



June 13, 2019

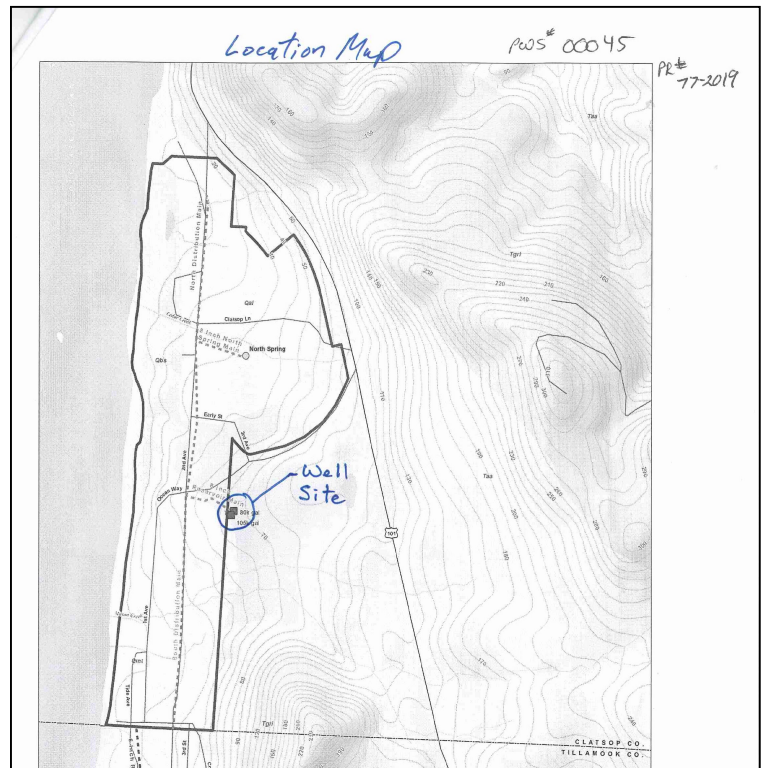
Ed Hodges, PE
Curran-McLeod, Inc.
6655 S.W. Hampton St., Suite 210
Portland, OR 97223

Re: **Falcon Cove Beach Water District (PWS #00045) – New Well L132105**
Curran-McLeod Project # 1530
Site Plan Approval (PR #77-2019)

Dear Mr. Hodges:

Thank you for your submittal to the Oregon Health Authority's Drinking Water Services (DWS) of plan review information for the new well on behalf of the Falcon Cove Beach Water District. On May 6, 2019, our office received a site map showing the location of a new well proposed for the District and a preliminary water well construction diagram. A plan review fee of \$825 and Land Use Compatibility Statement was received on May 6, 2019. The project includes drilling a new well to serve the District as shown to the right.

The proposed well site is approved. Please see the well evaluation results from our geologist on page 3 of this letter and the information listed on page 2 of this letter needed to complete this review as this site plan approval does not constitute approval for use of the well or approval on behalf of any other county or state agency (approval for use is not granted until a "Final Approval" letter has been issued).



Information needed to complete this review

In order to complete this review, please provide:

- 1) Plans and details showing how the new well will be plumbed into the system as well as GPS coordinates for the new well and details of the wellhouse showing construction in accordance with OAR 333-061-0050(2).
- 2) Evidence of the applicable land use approvals from Clatsop County (see page 4 of this letter);
- 3) Evidence of the applicable water rights required by the Water Resources Department (see page 4 of this letter);
- 4) Revised lease agreement with Oregon Parks and Recreation (OPRD) indicating that hazards will not be allowed within 100-ft of the well (see page 3 for acceptable language proposed by OPRD). Keep in mind that the current lease arrangement is for a limited time and, the District will need to maintain this lease agreement for as long as the District plans to use the well.
- 5) Test results for SOC, VOC, IOC, Uranium, Radium 226/228, Gross Alpha, and coliform bacteria (presence absence). Subsequent monitoring will depend upon the results of this monitoring and will generally be as shown in table 1 below.

