication to maximize cooperation and project coordination.

Consistent and open communication within the Gibbs & Olson project team and between the Gibbs & Olson project team and the District is critically important to ensuring quality deliverables are provided. Gibbs & Olson believes that it is impossible to have too much communication during this type of project. We also understand that effective communication requires vigilance and timely responses by all project participants.



Gibbs & Olson will have regular project communication with District staff as appropriate. Communication will be by phone, email, video conferencing and face-to-face meetings. We propose to have regularly scheduled meetings to review project progress and to identify and resolve issues as they arise. We have found that project status reports during the design phase are beneficial to all stakeholders. The status report will be a summary of work completed, work anticipated to be completed, and early identification of any issues that arise that could adversely impact the project schedule or budget. The status reports provide efficient and effective communication while minimizing the amount of time spent in formal progress meetings. Additionally, it helps to minimize the cost associated with meetings and allows more time to be spent in performing work on specific project tasks. All members of the Gibbs & Olson project team will also receive the status report to ensure all members of the team are current on project progress and upcoming work tasks.

To meet the District's goal of having design and construction completed in 2016, a well-planned approach is required for the project. General tasks for the project approach include:

- Field Hydraulic Analysis;
- Survey;
- Project Report;
- Easement Acquisition;
- Plans, Specifications & Estimate (PS&E);
- Bid Advertisement & Award;
- Construction Management; and
- Project Close Out

### FIELD HYDRAULIC ANALYSIS

We will evaluate and verify hydraulic analysis of the distribution system in the Sunset Sands Community. The District has no concerns regarding the 2014 hydraulic

analysis modeling performed by Gray & Osborne. However, before finalizing pump design parameters, we will conduct hydraulic field testing in specific locations within the project area using strategically placed pressure recorders to compare actual field conditions to the model results. A simple hydraulic model of the project area using EPA Net software will be created to evaluate the field data obtained. The results of the field testing and modeling will be presented in a technical memo and included in the project report.

### SURVEY

Gibbs & Olson will call for utility locates within the project area. We will also contact utility providers and request available utility mapping within the project limits. We will conduct field topographic surveying, collecting data within the project limits and project benchmarks will be set at key locations. These benchmarks will provide survey control for construction surveying and staking.

### PROJECT REPORT

A project report will be prepared in accordance with WAC 246-290-110. The report will identify all pertinent design criteria as outlined in the Washington State Department of Health (DOH) Water System Design Manual. Preliminary design will be based on a pitless booster station with aboveground control cabinet. The report will present the final pump configuration and design considerations. The project report will also include a schematic layout of the booster pump site and will be submitted to the District for approval prior to moving forward with design.

We will work directly with Baker-Monitor staff on pitless pump design criteria. Utilizing the elevated portion of the proposed site at the southwest corner of the intersection of 227th Street and Birch Place will allow for more flexibility in construction and minimize shoring. The basis of design for the vertical turbine pumps will be as directed by the District. A three pump system capable of providing Maximum Day Demand (MDD) plus the minimum residential



## PROJECT APPROACH

fire flow of 500 gpm is the likely pump configuration. The design basis for the pressure will be to maintain satisfactory operating pressure at the end of the system during a minimum fire flow occurrence. During the field hydraulic analysis, we will coordinate with the District to determine a satisfactory operating pressure level.

The pump control system will be based on a Goulds Aquavar multi pump system configuration. The controls will be capable of various pump protection scenarios, including the situation where no flow is observed upon pump call. A magnetic flow meter will be utilized for measuring flow at the discharge of the pump station. We will also evaluate the potential use of an existing standby generator at the site. Upon determination of the final pump configuration, we will coordinate with PUD No. 2 of Pacific County to apply for three phase 480 volt electrical service at the pump station site.

### EASEMENT ACQUISITION

As pipe routing and pump station site footprints are finalized, Gibbs & Olson will prepare the legal description and exhibit for use in obtaining an easement from the Sunset Sands Community for the booster station site. The draft easement document will be prepared in accordance with Pacific County recording requirements and submitted to the District for review. A final draft, incorporating District comments, will be submitted to the Sunset Sands Community for review. Prior to submittal to the County for recording, the final document will be prepared and submitted to the District and the Sunset Sands Community for final approval and required signatures.

