CITY OF FLORENCE
PLANNING COMMISSION

RESOLUTION PC 20 16 SUB 02
RESOLUTION PC 20 17 PUD 02

A REQUEST FOR FINAL PLANNED UNIT DEVELOPMENT AND FINAL SUBDIVISION PLAT OF A 12-UNIT SINGLE FAMILY CLUSTER DEVELOPMENT AT THE SW INTERSECTION OF AIRPORT ROAD/15TH STREET AND NOPAL.

WHEREAS, application was made by Josh Shafer, Stonewood Construction, Inc., representative of Corvallis Neighborhood Housing Services, Inc. for the DevNW Final PUD and Final Subdivision Plan approval as required by FCC 10-1-1-4, FCC 10-1-1-6-3, FCC 10-23, FCC 10-6, and FCC 11-3; and

WHEREAS, the Planning Commission met in a duly-advertised public hearing on June 9, 2020, as outlined in Florence City Code 10-1-1-6-3, to consider the application, evidence in the record, and testimony received; and

WHEREAS, the Planning Commission of the City of Florence, per FCC 10-1-1-4, FCC 10-1-1-6-3, FCC 10-23, FCC 10-6, and FCC 11-3, finds, based on the Findings of Fact, application, staff recommendation, evidence and testimony presented to them, that the application meets the applicable criteria through compliance with certain Conditions of Approval.

NOW THEREFORE BE IT RESOLVED that the Planning Commission of the City of Florence finds, based on the Findings of Fact and the evidence in record that:

The request for a final Planned Unit Development and final subdivision review, of a 12-unit single family cluster development located at the SW intersection of Airport Road/15th Street and Nopal St., meets the applicable criteria in Florence City Code and the Florence Realization 2020 Comprehensive Plan with the conditions of approval as listed below.

Conditions of Approval:

The application, as presented, meets or can meet applicable City codes and requirements, provided that the following conditions of approval are met.

Approval shall be shown on conditions of approval as supported by the following record:

"A"	Findings of Fact
"B"	Final PUD and Final Subdivision Plan Application
"C"	Final PUD Site Plan (5/11/2020)
"D"	Final Subdivision Plat Draft (5/11/2020)
"E"	Draft of Declaration of CC&R's
"F"	Development Schedule
"G"	Stormwater Management Plan and Drainage Study (3/6/2020)
"H"	Site Improvements Erosion and Sediment Control Plan
"I"	DEQ Stormwater Discharge Permit
"J"	DEQ Stormwater Discharge Permit Registration Letter
"K"	Landscaping Plan
"L"	Right-of-way Permit Application

"M"	Keener Place Phase 1 PUD Subdivision Plat
"N"	Resolution PC 19 22 PUD 03, PC 19 23 SUB 04, and PC 19 05 CUP 01
"O"	Condition of Approval Response from Resolution PC 20 05 CUP 01
"P"	Testimony: Chuck Trent, Boys and Girls Club
"Q"	Prior Approval Conditions Staff Checklist
"R"	Stormwater Comments (June 2, 2020)

Findings of Fact attached as Exhibit "A" are incorporated by reference and adopted in support of this decision.

1. Any modifications to the approved plans or changes of use, except those changes relating to Building Codes, will require approval by the Community Development Director or Planning Commission/Design Review Board.

2. Regardless of the content of material presented, including application text and exhibits, staff reports, testimony and/or discussions, the applicant agrees to comply with all regulations and requirements of the Florence City Code which are current on this date, EXCEPT where variance or deviation from such regulations and requirements has been specifically approved by formal Planning Commission action as documented by the records of this decision and/or the associated Conditions of Approval. The applicant shall submit to the Community Development Department a signed "Agreement of Acceptance" of all conditions of approval prior to issuance of a building permit.

3. Upon encountering any cultural or historic resources during construction, the applicant shall immediately contact the State Historic Preservation Office and the Confederated Tribes of Coos, Lower Umpqua, and Siuslaw Indians. Construction shall cease immediately and shall not continue until permitted by either a SHPO or CTCLUSI representative.

