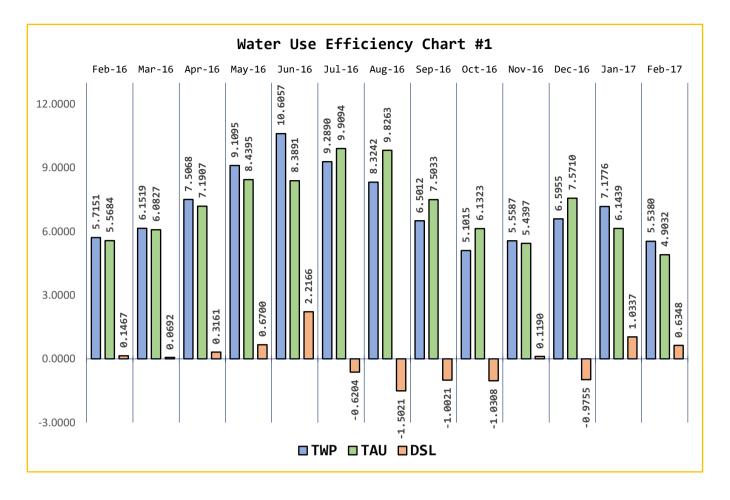
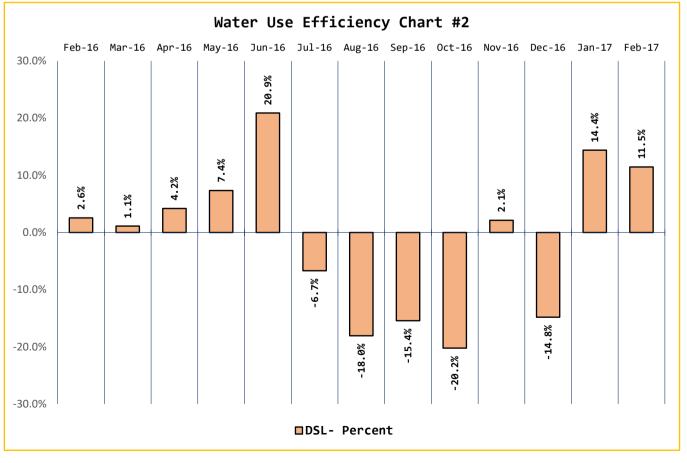
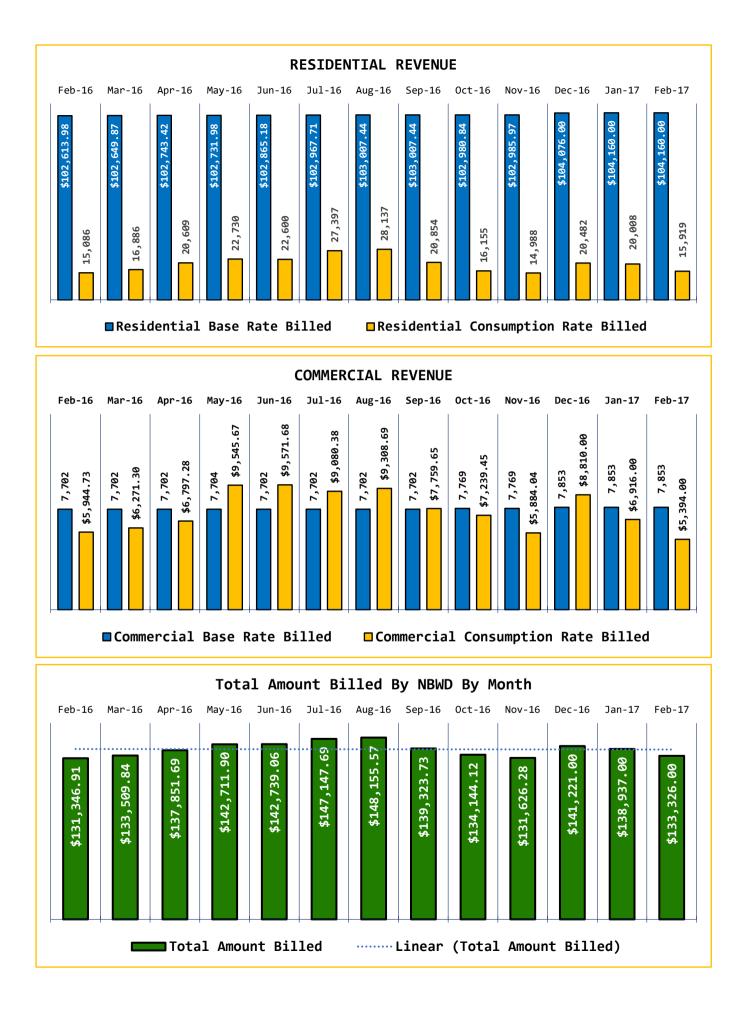