### PLANS, SPECIFICATIONS & ESTIMATE (PS&E)

During the design phase, we will prepare final contract documents to show the general scope, extent and character of the work to be furnished and performed by the contractor. The plans and specifications will be based on design criteria in the project report reviewed and

approved by the District. Schematics in the project report will serve as the 50 percent design document submittal. We will also submit PS&E for review at the 90 percent design level. Specifications will be prepared in accordance with Washington State Department of Transportation (WSDOT) format and include a contractor design-build electrical specification to minimize overall design cost and construction coordination.

Final plans and specifications along with the project report will be submitted to DOH for review and approval. Plans and specifications will be submitted to Pacific County for a general permit for construction and road right-of-way permit. As is the case with most current infrastructure projects, obtaining permits and regulatory approvals requires significant time. We have good working relationships with DOH and Pacific County which will help expedite the permitting and approval process.

### BID ADVERTISEMENT & AWARD

We will issue electronic bid documents through an online bid document service. During the bid phase, we will receive and respond to planholder questions and prepare and issue addenda as appropriate to interpret, clarify, amend, or expand the bid documents. After bids are received by the District, we will prepare a bid tabulation and assist the District in evaluating bids and awarding the construction contract.

### CONSTRUCTION MANAGEMENT

During the construction phase, we will consult with, advise the District, and provide clarification of the intent of the design plans and specifications as requested. We will provide review shop drawings, samples, and other data the contractor is required to submit for compliance with the contract documents. We are also prepared to issue necessary interpretations and clarifications of the contract documents as well as prepare work directive changes and change orders as required.



Within the limits of the construction phase budget, we will visit the site at key phases to observe the progression of construction work and determine if the work is being performed in general accordance with the contract documents. Depending on the scope and budget, we can also provide an experienced project representative to observe and document construction progress. If the District provides staff for construction observation and documentation, we will coordinate with District staff as appropriate to document any changes from the design in the as-constructed infrastructure.

We will also review contractor monthly progress pay requests and make payment recommendations to the District based on the onsite observations of our engineer and the onsite representative.

### PROJECT CLOSE OUT

We will assist the District with developing a construction punch list and providing documentation for substantial completion and final acceptance of the constructed infrastructure. We will also review maintenance and operation instructions, schedules, guarantees, bonds and certificates of inspection, tests and approvals which are to be assembled by the contractor in accordance with the contract documents; and will transmit them to the District with written comments. At the conclusion of the project, we will prepare a set of reproducible record drawings showing any significant changes made during construction, based on the marked-up prints, drawings, testing data and other data furnished by the contractor. We will also prepare a recommendation for the District to issue final acceptance of the constructed work and to make final payment to the contractor including release of retainage.

### PROJECT SCHEDULE

The anticipated project timeline is as follows:

Request for Proposal Process — July 2015

Execute Engineering Services Contract — August 2015

Hydraulic Analysis — September 2015

Survey — September 2015

Project Report — October 2015

Easement Acquisition — October 2015

PS&E — November - December 2015

Permits & Approvals — December 2015 - February 2016

Bid Advertisement & Award—March - April 2016

Construction Management – May - July 2016

Project Close Out – August 2016



PROJECT TEAM

COMPANY OVERVIEW

Founded in 1950, we have built our reputation by consistently delivering quality work and practical solutions. We provide civil engineering and land surveying services to clients throughout Washington and Oregon. Our mission is to enhance quality of life within the communities we serve.

An award-winning firm we have completed a multitude of projects that include civil engineering and surveying for water, stormwater, transportation, and sewer infrastructure.

TEAM MEMBERS

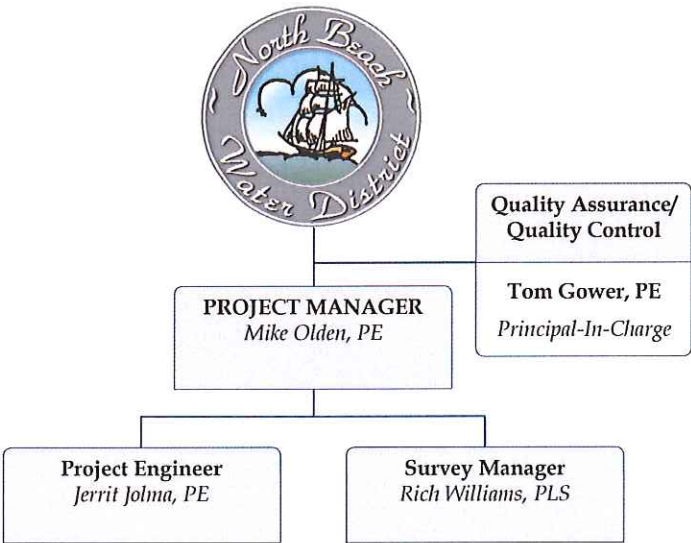
We have identified the following team members to work with North Beach Water District. We have assigned Mike Olden as your project manager. In addition to the team members assigned, we have a staff of 21 that can be utilized to meet critical time lines and milestones.