4. The applicant shall amend the Landscaping Plan to (a) include landscaping/irrigation notes for the 10' buffer area between the western property boundary and the parking lot and (b) provide vegetation in Tract C of the proposed development in order to retain the slope. Such vegetation shall be plantings that quickly establish root systems to ensure stability of the slope.

5. Due to a recent discovery regarding how rooftop drainage is conveyed to Airport Rd./15th St, the stormwater leaving the private on-site facilities shall reflect that it will collect in a facility in the public right-of-way. As such, the applicant shall submit a draft Memorandum of Understanding for responsibility of the surface and subsurface maintenance and future relocation of this private stormwater facility. The CC&R's shall also reflect the responsibility of the future HOA in maintaining the public stormwater facility. Such memorandum shall be submitted to the Planning Department and recorded with Lane County Deeds and Records.

6. The labeling of the recently approved Murrelet Lane name, and to be located in Tract B of the final plat draft, shall be added to the final plat.

7. Condition 32 in Exhibit "N" addresses capping a sewer lateral: "Locate and cap the two existing sanitary sewer laterals that serviced the former Senior Center and the undeveloped area to the east." Changes to the final plan include reusing the existing

sewer lateral located in the undeveloped area to the east. The plans note to cap the sanitary sewer lateral that serviced the former Senior Center. One lateral not referenced in the condition will connect to the sewer main located in the emergency access turnaround at the south end of Nopal St. The updated plan does not show that these are to be used, so they shall be capped.

8. The applicant shall have the photometric plans amended to illustrate that lighting remains internal to the development.

9. Condition 23 in Resolution PC 19 22 PUD 03, PC 19 23 SUB 04, and PC 19 05 CUP 01 (Exhibit "N") states that the applicant shall submit a plan for mail boxes, approved by the United States Postal Service, prior to the issuance of any building permits for residential structures.

The applicant references communication with the Building Department discussing that addresses must first be assigned before this condition can be met. The addresses have been assigned and the mailbox noted on Sheet C3's Legend, although staff was unable to confirm its location on the plans. Permanent placement of the mailbox is under the purview of the United States Postal Service, so the plans shall be amended to reflect its final location.

10. The applicant shall have the final plat draft amended to reflect the location of private stormwater drainage easements as stated in the CC&R's. Additionally, in order to satisfy Condition 38 of Resolution PC 19 22 PUD 03, Resolution PC 23 SUB 04 and Resolution PC19 05 CUP 01 (Exhibit "N"), the final plat (Exhibit "D") shall describe the areas specifically reserved as open space and common space, and that residential building/s except for storage are allowed on Tracts A and C.

11. Field investigation has changed the requirements of Condition 31, which is outlined in Resolution PC 19 22 PUD 03, Resolution PC 23 SUB 04 and Resolution PC19 05 CUP, (Exhibit "N"). What is currently on the plans is not reflective of the final changes and the following shall be noted on the as-built drawings: The proposed fire hydrant is in the correct location, but shall be connected to a new 'T' that will be cut into the existing water main. From that point continuing to the east to the connection for the water main that loops through the development, the contractor shall re-section the water main in order to remove a cross and install a new 'T' and the valve cluster (the three water main line valves). The plans shall be updated and approved by City staff accordingly.

ADOPTED BY THE FLORENCE PLANNING COMMISSION/DESIGN REVIEW BOARD the 9th day of June, 2020.

John Murphey, Chairperson DATE
Florence Planning Commission

FINDINGS OF FACT
FLORENCE PLANNING COMMISSION
Exhibit "A"

Public Hearing Date: June 9, 2020 **Planner:** Roxanne Johnston

Application: PC 20 16 SUB 02: DevNW Airport Road Final Plat
PC 20 17 PUD 02: Dev NW Airport Road Final PUD

I. PROPOSAL DESCRIPTION

Proposal: A request for a Subdivision Final Plat (Replat) of approximately 1.725 acre, being Lot 11 in Keener Place PUD Phase 1 subdivision and Final Development Plan for a Planned Unit Development for DevNW Airport Road.