General Manager's Report

Report on Water System Operations for:	March,2016		.6
Metering Period:	02/01/2015	- THRU -	02/28/2016
Billing Period:	02/15/2017	- THRU -	03/15/2016
Activity Period:	03/01/2016	- THRU -	03/31/2016
(MG= Million Gallons) (Mg/L= milligrams per liter) (Ug/L= micrograms per liter)	(MCL= Maximum Cont	aminant Level)	(c.f.= Cubic Feet)
Total Water Pump From All Wells in Metering Peri	od (TWP)	>	5.5380
Total Water Sold in Metering Period		>	4.8164
Total Filter Plant Backwash Water in Metering P	eriod	>	0.0506
Total Water Main Flushing Water in Metering Per	iod	>	0.0363
Total Other Authorized Water Use in Metering Pe	riod	>	0.0000
Total Authorized Consumption in Metering Period	I (TAC)	· >	4.9032
Total Distribution System Leakage in Metering H	Period (DSL)	>	0.6348
Percentage of DSL in Metering Period		·>	11.5%
12 Month Running Total of TWP		>	87.4596
12 Month Running Total of TAC		>	87.5312
12 Month Running Total of DSL		>	-0.0716
12 Month Average of Percentage of DSL		>	-0.1%
2,590 Residential Accounts	Paid Base Rates Tot	aling:	104,160.00
	Paid Base Rates Tot	- E	7,853.00
489,815 c.f. Residential Consumption	at \$0.0325 p	-	15,919.00
154,114 cf. Commercial Consumption	at \$0.0350 p		5,394.00
	Paid Base Rates Tot		477.58
5,450.00 Surfside Contract + 144.00	Reimbursments		5,594.00
Other Income:	신 ·	·>	4,223.00
Total Amount Billed in Billing Period		·>	143,620.58
Total Accounts Past Due in Billing Period			> 281
-			> 281
Total Accounts Past Due Longer than 60 days in	-		
Total Accounts Locked Off for being past due in Total Number of Properties with Liens			
TOTAL NUMBER OF FIOPERCIES WITH LIENS			
Total Number of Water Main Locates Completed in	Activity Period -		> 59
Total Number of Water Quality Complaints in Act:	ivity Period		> 0
Total Number of Customer Service Calls in Activ	ity Period		> 49
Total Number of Customer Valves Installed in Act	tivity Period		> 1
Total Number of New Services Installed in Activi	ty Period		> 1







04.4.2017

William Neal,

General Manager

Board of Commissioners

General Manager Report April, 2017

DWSRF Project Status:

No work on the South Wellfield DWSRF project was accomplished in March. We expect delivery of the treatment plant the week of April 17, 2017. No work on the North Wellfield can be accomplished until the Wiegardt Wellfield has been brought online and approved by DOH.

North Wellfield Treatment Plant:

No progress on the North Wellfield project in March, 2017.

Emond Easement:

Our Attorney, Brent Dille, sent Mr. Emond a letter (attached). Mr. Emond called me on April 4, 2017. Mr. Emond assured me he was happy with the negotiated agreement with one exception. Mr. Emond does not want to connect to the water system. Mr. Emond has a private well on the property and he wants to use it to provide water to his duplex. I discussed amending the documents to eliminate connection to the system with Brent Dille. The amended agreement is attached to this report. With the Board's approval, I would like to instruct our attorney to make those changes in the agreement and send them to Mr. Emond with a 30 day time limit to return them signed. If at the end of 30 days Mr. Emond does not return the executed documents then all offers are null and void and we will bill him for water used and replace our existing water mains with new ones.

New Office and Facilities Building Status:

I received a letter from Helligso Construction's attorney in March (attached). The District's attorney, Brent Dille, is negotiating a settlement to the extended warranty issue with Helligso's attorney. The retainage, less liquidated damages, will be included in this month's vouchers.

David Jensen is requesting payment on his final invoice (see attached). I would like to discuss this invoice with the Board before we approve it for payment

Loomis Lake Crossing Project:

Work on this project is paused until an agreement with Sunset Sands is negotiated. Roger Taylor had surgery in late March. I will attempt to meet with him in April.

Reduced Production In North Wellfield:

We have two wells in the North Wellfield that have significant loss of yield. Well #7 only yields 20 gallons per minute (gpm). Well #7 has been losing capacity for five years. Well #7 was drilled in 1978 and reported a yield of 100 gpm. In 2012 Well #7 had a yield of 50 gpm. Well # 7 is a 6 inch diameter well. All of the rest of the District's

North Beach Water District

Tel 360.665.4144 **Fax** 360.665.4641 2212 272nd Street. Ocean Park, WA 98640

www.northbeachwater.com



то

From

wells are 8-inch in diameter. Additionally, Well #7 is not in a good location on the site. The sanitary control area include the area to the south of the shop which is heavily used by the crew and includes the employee parking area. I recommend we abandon that well and drill a replacement well that is 8-inch diameter and placed to the west and south of its current location.

Well #6 only yields 35 gallons per minute (gpm). Unlike Well #7, Well #6 has not been losing capacity gradually. Well #6 was drilled in 1996 and reported a yield of 123 gpm. Well number six has an 80 gpm pump and has been making 80 gpm for years. We discovered the pump was surging in March. We performed a pump test and determined the constant yield was 35 gpm. We can investigate the cause of the loss of yield and develop a remediation plan. It is my experience that once you start remediation work on a well it will need to done on a regular basis. Therefore, I would recommend that well #6 be replaced at the same time as Well #7. I have attached a correspondence with Mike Krautkramer, Robinson Noble, Inc.