TEAM MEMBER, ROLE	TIME COMMITMENT
Mike Olden, Project Manager	15%
Jerrit Jolma, Project Engineer	25%
Tom Gower, QA/QC	5%
Rich Williams, Survey Manager	5%

**Mike Olden | Project Manager.** Mike has 26 years of civil engineering experience in developing local and regional systems. He provides technical assistance for water and wastewater systems to a number of local governments and special-purpose districts. He has extensive experience in the Grays Harbor County area including serving as project manager for the North Beach Regional Water System project to provide water service to Quinault Beach Resort and Casino (QBRC), Ocean City State Park, Hogan’s Corner and Illahee-Oyehut areas.

As project manager for the Birch Place Booster Station, Mike will be responsible for scheduling, budgeting, team organization, technical review and overall project quality. He will be the primary contact with District staff. Mike will also prepare status reports and project billings. He will be responsible for working with District staff to develop final design criteria for the project. Mike will also lead the design effort and be responsible for overseeing preparation of permit applications required for the project. During the construction phase Mike will coordinate with the District and contractor as necessary and will conduct regular construction progress meetings.

**Tom Gower | Quality Assurance/Quality Control.** Tom has 22 years of experience in the planning, design and construction management of public works infrastructure projects. As principal in charge for the Birch Place Booster Station, Tom will work with Mike and District staff to finalize the scope, schedule, and budget for the professional services agreement. Tom will perform an independent in-house quality assurance and constructability review of the plans and specifications prior to submission to the District.





**Jerrit Jolma | Project Engineer.** Jerrit will serve as project engineer for the Birch Place Booster Station project. He has 18 years of experience in planning, modeling, design and construction management of water, sewer, road, and drainage infrastructure. Jerrit will work with Mike to finalize project design criteria, prepare permit applications, and to prepare design plans and specifications. He will also prepare opinions of probable construction cost. During the construction phase of the project Jerrit will review contractor submittals and shop drawings and work with the District to prepare progress pay estimates. Jerrit will also be responsible for overseeing preparation of final project record drawings.

**Rich Williams | Survey Manager.** With 34 years of experience, Rich has extensive experience conducting all types of surveys including topographic and right-of-way. He is responsible for scheduling and managing our survey field crews, preparing legal descriptions, conducting title research and locating easement and right-of-way documentation, and preparing calculations and base maps for design projects. Rich will schedule our crews, review collected field data, and disseminate this information to the project team.

## Experience & References

### **Soos Creek Salmon Hatchery, Source Approval Report, Auburn, Washington**

*Client—Washington State Fish & Wildlife*

600 Capitol Way N., Olympia, WA 98501

Reference—Tim Ward, 360-902-8372, Timothy.Ward@dfw.wa.gov, Design Cost: \$12,000, Completed: 2014

Gibbs & Olson was hired by Fish & Wildlife to provide a source approval report for a new well and booster pump system at the Soos Creek Salmon Hatchery. The hatchery water system is classified as a Group A Transient Non-Community system. The original system included two wells, the first one was abandoned due to high iron content. The second well was abandoned in 2008 after flood damage and subsequent evaluation

determined it was no longer able to meet DOH standards. Since that time, water had been trucked to the site as a temporary emergency source. A new well was constructed and pump testing and water quality testing was performed in December 2010 under the supervision of Robinson & Noble. To prepare the report, Gibbs & Olson collected and analyzed existing data associated with the project. The final report included sizing of the booster pump system, treatment and storage equipment, a wellhead protection plan along with Iron and Manganese Removal and Chlorination checklists. Schematic design drawings were included in the report that met DOH construction document requirements. The report was approved in June 2013. Fish & Wildlife completed construction and put the new system into operation in February 2014.