Applicant: Stonewood Construction, Inc.

Representative: Josh Shafer, Stonewood Construction, Inc.

Property Owner: Corvallis Neighborhood Housing Services, Inc.

Location: SW intersection of Airport Road/15th St. and Nopal St.

Site: Assessor's Map 18-12-27-1, Tax Lot 15400

Site Characteristics:

	Use(s)	Zoning	Comp. Plan Designation	Streets / TSP Classification
Site	Northern Portion: Former Senior Center Site (Demolished). Southern Portion: Forested Slope	High Density Residential	High Density Residential	N/A
North	Mobile and Manufactured Homes, Single-Family Dwellings, the Boys & Girls Club	Mobile Home / Manufactured Home Residential, High Density Residential, and Commercial	High Density Residential	Airport Rd/15th Street (Collector)
South	Vacant Forested Land and Vacant Portion of Office Building (Old Hospital)	High Density Residential	Commercial	Proposed Driveway/Parking Lot
East	Keener Place Phase 1 (Single-Family Attached Dwellings)	High Density Residential	High Density Residential	Nopal Street (Local)

West	Single-Family Dwellings	Low Density Residential	Low Density Residential	Proposed Driveway/Parking Lot

II. NARRATIVE

These land use proposals are tied in to several past land use decisions from 2009, 2019 and 2020. The first such decision involved the Habitat for Humanity-funded Phase 1 of the Planned Unit Development, "Keener Place," designed to provide affordable housing options in the area. Phase 1 has since been constructed and lies to the east of the subject property. Keener Place was approved on October 27, 2009 (PC 09 26 FPUD 01) as was its related subdivision, "Keener Place PUD Phase 1." The Keener Place PUD Phase 1 plat was recorded March, 8, 2010, (Exhibit "M"), however, applications were not submitted in anticipation of developing Phase 2 at that time.

On November 6, 2019, the Planning Commission granted conditional approval of a tentative plat and development plan for DevNW Airport Road, what would have been Phase 2. This approval allowed for smaller lot sizes and for shared uncovered parking spaces near the residences and located on the northwestern side of the project. The Commission also approved a conditional use permit at that time (Exhibit "N") as was required due to cluster development or single-family residences, yet also determined that a Phase 2 Site Investigation Report, geotechnical report, and bank stabilization plan were required prior to development, given the slopes and soils present on an embankment along the southern border of the property. As a response to these latter requirements, the applicant submitted these reports and plan to the Planning Commission. These were conditionally approved by the Commission on February 25, 2020 under PC 20 05 CUP 01, (Exhibit "O").

Formerly the site of the Senior Center, the subject property of this proposal is located entirely on Lot 11 of the Keener Place PUD Phase 1 subdivision. In this proposed development, Lot 11 is being replatted into 12 individual lots and three tracts (Tracts A, B and C) to form its own subdivision. This does not create any inconsistencies in the current plat lot numbering, since Lot 11 was the last lot numbered in the original subdivision. Additionally, the new subdivision will be labeled, "DevNW Airport Road PUD" and the final plat draft recognizes the subject property as a replat of Lot 11, Keener Place PUD Phase 1 (Exhibit "D").

As part of staff review of the application materials, staff has provided a Prior Conditions Checklist for conditions placed on earlier approvals from November 2019 and February 2020 related to this final development proposal. This checklist can be found in Exhibit "Q." Any conditions that needed to be carried over to the June 9, 2020 Planning Commission meeting have been noted in these Findings of Fact.

The applicants submitted a development schedule along with their application packet, (Exhibit "F"). The site is already being cleared and the project completion date is targeted for June 2021.

Any conditions which will be met prior to the issuance of a building permit are noted in this report; the remainder have been addressed by the applicant.