I requested that the scope of work include an evaluation of the rest of the wells in the North Wellfield as well. Based on their evaluation we can better plan well replacement or possible implement measures that would extend the life expectancy of the Wellfield.

End of Report

Brent F. Dille <u>bdille@bgwp.net</u> Licensed in Washington Reply to Olympia office

April 4, 2017

Mr. Raymond Emond 4616 N. Lake Rd. S. Florence, WI 94121

Re: Regarding North Beach Water District Easement and Raymond Emond Easement Our File No. 2848-002

Dear Mr. Emond:

I understand that after having previously consented to a proposal by the District to relinquish certain landuse restrictions in exchange for ingress, egress, and utility easements, you now refuse to cooperate.

I must let you know that the Commissioners are committed to upgrading their water system, with or without your agreement and intent to upgrade the existing water transmission lines where they currently exist.

Additionally, you will receive a bill for past due charges for the previous six years for the water supplied to your duplex as the transfer of your mother's partial interest to you terminated the agreement to supply water without charge.

It is still the Commissioner's preference that you honor your prior agreement and to his end, have been asked to give you 10 days from the date of this letter to execute and return to Mr. Neal the documents previously provided to you.

Thank you for your time and attention in this matter and if you have any questions as to your legal rights, I suggest you contact your attorney immediately. I remain . . .

Very truly yours,

BEAN, GENTRY, WHEELER & PETERNELL, PLLC

Brent F. Dille Attorney at Law

BFD:keas

cc: North Beach Water District

AFTER RECORDING RETURN TO:

BEAN, GENTRY, WHEELER & PETERNELL, PLLC

910 Lakeridge Way SW Olympia, WA 98502

EASEMENT AGREEMENT

Grantors:	Raymond Emond and Barbara Emond
Grantee:	North Beach Water District
Abbreviated legal:	CONFIRMING WITH TITLE COMPANY
Pacific County Tax Parcel Nos.:	Parcel Nos. 760190080000 and 76019308000

This Easement Agreement ("Agreement") is made this _____ day of _____ 2016, by and between Raymond Emond and Barbara Emond (referred to collectively as "Grantors") and North Beach Water District, a Washington special purposes district operating under Title 57 of the Revised Codes of Washington, (RCW), (hereinafter referred to as "North Beach". "District" or "Grantee"). Grantors and North Beach are at times hereinafter referred to collectively as "Parties" and individually as "Party."

I. RECITALS

- 1.1 WHEREAS, Grantors are the owners of real property in Pacific County, Washington, legally described in Exhibit A attached hereto, and by this reference made a part hereof ("Burdened Property"); and
- 1.2 WHEREAS, North Beach operates and maintains a water system on Pacific County tax parcels 12113312120, 7601940900, 76019410000, 12113313262 ("North Beach Real Property"). The North Beach water system consists of water wells, water treatment plants, water storage tanks, booster stations, water transition mains, and other water works infrastructure, and future placement thereof, for delivery of potable water to the customers it serves ("North Beach Water System").
- 1.3 WHEREAS, North Beach desires to access said properties over and across the Burdened Property; and

- 1.4 WHEREAS, after North Beach draws water from the North Beach Real Property, the water may be transported across the Burdened Property via water mains and related infrastructure (collectively, "Water Line" or "Infrastructure") and delivered to the North Beach customers; and
- 1.5 WHEREAS, there are currently easements and restrictions upon the burdened property which North Beach desires to relinquish in a separate agreement; and
- 1.6 WHEREAS, North Beach wishes to grant Grantor water connections to the Burdened Property which is currently supplying Grantor's duplex; and
- 1.7 WHEREAS, North Beach wishes to further grant Grantor the right to apply for additional residential water services to service the Burdened Property, without charge, provided the cost of a residential water service at the time of application is not greater than the cost of an equivalent residential water service as of the date of this Easement; and
- 1.8 WHEREAS, the Parties desire to formalize their understanding of their rights relating to access to the North Beach Water and Well System and the Water Line.

NOW THEREFORE, and in consideration of the mutual promises and benefits described herein, the agreement to relinquish certain restrictions and easements, and the granting of two water connection to Grantees' duplex, the sufficiency of which is acknowledged, the Parties agree as follows:

II. EASEMENT AGREEMENT

- 2.1 Grant of Utility and Access Easement. Grantors grant and convey to North Beach a perpetual, non-exclusive easement over, under, along, across, upon and through the Burdened Property for the purpose of transporting water as well as accessing, installing, maintaining, repairing, replacing, and/or removing any underground utilities, particularly any water lines related to the delivery of water from the Burdened Property to the North Beach customers ("Utility Easement"). Grantors also grant and convey to North Beach a perpetual, non-exclusive easement over, under, along, across, upon and through the Burdened Property for the purpose of accessing, installing, maintaining, repairing, replacing, and/or removing any underground utilities, and for accessing the Well Properties and the Burdened Properties for the purpose accessing the Water Line and the North Beach Water and Well System and the maintenance and upkeep of the existing well and building and other related facilities ("Access Easement"). The Utility Easement and the Access Easement shall hereinafter be referred to collectively as the "Easement". Notwithstanding the above, in the event North Beach abandons the existing building, as described in Exhibit B referred to in section 2.2, the easement will be revised to include only what is needed to accessing and maintaining remaining District infrastructure.
- 2.2 **Location of Easement**. The Utility and Access Easement are described on Exhibit B, attached hereto and incorporated herein as though fully set forth.
- 2.3 <u>Completion of Utility Work and Use of Roads</u>. North Beach shall be solely responsible, including all costs and expenses related thereto, for the maintenance, repair, replacement, and/or removal of the Water Line ("Utility Work"). In the event North Beach desires to conduct any Utility Work in the Utility Easement, North Beach provide as much notice, if any, as is reasonably possible before completing the Utility Work. In each instance of Utility Work, North Beach shall take all reasonable measures to complete the Utility Work in a manner than does not unreasonably interfere with Grantor's travel on or along any existing access road and shall not otherwise use the

Utility Easement in such a manner that unreasonably interferes with the use of Burdened Property by Grantors. North Beach shall undertake and conclude any Utility Work promptly. All such Utility Work shall be done in a workmanlike manner, and in compliance with all applicable laws, rules and regulations. At the conclusion of the Utility Work, North Beach shall restore the easement area to the condition it was in immediately prior to the Utility Work. North Beach shall keep the Burdened Property free of any liens related to the Utility Work. Notwithstanding the above, the District will abandon the temporary construction easement, described in Exhibit B, not more than ninety (90) calendar days after commencing the construction of the water main.

- 2.4 <u>**Grantors' Reservation; Use of Easement**</u>. Grantors reserve all rights of ownership in and to all portions of the Burdened Property not inconsistent with this Easement, including, without limitation, the right to grant further easements over, under, along, across, upon and through the Burdened Property. Grantors further reserve the right to use the Burdened Property for all uses not interfering with the use permitted North Beach under this Agreement.
- 2.5 <u>Consideration for Easement</u>. As consideration for the granting of the Easement, the sufficiency of which is hereby acknowledged, North Beach agrees to provide two 5/8" x 3/4" meters to supply water to Grantor's Duplex located at 25604 Z Street, Ocean Park, Washington. Grantor agrees to connect the Duplex to the meter within thirty (30) days of the instillation of said meters by North Beach. As further consideration, Grantee will be entitled to apply for additional water services for the Burdened Property, if, and only if said services are available and the application is approved by the District. Grantor shall only be required to pay the difference between the District's published connection fees for a water connection at the time of application and the cost of a residential water connection as listed on the District's rate schedule as published at the time of execution of this Easement.
- 2.6 <u>Costs; Indemnification</u>. North Beach agrees to indemnify Grantors from and against liability incurred by Grantors as a result of North Beach's negligence or willful misconduct, or the negligence or willful misconduct of North Beach's agents, guests or invitees in the exercise of the rights herein granted to North Beach, but nothing herein shall require North Beach to indemnify Grantors for that portion of any such liability attributable to the negligence or willful misconduct of Grantors, their agents, guests or invitees or the negligence or willful misconduct of third parties. Grantors agree to indemnify North Beach from and against liability incurred by North Beach as a result of Grantor's negligence or willful misconduct or the negligence or willful misconduct of Grantors agents, guests or invitees in the exercise of Grantors' use of the Burdened Property, but nothing herein shall require Grantors to indemnify North Beach for that portion of any such liability attributable to the negligence or willful misconduct of North Beach for that portion of any such liability attributable to the negligence or willful misconduct of use of the Burdened Property, but nothing herein shall require Grantors to indemnify North Beach for that portion of any such liability attributable to the negligence or willful misconduct of North Beach, or their agents, guests or invitees or the negligence or the negligence or black.

III. GENERAL PROVISIONS

- 3.1 <u>Notice</u>. Any notice required under this Agreement shall be in writing and shall be sent by United States Mail, registered or certified, return receipt requested to the respective Party's property tax payer mailing address of record with the Pacific County Assessor's Office. Notice shall be deemed effective three (3) days after mailing. Notice may also be by personal delivery, in which case notice is effective upon such delivery. A Party may change its preferred address for notice purposes through written notice to the other Party.
- 3.2 **Duty to Notify**. To the extent applicable, each Party has the affirmative obligation to advise all tenants, licensees, invitees or users of the Easement of the existence of this Agreement.