### *Relevance to Birch Place Booster Station:*

- Design of a booster pump system to provide service pressures to the facility
- New booster pump system retrofitted into an existing system
- Coordinated with system supplier to properly size equipment

### **Toutle Rest Area Water Booster Pump Station Modifications, Cowlitz County, Washington**

*Client—Washington State Department of Transportation*

PO Box 47328, Olympia, WA 98504

Reference—Steve Leach, 360-561-1205, leachs@wsdot.wa.gov, Construction Cost: \$130,000, Completed: 2012

Gibbs & Olson was hired to provide the planning, design and construction phase services for the Toutle River Safety Rest Area water system upgrade. The system was experiencing problems associated with hydraulic transients (water hammer) in the buildings causing pipe joint failures and premature pressure tank bladder failures. Gibbs & Olson evaluated the water system and provided alternatives to resolve these operational issues in a predesign report. Gibbs & Olson designed the recommended upgrades





which included removing the existing pump and electrical system and replacing it with a package booster pump system. The new system includes three pumps and motors with variable frequency drives each sized to provide 85 gpm at 165 feet of total dynamic head. The package booster pump system is on a skid,

complete with suction and discharge piping, pumps, motors, variable frequency drives, electrical panel and pre-programmed control system. The project involved mechanical and electrical design of the package booster pump system as well as a new coating system in the underground concrete storage tank to replace the existing liner. The \$130,000 construction project was completed during a shutdown of the rest area facility in October 2012.

### *Relevance to Birch Place Booster Station:*

- Design and installation of a booster pump system to provide increased pressures to the facility
- Booster pump system with variable frequency drives to control pressure
- Included multiple pumps to provide redundancy and to cover a wide range of flows

### **Fallert Creek Hatchery, Group B Water System Approval Workbook, Kalama, Washington**

*Client—GeoEngineers for Washington State Fish & Wildlife*

8410 154th Avenue NE, Redmond, WA 98052

Reference—Steve Helvey, 425-861-6000, shelvey@geoengineers.com, Design Cost: 8,000, Completed: 2008

Gibbs & Olson was hired by GeoEngineers to prepare a Group B Public Water System Approval workbook and design the well pump, booster pump, storage tanks and treatment system for the Fish & Wildlife Fallert Creek

Hatchery. To prepare the workbook Gibbs & Olson reviewed existing documents provided by GeoEngineers which included: a well site inspection report; water quality testing data; pump test data; and well logs. Once the data was reviewed, we coordinated with Blue Line Water to complete the Group B Public Water System Approval workbook and the DOH Iron and Manganese Removal Facilities for Small Systems Submittal Checklist for iron treatment. The new system included: a new well pump; two 1,150 gallon polyethylene water storage tanks; two distribution system pumps; chemical feed system and an iron removal treatment system. Other services we provided included land surveying to tie existing buildings and obtain relative elevations of critical features as necessary to prepare a site plan that included layout of the new facilities in an existing building.

### *Relevance to Birch Place Booster Station:*

- Booster pump system sized to provide service pressure to the facility
- Coordinated with system supplier to properly size equipment
- Multiple pumps to provide redundancy
- Provided design survey services

### **Submersible Turbine Pump and Baker-Monitor Pitless Unit**

*Client—City of Montesano, Washington*

112 W Main Street, Montesano, WA 98563

Reference—Mike Wincewicz, 360.429.3021, ext. 111, mwincewicz@montesano.us, Construction Cost: \$ 1.2 million, Completed: 2006

Gibbs & Olson provided planning, design and construction phase services for improvements consisting of a new 125 Hp submersible turbine well pump and Baker-Monitor Pitless Unit, 10,000 feet of water system piping including: 4,000 feet of 12 inch water transmission piping; 700 feet of 8 inch water main; 4,800 feet of 6 to 12 inch water distribution piping; and 350 feet of 20 inch steel bore casing. Other improvements included:





implementation of a new well, well house, pumps, and corrosion control treatment, reservoir level instrumentation and 800 feet of

6 inch pressure sewer collection piping. The first phase of the two phase project was bid with three schedules; one for the transmission main, the new well, and the treatment building.