III. NOTICES & REFERRALS

Notices:

On May 20, 2020, notice was mailed to surrounding property owners within 300 feet of the property, and a sign was posted on the property. Notice was published in the Siuslaw News on June 3, 2020.

At the time of this report, the City has received written comment on the application as follows:

Chuck Trent, Executive Director, Boys and Girls Club of Western Lane County (representative of adjacent landowner), May 22, 2020. Mr. Trent is in support of the proposed project, but expressed safety concerns and asked that the construction area be fenced to keep children from having access to construction equipment and the excavation area. He stated that the orange barrier currently in place is not adequate. He wanted to ensure that the project contain enough lighting for children as they walk or ride their bicycles to the bus stop at dawn and dusk. He also referenced a prior request for a pedestrian crosswalk with blinking lights in the preliminary approval process for this current proposal and requests that the speed limit be reduced to 20 mph so Airport Rd./15th St. is treated as a school zone, (Exhibit "P").

Staff Comments:

The items listed do not include criteria for this application with regard to site security, traffic crossings, street lights, and speed limits. Staff are currently working with the applicant to address site security issues that have been raised by Mr. Trent, (Exhibit "P"). Addressing requested speed limits while not part of this approval process, involves separate processes requiring oversight by the Transportation Committee. Additionally, Public Works staff is researching traffic calming features for 15th St. and communicating with Central Lincoln to cut back vegetation blocking one of the street lights. Public Works staff is also evaluating whether another street light is need and will add it if this is the case.

Referrals:

City of Florence, Central Lincoln PUD, Siuslaw Valley Fire and Rescue, and the United States Postal Service.

At the time of this report, Public Works Director Mike Miller had made written and verbal comments on the proposal. Conditions 7 and 11 reflect additional needs related to utilities. Also Building Permit Tech Eric Rines stated the addresses are available for the units and so the mailbox location can be demonstrated. Condition 9 reflects this requirement. The City had not received any additional referral comments on the application.

IV. APPLICABLE REVIEW CRITERIA

Florence City Code Title 10: Zoning Regulations

Chapter 3: Off Street Parking and Loading, Section 9.
Chapter 23, Planned Unit Development, Sections 11, 12, 13 and 14A
Chapter 34: Landscaping, Sections 3 through 5

Chapter 27: Lighting, Section 37

Florence City Code Title 11: Subdivision Regulations
Chapter 4: Partition and Subdivision Final Plat

Florence City Code Title 9: Utilities
Chapter 5: Stormwater Management

Conditions of Approval for Resolution PC 19 22 PUD 03, Resolution PC 19 23 SUB 04, Resolution PC 19 25 CUP 08 (Exhibit "N")

Conditions of Approval for Resolution PC 20 05 CUP 01 (Exhibit "O")

V. PROPOSED FINDINGS

Code criterion are listed in **bold**, with staff response, beneath. Only applicable criteria have been listed.

FLORENCE CITY CODE

TITLE 10: OFF-STREET PARKING AND LOADING

10-3-9: PARKING STALL DESIGN AND MINIMUM DIMENSIONS: All off-street parking (except those provided for a single-family; duet, duplex dwelling; or tri-plex, quad-plex, or cluster housing development that provides off-street parking though a carport of a garage) shall be improved to conform to City standards for surfacing, stormwater management, and striping and where provisions conflict, the provisions of FCC Title 9 Chapter 5 shall prevail. Standard parking spaces shall conform to minimum dimensions specified in the following standards and Figures 10-3(1) and Table 10-3-3:

A. Motor vehicle parking spaces shall measure nine (9) feet and six (6) inches wide by nineteen (19) feet long.

The internal parking plan depicted in the preliminary PUD plans (PC 19 22 PUD 03) was found to be challenging in terms of maneuverability and explained in Condition 19 of the Resolution pertaining to that application, (Exhibit "N"). As a result, the applicant has now submitted plans with the Final PUD request depicting that they have provided the requirement of 23 feet in areas adjoining the parking stalls, (Exhibit "C", Sheet C2). This criterion has been met.