- 3.3 <u>Waiver or Modification</u>. The Parties may waive, cancel, change, modify or amend this Agreement only through a writing signed by each Party.
- 3.4 <u>Severability</u>. If any provision of this Agreement shall be held invalid, illegal or unenforceable, all other provisions of this Agreement shall remain in full force and effect and shall be liberally construed in order to carry out the intent of the Parties as nearly as may be possible. Any such invalidity, illegality or unenforceability shall not affect the validity, legality or enforceability of any other provision of this Agreement.
- 3.5 <u>**Governing Law, Venue**</u>. This Agreement shall be construed in accordance with and governed by the laws of the State of Washington with venue in Pacific County, Washington.
- 3.6. <u>Attorneys' Fees</u>. If any party seeks to enforce its rights hereunder through an attorney after breach of an obligation hereunder by the other party or parties, and is successful in enforcing its rights with regard to such breach, whether suit be brought or not, the party or parties against whom enforcement is sought promises to pay a reasonable sum as attorneys' fees, in addition to all costs and expenses incurred thereby, provided that, if suit is brought, the losing party or parties shall pay to the prevailing party or parties any and all costs and expenses of suit, including reasonable attorneys' fees.
- 3.7 <u>Successors and Assigns</u>. This Agreement shall be binding upon and shall inure to the benefit of the Parties and their respective personal representatives, heirs, successors and assigns.
- 3.8 **Runs with the Land; No Merger**. This Agreement shall run with the land and shall be binding upon, and inure to the benefit of, the Parties described herein and their respective successors in interest. The Easement identified herein shall not merge with the fee simple title as a result of any common ownership of the Burdened Property and North Beach Water and Well System and/or any adjacent property(ies) thereto, but shall survive and run with the land.
- 3.9 **<u>Recordation</u>**. This Agreement shall be recorded in the real estate records of Pacific County.
- 3.10 <u>**Time**</u>. Time is of the essence in every provision of this Agreement.
- 3.11 Grant of Right of First Refusal to Purchase. Grantors hereby grants North Beach a onetime Right of First Refusal in regard to any sale of the Burdened Property, or any portion or subdivision thereof, referenced in section 1.1. In the event the Grantors receives and accepts a bona fide offer for the purchase of the Burdened Property, or any portion or subdivision thereof, they shall immediately notify North Beach and provide North Beach with a complete copy of the contract. North Beach will have fifteen (15) calendar days from receipt of said notice from the Grantors to give notice to the Grantors that it has decided to exercise its Right of First Refusal. In the event North Beach gives notice to the Grantors that it is not exercising its Right of First Refusal or in the event no timely notice is is given by North Beach to the Grantor, this Right of First Refusal shall expire. In the event the Burden Property, or any portion or subdivision thereof, is not sold prior to the Expiration Date (defined in section 3.12), North Beach's Right of First Refusal shall end on that date. In the event North Beach exercises it Right of First Refusal, it shall be bound by and required to timely perform all of the terms of the purchase contract (i.e., as if it had been the party making the original offer) or else the purchase contract between North Beach and the Grantor can be voided at the sole discretion of the Grantor. In such an instance, the Right of First Refusal will have been permanently terminated. Once so terminated the Grantor will have the right to reinstate the purchase contract with the original buyer or seek any subsequent buyer. Hence, in the event North Beach fails to timely and fully perform one or more terms of the contract, its Right of First

Refusal may be terminated by the Grantor as of the date of North Beach's failure to timely or fully perform.

3.12 **Right of First Refusal Period.** The Right of First Refusal shall be effective upon execution of this Easement Agreement by both parties and shall expire January 1, 2031.

EXECUTED as of the date by the signatures set forth below:

Raymond Emond

NORTH BEACH WATER DISTRICT

Barbara Emond

Date

By: William M. Neal III, Manager Date

Date

STATE OF WISCONSIN)) ss. COUNTY OF _____)

I certify that I know or have satisfactory evidence that **Raymond Emond** is the person who appeared before me and said person acknowledged that he signed this instrument and acknowledged it to be his free and voluntary act for uses and purposes mentioned in the instrument.

GIVEN under my hand and official seal this <u>day of</u>, 2016.

		(Print name)	
		Notary Public in and for the state of Wisconsin	
		Residing at:, WI	
		My Appointment Expires:	
STATE OF WISCONSIN)		
) ss.		
COUNTY OF)		

I certify that I know or have satisfactory evidence that **Barbara Emond** is the person who appeared before me and said person acknowledged that she signed this instrument and acknowledged it to be her free and voluntary act for uses and purposes mentioned in the instrument.

GIVEN under my hand and official seal this ____ day of _____, 2016.

	(Print name) Notary Public in and for the state of Wisconsin	
	Residing at:, WI	
	My Appointment Expires:	
)		
) ss.		
)		
)) ss.)	

I certify that I know or have satisfactory evidence that **William M. Neal III** is the person who appeared before me, and said person acknowledged that he signed this instrument, on oath stated that he was authorized to execute the instrument and acknowledged it as the Manager of NORTH BEACH WATER DISTRICT to be the free and voluntary act of such party for the uses and purposes mentioned in the instrument.

GIVEN under my hand and official seal this _____ day of _____, 2016.