## *Relevance to Birch Place Booster Station:*

- Project Report
- DOH Approval
- Survey
- Design and installation of a submersible turbine pump
- Design and installation of a Baker-Monitor Pitless Unit

## **Well 5 Submersible Turbine Pump and Baker-Monitor Pitless Unit**

*Client—City of Elma, Washington*

PO Box E, Elma, WA 98564

Reference—Jim Starks, 360.482.4482, jim@cityofelma.com, Construction Cost: \$ 773,000, Completed: 2006

Gibbs & Olson provided pre-design, design, and construction management services to the City of



Elma for the purpose of implementing significant upgrades to the City's drinking water system. The project included implementation of a new well, installation

of two submersible turbine well pumps, installation of two Baker-Monitor Pitless Units and transmission and distribution system upgrades to address water supply reliability and fire flow deficiencies.

## *Relevance to Birch Place Booster Station:*

- Project Report
- DOH Approval
- Design and installation of a submersible turbine pump
- Design and installation of a Baker-Monitor Pitless Units
- Standby Generator

## **Quinalt Beach Resort Booster Station**

*Client—Grays Harbor County, Washington*

100 Broadway, Montesano, WA, 98563

Reference—Kevin Varness, 360.249.4222, kvarness@co.grays-harbor.wa.us, Construction Cost: \$900,000, Completed 2008

Gibbs & Olson assisted the Quinalt Indian Nation in implementing a booster station and transmission line from the Ocean City State Park to the Quinalt Beach Resort. The in-line booster station consisted of two 7.5 Hp pumps with variable frequency drive multi pump controls. The in-line booster station was required as an interim measure to supply water from the City of Ocean Shores to the Resort. The booster station was subsequently taken off line after the Resort was able to be served by the County's Hogan's Corner water system. The transmission main consisted of 600 feet of 12 inch PVC and 4,700 feet of 8 inch PVC pipe. The majority of the transmission main was constructed within the inter-dunal areas. The project required extensive permitting and dewatering work.

## *Relevance to Birch Place Booster Station:*

- Project Report
- DOH Approval



- In-line booster station
- Multi pump booster station
- Multi pump variable frequency drive pressure controls

### **Wilder Hill Booster Station**

*Client—City of Montesano, Washington*

112 W Main Street, Montesano, WA 98563

Reference—Mike Wincewicz, 360.429.3021, ext. 111, mwincewicz@montesano.us, Construction Cost: \$300,000, Completed 2014

Gibbs & Olson provided design services for a booster station and water main improvements for the Wilder Hill area in Montesano. The booster station consisted of two 5 Hp vertical centrifugal pumps and one diesel driven pump for fire service. The diesel driven fire pump was provided in lieu of very costly power supply upgrades. The project also included the design and installation of 1,700 feet of 6 inch and 2 inch directionally drilled water main.

#### *Relevance to Birch Place Booster Station:*

- Project Report
- DOH Approval
- In-line booster station
- Multi pump booster station
- Multi pump variable frequency drive pressure controls

### **Ocean City Booster Station**

*Client—Grays Harbor County, Washington*

100 Broadway, Montesano, WA, 98563

Reference—Kevin Varness, 360.249.4222, kvarness@co.grays-harbor.wa.us, Construction Cost: \$30,000, Year Completed: 2008

Gibbs & Olson assisted Grays Harbor County with the purchase and installation of a booster pump skid for the County's Ocean City Water system. The booster pump skid consists of three 7.5 Hp pumps, variable frequency drives and discharge piping. Piping and connections to the skid were designed by Gibbs & Olson and completed by County staff. Electrical upgrades were also completed as part of the project to provide a standby generator receptacle and manual transfer switch.

#### *Relevance to Birch Place Booster Station:*

- Multi pump booster station
- Multi pump booster station variable frequency drive control
- Standby generator capabilities

### **North Beach Regional Water System (Hogan's Corner)**

*Client—Grays Harbor County, Washington*

100 Broadway, Montesano, WA, 98563

Reference—Kevin Varness, 360.249.4222, kvarness@co.grays-harbor.wa.us, Construction Cost: \$2.5 Million, Completed: 2010

Gibbs & Olson assisted Grays Harbor County as they worked to develop a new regional water system to serve the North Beach area of the County. With the new water system the County is able to provide a secure, safe, and reliable water supply to the Quinault Beach Resort and Casino (QBRC), Ocean City State Park, Hogan's Corner and Illahee-Oyehut areas. The new system includes: 17,000 feet of 6 to 12 inch water distribution piping, 200 feet of highway bore crossings, two new wells with combined capacity of 1,230 gpm, associated buildings, hypochlorination equipment, pH adjustment, two vertical turbine well pumps, a booster pump station, a 160,000 gallon concrete storage tank, standby power, control systems and a radio telemetry system. The booster station consists of one 5 Hp pump,

one 15 Hp pump and two 40 Hp pumps. Pumps are controlled based on distribution pressure using variable frequency drives.