B. Each space shall have double line striping with two feet (2') wide on center.

The proposed parking plan appears to have met this requirement.

C. The width of any striping line used in an approved parking area shall be a minimum of 4" wide.

The proposed parking plan shows double striping which appears to meet these criteria.

D. All parallel motor vehicle parking spaces shall measure eight (8) feet six (6) inches

by twenty-two (22) feet;

The applicant is not proposing parallel parking.

E. Parking area layout shall conform to the dimensions in Figure 10-3(1) a, and Table 10-3-3-, below;

The applicant has amended the preliminary parking plans to address Condition 19 outlined in Resolution PC 19 22 PUD 03, (Exhibit "N"). This criterion has been met.

F. Parking areas shall conform to Americans with Disabilities (ADA) standards for parking spaces (dimensions, van accessible parking spaces, etc.). Parking structure vertical clearance, van accessible parking spaces, should refer to Federal ADA guidelines.

The applicant has provided the required ADA parking with this final plan. This is shown on Exhibit "C", Sheet C2. This criterion has been met.

FIGURE 10-3(1)

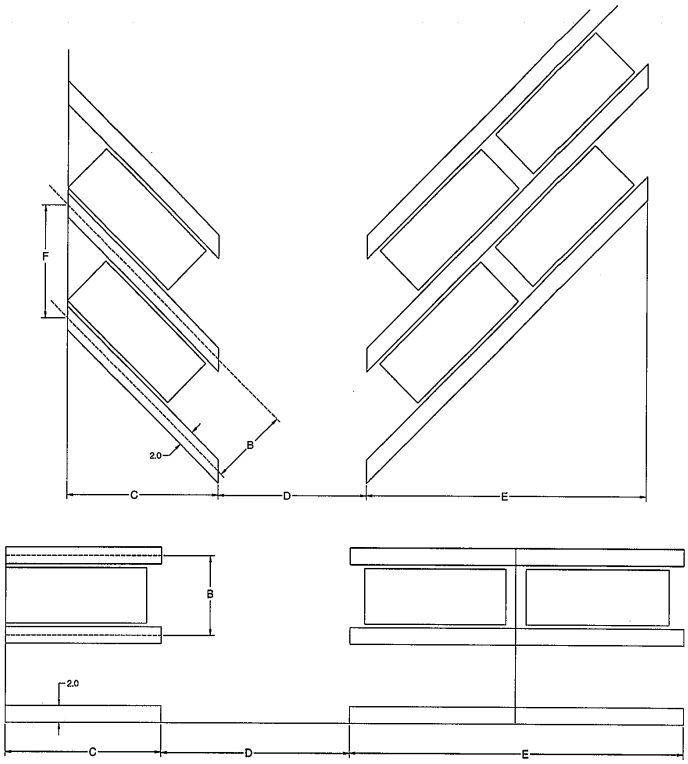

Table 10-3-3 – Parking Area Layout							
Space Dimensions in feet	Parking Angle <°	Stall Depth		Aisle Width		Stall width (B)	Curb Length (F)
		Single (C)	Double (E)	One Way (D)	Two Way (D)		

	30°	**15.6**	**26.7**	**12**	**18**	**9.5**	**19.0**
	45°	**18.4**	**334**	**13**	**18**	**9.5**	**13.4**
	60°	**20**	**38.8**	**17**	**18**	**9.5**	**11.0**
	70°	**20.3**	**40.6**	**18**	**19**	**9.5**	**10.1**
	80°	**20**	**41.2**	**22**	**22**	**9.5**	**9.6**
	90°	**19**	**40.5**	**23**	**23**	**9.5**	**9.5**

CHAPTER 23: PLANNED UNIT DEVELOPMENT (PUD)

10-23-11: APPROVAL OF THE FINAL DEVELOPMENT PLAT:

1. **Within one year following the approval of the preliminary development plan, the applicant shall file with the Planning Commission a final development plan containing in final for the information required in the preliminary plan. The Planning Commission may grant a one-time extension of one (1) year maximum duration based on compliance with the following criteria:**
   a. **The request for an extension is made in writing prior to the expiration of the original approval.**
   b. **There are special or unusual circumstances that exist which warrant an extension,**
   c. **No material changes of surrounding land uses or zoning has occurred.**

   The planning Commission may deny the request for an extension if new land use regulations have been adopted that affect the applicant's proposal.