Table 1 – Initial monitoring					
Year 1				Year 2	Year 3
Sampling to be completed prior to Final Approval	Sample by the end of the first quarter of operation (after Final Approval)	2nd Quarter of Operation	3rd Quarter of operation		
Sample at the Source (SRC-CA)	Sample at the Entry Point (EP-C) to the distribution system served by the new source				
<ul style="list-style-type: none"> • Coliform • Nitrate, Nitrite • IOC, VOC, SOC • Arsenic • Radiological including uranium, gross alpha, and radium 226/228 	<ul style="list-style-type: none"> • Radiological • Lead and copper tap samples 	<ul style="list-style-type: none"> • Radiological if detects 	<ul style="list-style-type: none"> • Radiological if detects 	Annual: <ul style="list-style-type: none"> • Nitrate • VOC • SOC 	
Sampling at Customer Taps	Tap Sampling in the Distribution System (to assess impact of the new well on distribution system corrosion).				
<ul style="list-style-type: none"> • Lead and Copper 	<ul style="list-style-type: none"> • Sample at 10 Tier 1 sites (1st 6-months of operation) 		<ul style="list-style-type: none"> • Sample at 10 Tier 1 sites (second 6 months of operation) 	Reduction to 5 tap samples every 3 years is possible depending upon results	

Documentation and test results submitted to address the above-mentioned items should reference Plan Review #77-2019 and can be emailed to me at evan.e.hofeld@state.or.us or mailed to:

Attn: Evan Hofeld
OHA-Oregon Drinking Water Program
PO BOX 14450
Portland, OR 97293-0450

If you have any questions, please feel free to call me at 971-673-0419.

Sincerely,



Evan Hofeld, PE
Oregon Health Authority – Drinking Water Services

CC: Charles Dice, Falcon Cove Beach Water District
Annette Pampush, Tillamook County Environmental Health
Gail Henrikson, Clatsop County Community Development
Nikki Hendricks, Oregon Water Resources Department
Alice Beals, Oregon Parks and Recreation Department

Geologist Evaluation of the Well Report (adequately constructed into confined aquifer)

The proposed site plan was sent to our geologist, Tom Pattee, on 5/9/19 who discovered the well driller’s report (CLAT 55068, Well ID# L132105), which showed that the well had been drilled on January 2, 2019. You confirmed on 5/14/19 that the well report was for a test well, which will be used as the District’s supply well. Mr. Pattee evaluated the constructed well and provided the following comments on 5/21/19:

Comments: This well was drilled to a depth of 173 ft. The casing extends to a depth of 166 ft and the casing seal to a depth of 115 ft. The casing seal is completed 21 ft into a 57 ft thick sandstone layer that appears to be of low permeability and is assumed to act as confining layer. Sensitivity Analysis results suggest that the well construction is not sensitive to nearby land use practices.

Nature of Aquifer Evaluation:

Aquifer Nature: Confined aquifer Semi-confined aquifer Unconfined aquifer

Comments: This well draws water from what is interpreted as a thin basalt layer within the surrounding sandstone. The water-bearing zone is directly overlain by 57 ft of sandstone that is assumed to be of low permeability and acts as a confining layer. The static water-level rose from where first encountered in the basalt at 151 ft below ground level to 141 ft below ground level. Sensitivity Analysis result suggest that the aquifer is not highly sensitive to local land use practices.

Clatsop County Land Use Approval/Geologic Hazard Permit/Development Permit (required)

As of 5/30/19, the District had not submitted any applications to Clatsop County land use. The District will need a geologic hazard permit (or waiver) and a development permit. The District will need to work with Clatsop County to address their requirements as this site plan approval is not an approval on behalf of Clatsop County. Please contact Gail Henrikson with Clatsop County Community Development at:

Gail Henrikson, AICP, CFM, Director
Clatsop County Community Development
800 Exchange Street, Suite 100
Astoria, OR 97103
503.325.8611
503.338.3666 Fax
ghenrikson@co.clatsop.or.us
www.co.clatsop.or.us

Water Rights (potentially required)

As of June 3rd, 2019, the District had not applied for water rights with the Water Resources Department. The district will need a water right or do a transfer to use the well. Unless they only use the 15,000 gallon per day as an exempt group domestic use. Please contact Nikki Hendricks of the Oregon Water Resources Department to determine their requirements, as this site plan approval is not an approval to use the well without the appropriate water rights.