*Relevance to Birch Place Booster Station:*

- Multi Pump Booster Station
- Multiple variable frequency drives with pressure control
- Standby Generators







Tom Gower, PE, Principal-In-Charge, QA/QC .....A-1

Mike Olden, PE, Project Manager .....A-2

Jerri Jolma, PE, Project Engineer.....A-3

Rich Williams, PLS, Survey Manager.....A-4





## PRINCIPAL IN CHARGE

- 22 years of water and wastewater experience in planning, design, and construction.
- His technical expertise includes booster pump stations, pressure reducing stations, water distribution, and storage systems.

## PROJECT EXPERIENCE

### Soos Creek Salmon Hatchery, Source Approval Report, Auburn, WA

*Client—Washington State Fish & Wildlife*

Tom served as project manager and worked with Fish & Wildlife to prepare the Source Approval Report for approval by Washington State Department of Health. Gibbs & Olson was hired by Fish & Wildlife to provide a source approval report for a new well at the Soos Creek Salmon Hatchery as well as to design the booster pump system to provide service pressures to the hatchery facility.

### Toutle Rest Area Water Booster Pump Station Modifications

*Client—Washington State Department of Transportation*

Tom served as project manager for the Toutle River Safety Rest Area water system upgrade which included planning, design and construction phase services. Tom oversaw design of the recommended upgrades which included removing the existing pump and electrical system and replacing it with a package booster pump system.

### Fallert Creek Hatchery, Group B Water System Approval Workbook, Kalama, WA

*Client—GeoEngineers for Washington State Fish & Wildlife*

As project manager, Tom was responsible for preparing a Group B Public Water System Approval workbook and design the treatment system for the Fish & Wildlife Fallert Creek Hatchery. To prepare the workbook Gibbs & Olson reviewed existing documents provided by GeoEngineers which included: a well site inspection report; water quality testing

data; pump test data; and well logs. Once the data was reviewed, we coordinated with Blue Line Water to complete the Group B Public Water System Approval workbook and the Washington State Department of Health, Iron and Manganese Removal Facilities for Small Systems Submittal Checklist for iron treatment. Our design of the system included: a new well pump; two 1,150 gallon polyethylene water storage tanks; two distribution system pumps; chemical feed system and an iron removal treatment system.

### Quinault Beach Resort Booster Station

*Client—Grays Harbor County, Washington*

Gibbs & Olson assisted the Quinault Indian Nation with the installation of a booster station and transmission line from the Ocean City State Park to the Quinault Beach Resort. Tom provided technical review for the booster pump station design.

### Water Line Replacement

*Client—City of Kelso, Washington*

As project manager, Tom provided oversight the design for water main upgrades at various locations throughout the City. The water line replacement projects were identified in the City's capital improvement plan and their current water system plan. The aging water lines leaked, required frequent repair, and were the highest contributor to the City's unaccounted for water loss. Several of the water lines were also undersized and did not meet fire flow capacity. The upgrades consisted of 14,500 feet of 4 to 16 inch ductile iron water distribution piping including associated valves, service meters, and fire hydrants. Most of the work involved complete water piping replacement with a portion requiring new pipeline alignment.

## Professional Registration

Civil Engineer, Washington  
(License 35173, 1998)

Civil Engineer, Oregon  
(License 86763, 2012)

## Education

BS Civil Engineering  
Washington State University



### PROJECT MANAGER

- 27 years of experience in the planning, design and construction management of public water and wastewater facilities.
- Extensive experience with water supply, treatment, storage, transmission and distribution facilities.