The deadline for submission of the final development plan is November 26, 2020. The applicant filed for the final PUD plan approval and final subdivision well before the deadline from the date of earlier approvals. No extension is being requested at this time and the Planning Commission public hearing for these final plans is June 9, 2020. This criterion has been met.

2. **Final development plans shall include plans for proposed:**
   a. **Storm drainage.**
   b. **Sewer and water utilities.**
   c. **Streets, pedestrian ways, trails and paths.**
   d. **Preliminary subdivision plan, if property is proposed to be divided.**
   e. **Open Space and Parklands to be dedicated to the public or held in Homeowner Association ownership. (Ord. No. 2, Series 2011)**

The applicant has provided all of these requirements as these are depicted within Sheet C2 of the final PUD plans, (Exhibit "C"). This criterion has been met with regard to the PUD plans; however, Open Space has not been noted on the final subdivision plat draft, (Exhibit "D"), **[Condition 10]**.

3. **Plans for public improvements shall be prepared by a Registered Engineer and shall be approved by City staff before final approval by the Planning Commission.**

The applicant has submitted engineered pubic improvement plans with this request and they have been paid for and reviewed by the Public Works Director. This criterion has been met.

4. **If the Planning Commission finds evidence of a material deviation from the preliminary development plan, the Planning Commission shall advise the applicant to submit an application for amendment of the planned unit development. An amendment shall be considered in the same manner as an original application.**

No significant material deviation between the preliminary and final development plans have been discovered. This criterion has been met.

10-23-13: GUARANTEE OF PERFORMANCE: For public improvements, the City may require that a cash deposit, surety bond or other similar guarantee be posted to ensure the full and faithful performance by the parties involved, not to exceed a period of two years after required improvements are completed.

No performance guarantee for public improvements are necessary with this development proposal because improvements to the public infrastructure ties in to their proposed development and are required for final certificates of occupancy. If the development, for whatever reason, is not built out, public infrastructure will remain unaffected and there would be no cost burden to the City. This criterion has been met.

10-23-14: EXPIRATION OF APPROVAL FOR A PUD:

A. **If the PUD includes creation of a subdivision, and approval of the subdivision has expired or is requested as provided in Chapter 11-4 of this Code, the PUD approval is revoked as of the expiration or rejection date for the proposed subdivision.**

CHAPTER 34: LANDSCAPING

10-34-3: Landscaping sets standard for and requires landscaping of all development sites. This section also requires buffering for parking and maneuvering areas, and between different land use districts. Not that other relevant standards are provided in each land use district for specific types of development.

10-34-4: Street Trees sets standards for planting of street trees for shading, water quality, and aesthetic purposes.

10-34-5: Fences and Walls regulate the design of fences and walls, including allowable height and materials, to promote security, personal safety, privacy, and aesthetics.

The applicant has provided a Landscaping Plan with this submittal. A discrepancy does exist between the Landscaping Plan (Exhibit "K") and the PUD Construction Plan. Sheet C2 of the Final PUD Construction Plan (Exhibit "C") notes that the Landscaping Plan shows a planting schedule for the 10' buffer located on the west side of the project, between the lot line and the parking lot. This area is not noted with a schedule on the Landscaping Plan. This Plan needs to be amended to reflect the landscape proposal for this strip, **[Condition 4]**. Furthermore, p. 9, under Section 5.3 of the Geotechnical Report conditionally approved as Exhibit F in the Resolution for PC 20 05 CUP 01, recommends that "All slopes shall be protected from erosion by timely vegetation." As

such, the Landscaping Plan needs to reflect the planting selection necessary to retain the slope called out as Tract C in the final plans and plat. Staff recommends plantings such as shrubs and trees that will quickly establish a strong root system and comply with the provisions set forth in this Chapter, **[Condition 4]**.