Nikki Hendricks
Watermaster, Dist. 1
Oregon Water Resources Department
4000 Blimp Blvd. Suite 400
Tillamook, OR 97141
Phone: 503-815-1967
Fax: 503-815-1968
Email: Nikki.M.Hendricks@oregon.gov

Control and prohibition of hazards within 100-ft of the well (required – ongoing)

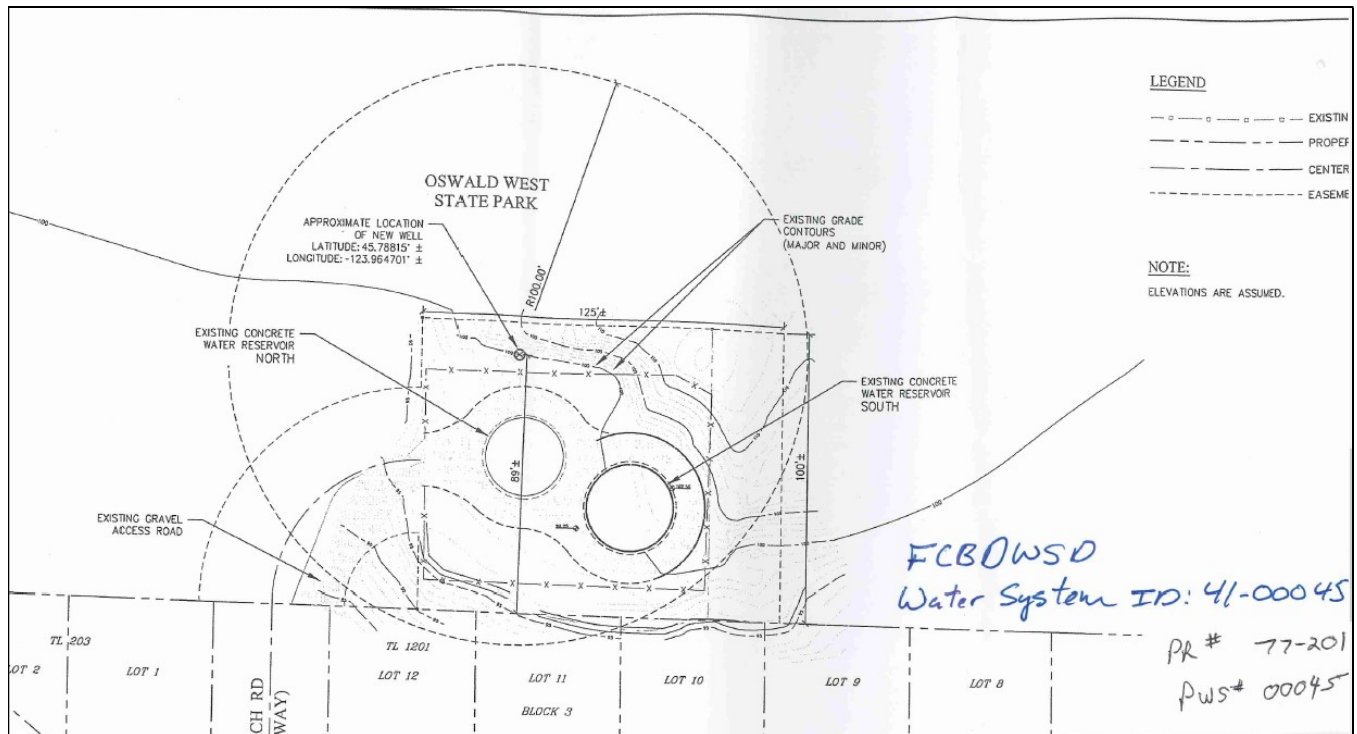
Control/access around the well is granted to the District through a lease agreement with Oregon Parks and Recreation Department (the well and tanks are constructed in Oswald West State Park). The lease agreement will need to be amended to ensure that requirements for hazard setbacks in OAR 333-061-0050(2)(C) and (E) are met.