### PROJECT EXPERIENCE

#### Baker-Monitor Pitless Unit

*Client—City of Montesano, Washington*

Mike was the project manager for the City's water upgrade project. The improvements consisted of a new 125 Hp submersible turbine well pump and Baker-Monitor Pitless Unit, 10,000 feet of water system piping including: 4,000 feet of 12 inch water transmission piping; 700 feet of 8 inch water main; 4,800 feet of 6 to 12 inch water distribution piping; and 350 feet of 20 inch steel bore casing. Other improvements included: implementation of a new well, well house, pumps, and treatment, reservoir level instrumentation and 800 feet of 6 inch pressure sewer collection piping.

#### Well 5 Submersible Turbine Pump and Baker-Monitor Pitless Unit

*Client—City of Elma, Washington*

As project manager, Mike provided pre-design, design, and construction management services to the City of Elma for the purpose of implementing significant upgrades to the City's drinking water system. The project included implementation of a new well, installation of two submersible turbine well pumps, installation of two Baker-Monitor Pitless Units and transmission and distribution system upgrades to address water supply reliability and fire flow deficiencies.

#### Quinault Beach Resort Booster Station

*Client—Grays Harbor County, Washington*

Mike served as project manager and assisted the Quinault Indian Nation with the installation of a booster station and transmission line from the Ocean

City State Park to the Quinault Beach Resort. The in-line booster station consisted of two 7.5 Hp pumps with variable frequency drive multi pump controls. The in-line booster station was required as an interim measure to supply water from the City of Ocean Shores to the Resort. The booster station was subsequently taken off line after the Resort was able to be served by the County's Hogan's Corner water system. The transmission main consisted of 600 feet of 12 inch PVC and 4,700 feet of 8 inch PVC pipe. The majority of the transmission main was constructed within the interdunal areas. The project required extensive permitting and dewatering work.

#### Wilder Hill Booster Station

*Client—City of Montesano, Washington*

As project manager, Mike provide design services for a booster station and water main improvements for the Wilder Hill area in Montesano. The booster station consisted of two 5 Hp vertical centrifugal pumps and one diesel driven pump for fire service. The diesel driven fire pump was provided in lieu of very costly power supply upgrades. The project also included the design and installation 1,700 feet of 6 inch and 2 inch directionally drilled water main.

### ADDITIONAL EXPERIENCE

- **Project Manager, Ocean City Booster Station**  
*Client—Grays Harbor County, Washington*
- **Project Manager, North Beach Regional Water System (Hogan's Corner)**  
*Client—Grays Harbor County, Washington*

### Professional Registration

Civil Engineer – Washington  
(License 29483, 1992)

### Education

BS Civil Engineering  
Washington State University



## PROJECT ENGINEER

- Over 18 years of experience focusing on design and construction of water and sewer utilities, roadways, drainage, grading, erosion control, and site design.
- Extensive experience in the preparation of engineering plans, reports, technical specifications, bid documents, and cost opinions on a variety of civil engineering projects.

## PROJECT EXPERIENCE

### Ranney Well Improvement Project

*Client—City of Woodland, Washington*

Jerrit is the project engineer for the Ranney Well Improvement Project. Gibbs & Olson provided land surveying, design, permit, bid advertisement and limited construction phase services for increasing capacity of the City's Ranney Well. The project was identified as a priority in the City's Water System Plan and was important to the City the project be completed in 2014 prior to summer high water demands.

### Water & Sewer Improvements

*Client—City of Kelso, Washington*

Gibbs & Olson was hired to complete land surveying, design and construction phase services for improvements to the City's water and sewer system. Construction of the water improvements began in the spring of 2014. Water system improvements include replacing 2,100 feet of pipe at three locations. Jerrit is currently serving as project engineer and is responsible for all design aspects and construction management of the project. He was tasked with preparing the design drawings and specifications as well as technical coordination with the City, equipment suppliers, the contractor and within the Gibbs & Olson design team.

### Southwest Sherwood Water System Improvements

*Client—City of Sherwood, Oregon*

As a staff engineer, Jerrit was a design team member for Sherwood's Southwest Water System Improvements. The project included upgrades to an existing booster pump station, over 4,000 feet of new 12 and 18 inch ductile iron transmission main, and 500 feet of bored/jacked casing that was installed under Highway 99 west. Additionally, Jerrit designed two PRV stations as part of the pressure rezoning associated with the project.

### Water Treatment Plant Expansion

*Client—City of Scappoose, Oregon*

Serving as the project's design engineer, Jerrit was the design lead for the City of Scappoose's water treatment plant expansion project. The project included the addition of a new "Green Sand" filter bed to treat well water containing high levels of iron. A new telemetry and chemical feed system was also designed to control the existing and new plant facilities.