NOTARY PUBLIC - State of Washington Residing in: ______ My Commission Expires: ______

EXHIBIT A LEGAL DESCRIPTION OF BURDENED PROPERTY

IN PACIFIC COUNTY, WASHINGTON

Tract 8, RUSHTON ON THE BAY, according to the plat recorded in Volume D-3 of Plats, pages 182 and 183, in Pacific County, Washington. (Per Real Estate Contract, AFN 62493)

Parcel Nos. 76019008000 and 76019308000

EXHIBIT "A"

LEGAL DESCRIPTION OF GRANTOR'S PROPERTY

Tract 8, RUSHTON ON THE BAY, according to the plat recorded in Volume D-3 of Plats, page 182, in Pacific County, Washington. (Per Real Estate Contract, AFN 62493)

LEGAL DESCRIPTION OF EASEMENTS TO BE GRANTED

A perpetual easement for Utilities across the West 15.00 feet of said Tract, excepting therefrom the South 15.00 feet of said Tract.

TOGETHER WITH a Temporary Construction Easement across the East 15.00 feet of the West 30.00 feet of said Tract, excepting therefrom the South 15.00 feet of said tract;

TOGETHER WITH

A perpetual easement for Infrastructure and Access BEGINNING at the Southwest corner of said Tract; THENCE East along the South line of said Tract to the Southeast corner thereof;

THENCE North along the East line of said Tract to the North line of the South 15.00 feet of said Tract; THENCE West 94.00 feet along said North line of the South 15.00 feet;

THENCE North perpendicular from last said line 25.00 feet to the North line of the South 40.00 feet of said Tract;

THENCE West 40.00 feet along said North line of the South 40.00 feet;

THENCE perpendicular from last said line South 25.00 feet to the North line of the South 15.00 feet of said Tract;

THENCE West 523.5 feet, more or less, along saod North line of the South 15.00 feet to the West line of said Tract;

THENCE South 15.00 feet along said West line to the POINT OF BEGINNING.

TOGETHER WITH

A perpetual easement for slope and grading lying along the North 5.00 feet of the South 20.00 feet of the West 145.00 feet of said Tract.

LEGAL DESCRIPTION OF EASEMENTS TO BE RELEASED

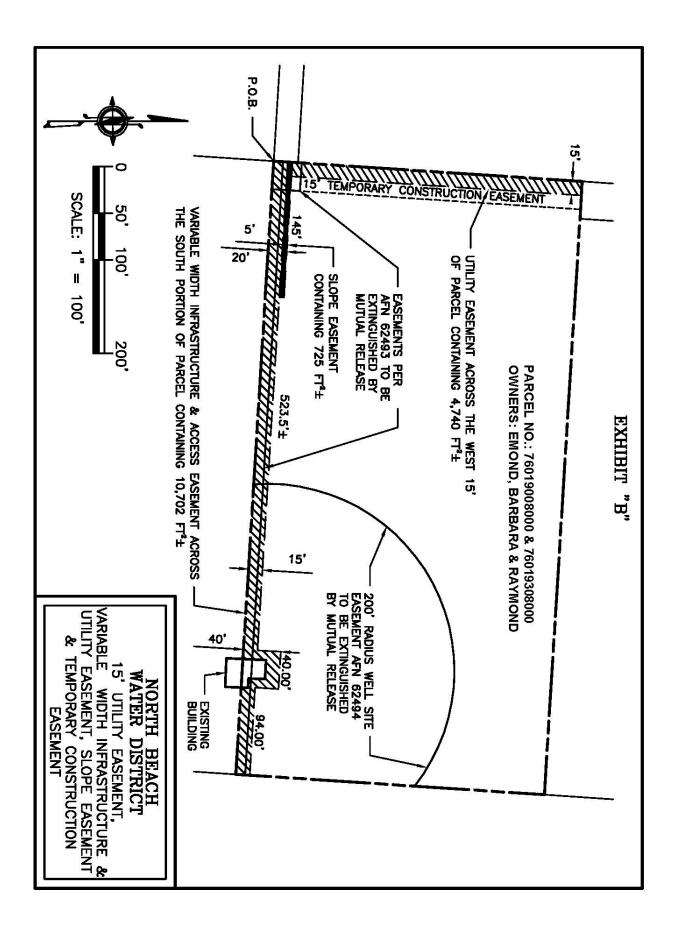
A parcel of land located in Tract 8 of RUSHTON ON THE BAY, according to the plat recorded in Volume D3 of Plats, pages 182 and 183, Pacific County, Washington, being a circle with a 200 foot radius the center point of which is located 27.17 feet North of the South line of said Tract 8 and 112.88 feet West of the East line of said Tract 8; (per Quit Claim Deed, AFN 62494)

TOGETHER WITH

An easement for ingress and egress over the southerly 10 feet of said Tract 8; (per Real Estate Contract, AFN 62493)

TOGETHER WITH

An easement 30' in width for ingress and egress over and across the southwest corner of said Tract 8, to be situated as close as possible to the southwest corner of Tract 8. (Per Real Estate Contract, AFN 62493)





April 5, 2017

North Beach Water District Attn: Bill Neal PO Box 618 Ocean Park, WA 98640

STATEMENT

Re:	Architectural Services			
Project:	Water District Offices and Equipment Storage Facility			
	min. Phase (Previous Statement 3/5/17) pleted Close out Activities	\$ 1,639.49		
Blueprinting	0 Sheets @ \$1.50	<u>\$0.00</u>		
BALANCE DUE:		\$ 1,639.49		



April 11, 2017

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

Subject: Proposal to provide hydrogeologic services for the placement of two new wells in the District's North Wellfield and perform well tests on existing North Well-field wells while on site

Dear Bill,

It was good to talk to you again. Robinson Noble will be pleased to assist the North Beach Water District (District) in the construction of the two new water wells we discussed last week. The following scope of work and cost estimate was generated based on that discussion and on the documents you provided. Though our initial discussion was for Robinson Noble to carry the drilling contractor as a sub-contract, the requirement for adding sales tax to our services as well as the necessary mark-up of the drilling cost may make that approach less desirable. This proposal has been prepared under the assumption that the drilling will be contracted directly by the District, but we can certainly modify it if you decide to have us carry the drillers.