- (C) For wells located on land owned by a public entity, (Federal, State, County, Municipality) where the entity is not the water supplier, a permit may be issued by the public entity to the water supplier in lieu of an easement. Said permit shall state that no existing or potential public health hazard shall be permitted within a minimum of 100 feet of a well site;

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(E) The following sanitary hazards are not allowed within 100 feet of a well which serves a public water system unless waived by the Authority: any existing or proposed pit privy, subsurface sewage disposal drain field; cesspool; solid waste disposal site; pressure sewer line; buried fuel storage tank; animal yard, feedlot or animal waste storage; untreated storm water or gray water disposal; chemical (including solvents, pesticides and fertilizers) storage, usage or application; fuel transfer or storage; mineral resource extraction, vehicle or machinery maintenance or long term storage; junk/auto/scrap yard; cemetery; unapproved well; well that has not been properly abandoned or of unknown or suspect construction; source of pathogenic organisms or any other similar public health hazards. No gravity sewer line or septic tank shall be permitted within 50 feet of a well which serves a public water system. Clearances greater than indicated above shall be provided when it is determined by the Authority that the aquifer sensitivity and degree of hazard require a greater degree of protection. Above-ground fuel storage tanks provided for emergency water pumping equipment may be exempted from this requirement by the Authority provided that a secondary containment system is in place that will accommodate 110 percent of the fuel tank storage.

Background: The current lease granted access/permission to develop water supply facilities within a 100-ft x 100-ft area in Oswald West State Park as shown below.



The initial lease appears to have started in 1989 for an initial duration of 5-years with three 5-year renewals, making it effectively a 20-year lease as shown below:

BACKGROUND

OPRD owns the land located at Oswald West State Park in the County of Tillamook, State of Oregon (collectively, the "Premises"). On July 17, 1989, OPRD granted a permit to FCBDWSD to construct and maintain a 79,000 gallon water tank and associated water line in a 100' x 100' area of land within the park. Comes now, FCBDWSD desiring to lease an additional portion of the Premises in order to add a second water tank. OPRD desires to grant to FCBDWSD the right to combine this additional portion of the Premises with the existing area in accordance with this Agreement.

The parties agree as follows:

1. **LEASE OF PREMISES.** OPRD hereby leases to FCBDWSD a certain portion of the Premises containing approximately 15,625 square feet, as more fully depicted on attached Exhibit 1.
2. **PERMITTED USE.** FCBDWSD may use the Premises to construct and maintain a new 105,000 gallon water tank including continuing use the existing 79,000 gallon water tank and water line as granted in the 1989 permit through the term of this Agreement (collectively, the "Permitted Use").
3. **TERM.**
 - (a) The initial lease term will be five (5) years ("Initial Term"), commencing on the Effective Date. The Initial Term will terminate on the fifth (5th) annual anniversary of the Effective Date.
 - (b) This Agreement will automatically renew for three (3) additional five (5) year term(s) (each five (5) year term shall be defined as the "Extension Term"), upon the same terms and conditions unless the FCBDWSD notifies the OPRD in writing of FCBDWSD's intention not to renew this Agreement at least thirty (30) days prior to the expiration of the existing Term.

A March 2019 lease amendment granted the District permission to construct and operate a water well in the 100'x100' space within the park. The District is in the 3rd of 3 5-year renewal periods. The lease agreement currently does not adequately address control and exclusion of hazards within 100-ft of the well under OAR 333-061-0050(2)(a)(C) and (E). OPRD proposed acceptable language that would address these requirements as shown below:

“OPRD recognizes and agrees that, in compliance with OAR 333-061-0050(2)(a)(C), OPRD will not allow any development or use of OPRD lands within 100 feet of the well site that are inconsistent with OAR 333-061-0050(2)(a)(E).”

Alice M. Beals
Oregon Parks and Recreation Department
725 Summer Street NE, Suite C
Salem, Oregon 97301-1266
(503) 986-0761 (office)
(503) 580-1568 (cell)