### Slow Sand Filtration Plant

*Client—City of Falls City, Oregon*

Jerrit served as design engineer on the City's new slow sand filtration plant. The plant was designed to treat up to 400 gpm via 3 sand filter beds. Additionally, a chlorine contact chamber, chemical feed and lab building, and over 2,000 feet of ductile iron pipe were part of the design.

## Professional Registration

Civil Engineer – Washington  
(License 38342, 2002)

Civil Engineer – Oregon  
(License 56365, 2012)

## Education

BS Civil Engineering  
Portland State University



## **SURVEY MANAGER**

- 34 years of experience and has completed over 1,000 projects while at Gibbs & Olson.
- Expert at preparing legal descriptions, conducting title research and locating easements and rights-of-ways.
- Experienced in performing all types of land surveys including: topographic, boundary, construction and construction staking, control, ALTA/ACSM, aquatic lease, cadastral, hydrographic, and aerial.

## **PROJECT EXPERIENCE**

### **Water System Improvements, Community of Bay Center**

*Client—Public Utility District No. 2 of  
Pacific County, Washington*

Performed a topographic survey and construction staking of approximately 1.5 miles of Bay Center Road for water main line installation. The topographic survey included all visible utilities and utility locate marks, edges of pavement, shoulders, ditches top of fill, storm structures and trees over 5 inches in diameter. The field data was used to create AutoCAD drawing files with surface model, contour lines and existing right-of-way.

### **Lebam Community Water System**

*Client – Pacific County*

Gibbs & Olson provided surveying, planning, design and construction phase engineering services to finalize planning and implement water system improvements for a community water system. A topographic survey was performed and included over 2.1 miles of State Route 6 and various county roads for the design and installation of water main line and reservoir site. The survey included all visible utilities and utility locate marks, edges of pavement, shoulders, ditches top of fill, storm structures. The field data was used to create AutoCAD drawing files with surface model, contour lines and existing right-of-way.

### **South Fork Industrial Park Infrastructure Development**

*Client—Port of Willapa Harbor, Raymond, Washington*

Gibbs & Olson was hired by the Port to provide land surveying, planning, design and construction management services to upgrade the infrastructure of a 30 acre industrial site. The \$921,000 project improvements included 2,100 feet of roadway, 1,675 feet of sanitary sewer main including side laterals, upgrade to City of Raymond sewer pump station, 1,860 feet of water main for domestic, industrial and fire protection, and drainage upgrades using best management practices. Survey work included collection plat data and record of survey monuments together with all existing structures, roadways, and utilities to create a surface model with contours and right-of-way limits. Survey construction staking was provided for curbs, sidewalks, and infrastructure utilities.

### **Water Line Replacement Projects**

*Client—City of Kelso, Washington*

Rich researched existing surveys and road right-of-way maps to determine road rights-of-way along all routes. Final base drawings were prepared using the survey data. Surveying services included establishing a site GPS projection and using digital level loops run through control points to refine the projection. All data collected used NAD83/91 and NAVD88 to establish horizontal and vertical datums. Elevation control benchmarks were located in the field for use during construction. Crews performed a topographic survey using GPS/RTK and Total Station for 14,500 feet of water line to develop base maps and drawings with elevations and coordinates.

## **Professional Registration**

PLS – Washington  
(License 34147)

## **Education**

ATA Civil Engineering  
Centralia College





Addendum No. 1.....B-1

Addendum No. 2.....B-2

# ADDENDUM NO. 1

Date of Addendum: 6/16/2015

To: Mike Olden, Gibbs & Olson, Inc.

Via E-mail: [molden@gibbs-olson.com](mailto:molden@gibbs-olson.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.

  
Signature

7/13/2015

Date

B-1



**GIBBS & OLSON**

PO BOX 400, LONGVIEW WA 98632  
360.425.0991 Tel | 360.423.3162 Fax  
[www.gibbs-olson.com](http://www.gibbs-olson.com)

CONSULTANT PROPOSAL  
Professional Engineering Services  
Birch Place Booster Station



To: Mike Olden, Gibbs & Olson, Inc.

E-mail: [molden@gibbs-olson.com](mailto:molden@gibbs-olson.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.*

  
Signature

7/13/2015

Date

B-2