In creating this scope of work, we have assumed the following:

- 1) The proposed wells are intended to reach a depth of about 130 feet with a final casing size of 8 inches. The wells will be drilled and constructed using cable-tool methods as this method offers the highest level of control over the drilling and construction process in beach deposits.
- 2) The District will prepare the drilling pads for the new well sites.
- 3) Robinson Noble will define the technical specifications for the well construction, and the District will review and provide comments prior to their publication. The District will be responsible for advertising the bid or soliciting contractor quotes.
- 4) Only one formal meeting with the District is included (under Task 5). The majority of project progress reporting will be accomplished by on-site discussions with our hydrogeologist or by phone or email.
- 5) The District will directly contract with the selected well drilling contractor. Selection of a drilling contractor on the basis of experience with cable-tool drilling in costal aquifer conditions and/or specific drilling experience in the near vicinity of the project site is recommended.

- 6) The District will provide for site security and will submit the necessary site approvals, with associated fees, to State and County regulators for authorization of new well construction.
- 7) We anticipate a construction and reporting schedule for each well will be about 60 days after the selection of a contractor (and assuming the contractor is immediately available). Drilling will likely be one to two weeks in duration, screen installation and development will be two to three weeks (including construction and shipping time for the screen materials), and well testing will take about a week. Our final report can be complete within three weeks of the end of the testing effort (Task 5) provided water quality data is available in that time frame. As with all construction projects, this schedule is highly dependent on field conditions.
- 8) We estimate the well drilling contractor costs to be \$50,000 for each well. This is an internally derived estimate only; we have not consulted with any drilling firms to determine current market costs.
- 9) Our costs presume full-time observation of the drilling, screen installation/development, and well testing phases (Tasks 2, 3, 4, and 5 below) and assume a driller experienced in costal aquifers is selected. We will work with the District to accomplish brief pumping tests of the other wells in the North Wellfield while our hydrogeologist is on site during the new well drilling, construction, and development process.
- 10) This scope covers services up to the point of completed and tested, capped wells along with recommendations for size and placement of permanent pumps. Post-well construction engineering services (wellhead design, pump design/installation, pump-house construction, etc.) are not included.

Scope of Work

Robinson Noble hydrogeologists will provide professional services as detailed in the following scope of work.

Task 1: Pre-construction activities and project administration

Robinson Noble will provide project administration for the two new production wells. We will review information provided by the District for the project and provide comments and recommendations as appropriate. A set of technical specifications for a two-well project will be prepared for District review and then finalized as the basis for bids or quotes

We will assist the District in evaluating bids (or quotes if appropriate) received prior to the District awarding a drilling contract.

We will meet with District personnel via phone call when requested and provide periodic verbal (or email) progress reports. We presume that since the new wells are to be drilled within the existing wellfield area, no pre-bid site meeting will be necessary for either specification preparation or to inform interested drilling contractors.

If desired, we will review the selected drilling contractor's invoices for accuracy before they are forwarded to the District.

Task 2: Observe well drilling, assistance with well testing

Robinson Noble will serve as the District's representative at the drill site through all phases of the work by the Contractor. Our hydrogeologist will participate in a pre-construction conference at the project site to identify and discuss the site requirements and the project goals; set up project coordination between the Contractor, Robinson Noble, and the District; and define any issues that might require contingency planning.

A qualified geologist will observe well drilling activities and keep the District informed of the Contractor's progress. Our geologist will be on site during critical phases of the drilling process to collect representative formation samples and observe drilling rig behavior and water level responses. Currently, we assume five field days for drilling observation for each well, although the drilling process may take more or less time based on field conditions.

Task 3: Well screen design, installation, and development

Robinson Noble personnel will perform sieve analysis of selected aquifer samples in our inhouse laboratory. We will prepare a screen design for each well for review and approval by the District before completion materials are purchased and installed by the drilling contractor. Our geologist will be on site to observe the installation and development of the well in preparation for testing in accordance with our assumptions above. Proper development of the screen, once in place, is critical to the success and longevity of a new well. Development is currently assumed to take up to one week of field effort; however, depending on conditions and the well's response, may require additional time.

Task 4: Testing and evaluation of North Wellfield wells

While our geologist is on site for the drilling, construction, and development of the new wells, it is a fine opportunity to accomplish the North Wellfield testing program that has been discussed. We will assist the District with the testing of the remaining wells in the North Wellfield. As planned, this testing will include a minimum of one monitored pumping and recovery cycle at each of the wells in the wellfield. We will install an automated data-logging pressure transducer in each of the wells for the pumping and recovery period, as well as record water levels and pumping rates manually during testing. We will then analyze the results of the testing and assess well efficiency with the data collected. In cases of poor well efficiency or wells that have shown a marked decline in their performance from historical levels, we may recommend cleanout and redevelopment in an effort to restore well efficiency. Typically, this process consists of removing the pump, completing a video inspection, then several days of surge-and-bail cleanout and redevelopment of the well. These efforts will be defined and addressed as appropriate under an additional scope of work if the need is identified.

Task 5: Conduct variable- and constant-rate pumping tests on the two new wells

We will install automatic water-level sensing devices in each pumping well and the available observation wells prior to testing the new wells. Step tests will be accomplished at each well to evaluate well efficiency and verify the well is sufficiently stable for the subsequent constant-rate testing. We presume that the District has not recently performed a proper wellfield test on the North Wellfield. Given this assumed need, we propose that each step-test be followed by a 4-hour, constant-rate test at each well and that a 72-hour test be performed pumping the better of the two wells to evaluate aquifer characteristics and the long-term response of the wellfield. During the 72-hour test, we will instrument as many of the wells as is practical in order to pro-

vide a robust description of aquifer response. The automatic data collection in the pumped well and the nearest observation wells for all tests will be backed up by manual measurements at appropriate intervals. Field monitoring of specific conductivity will be accomplished throughout the 72-hour test.

At the end of the 4-hour constant-rate tests, we will assist in the collection of required water quality samples and deliver them to the laboratory if needed. If it is clear that the second well is to be the better well, the 72-hour constant-rate test can be the only constant-rate test of that well with water quality samples taken at the conclusion of the long-term pumping. It is presumed that standard inorganic, volatile organic, bacteriological, and radionuclide sampling is required. Since the new wells are in a wellfield, a lesser sampling effort might be allowed.

Our geologist will be on site for all variable-rate testing activities and both start up and shut down of the constant-rate test. As is typical, we presume the drilling contractor will collect manual water-level readings overnight during constant-rate testing as part of their required site presence to monitor operation of the pump and generator.

Though we presume the full aquifer test proposed is in the District's best interest and the most cost-effective way to accomplish this need, it is likely that less rigorous testing would meet the WSDOH criteria to qualify the new wells as sources. The fact that the new wells are to be part of an existing wellfield allows for less stringent testing if that is the District's choice.

Task 6: Prepare construction and testing report

Unless the District prefers a single report for the project, we will provide a final project report for each well. This will facilitate individual submittals to regulatory entities and allow the District to keep individual source files for the new wells. Our reports will include: a location map, geologic log of materials penetrated; well completion details; water quality analysis results; and graphic analysis of the well tests along with test data. We will also provide recommendations for well yield, pump placement, and operation. The report will be designed to support the District in gaining source approval for the new wells from the Department of Health. Reports will be delivered as hard copy and electronic PDF files.

We will also assist the District in complying with water right affidavits to demonstrate compliance with 90.44.100(3) if the District so desires (this is a presumed service in this scope).

Estimated Project Cost

Based on our understanding of the project and the assumptions and tasks outlined above, we estimate the cost of our services to be \$58,300. This includes the proposed North Wellfield well testing and the 72-hour aquifer test. Should the District elect to not complete the requested testing of the remaining wells in the wellfield (Task 4), that would eliminate \$4700 of the cost (but it will cost more later as an independent effort). Further, were we to work with WSDOH to define the bare minimum testing to qualify the two new sources, it could save as much as \$3,000 of the Task 5 effort. That would bring the cost for hydrogeologic services down to about \$50,600 for the bare-bones two-well project. Robinson Noble works on a time-and-expense basis according to the attached General Fee Schedule. This estimate will remain valid for 90 days from the date of this scope.

This project estimate does not include costs for any extra insurance, business licenses or fees, or applicable local taxes that might be necessary to complete the project. We will request that

these additional costs be added to the above total estimate when they become known to us. Rental costs for our standard field equipment and any specialized equipment as detailed in this scope are included in the above estimate. Should additional equipment be deemed necessary or warranted in order to properly complete the project, we will submit a change in scope request with estimated costs based on the equipment rental schedule included in the General Fee Schedule.

Should the District decide to pursue some or all of the work discussed above, we will prepare a Professional Services Agreement outlining the specific tasks to be completed. Alternatively, we will gladly review the District's standard contract as applied to this scope of work. We hope this scope of work and cost estimate is adequate for your needs. Please contact us if we can provide additional information or modify the scope of work to better assist the District. If at any time prior to or during this project the District identifies a concern or problem with our work or progress that cannot be resolved by the assigned Robinson Noble project manager, please contact Joseph Becker, our company President, and he will make every effort to resolve the issue to your satisfaction.

If you have questions or need additional information, please contact us. Thank you for the opportunity to be of service.

Respectfully submitted, Robinson Noble, Inc. J. Michael Kruufframers

F Michael Krautkramer, LGH, RG, CPG Principal Hydrogeologist

attachment