CHAPTER 37: LIGHTING

10-37-3: LIGHTING PLANS REQUIRED: All applications for building permits and land use planning review which include installation of exterior lighting fixtures, not exempted, shall include the number of luminaires, the number of lamps in each luminaire, a photometric report for each type of luminaire and a site plan with the photometric plan of the lumen output.

Locations for general site lighting are shown on the landscape and site plans. A photometric plan has been submitted and needs amended because it shows light trespassing on neighboring lots to the west and east to the Keener development, (Exhibit "C," Sheet 1/1), **[Condition 8]**

TITLE 11: CHAPTER 4: PARTITION AND SUBDIVISION FINAL PLAT

FCC 11-4-1: APPLICATION

An application for a partition or subdivision final plat approval shall be made by the person proposing the partition or subdivision, or his authorized agent or representative, on a form prescribed by the City and submitted to the Planning Director after the effective date of tentative plan approval. Applications for a Final Plat are reviewed through a Type 1 Review as defined in Section 10-1-1-6. Said applications shall be accompanied by revised plans and additional information as prescribed in this Chapter.

The tentative PUD plan, preliminary subdivision plat and conditional use permit were reviewed and conditionally approved by the Planning Commission on November 26, 2019 (Exhibit "N") and another conditional use approval on February 26, 2020, (Exhibit "O"). An important note is that since this time, Florence City Code has changed. Given the scope of the project and these prior conditional approvals that need tracking to ensure they have been met, the current application is therefore being processed as a Type III requiring further Planning Commission oversight. Tracking the past conditions of approval by Planning staff can be found in Exhibit "Q".

The application for final subdivision plat and development plan for a planned unit development was submitted May 11, 2020. These criteria have been met, (Exhibits "C" and "D").

FCC 11-4-2: REQUIREMENTS '

A. Drafting: Provisions for drafting shall be as follows:

1. Partition or Subdivision Plats: Two (2) full-sized copies, one (1) reduced copy of 11" x 17" or less, and an electronic copy. Original plats shall conform to the Lane County Surveyor's specifications and requirements pertaining to material that has characteristics of adequate strength and permanency as well as suitability for binding and copying.

Plats shall be in clear and legible form and may be placed on as many sheets as necessary but a face sheet and an index page shall be included for all plats placed on both sides of a sheet. Scale requirements shall be the same as specified for tentative plans. Lettering and the dedication and affidavit of the surveyor shall be of such size or type as will be clearly legible and no part of the plat shall come nearer than one inch (1") to any edge of any sheet.

The electronic final subdivision plat and development plan for a planned unit development was submitted May 11, 2020 and followed by the required hard copies. These criteria have been met, (Exhibits “C” and “D”).

B. Information Required: The application itself, or the proposed partition of subdivision plat, must contain the following with respect to the subject area:

1. Transverse computation sheets. The registered engineer or licensed land surveyor signing the surveyor's affidavit on the plat shall submit transverse computation sheets for the use of the City in checking the plat. Said sheets shall include the calculation of each course and distance by latitude and departure of all the boundary lines and of all lot lines in the subdivision area, and for all boundaries and all lots in the plat which are not completely rectangular in shape. Each course and distance, and each latitude and departure shall be tabulated on the transverse computation sheet in the proper order to show the closure limits of each area, and rectangular coordinates of every angle point shall be extended and shown from a single meridian and from a single point of origin.

2. The lengths of all chords, radii points of curvature and tangent bearings.

3. The lot lines of all lots within the partition or subdivision, with dimensions in feet and hundredths of feet and with all bearings shown; the acreage or square footage of each lot.

4. Numbers designating each block and lot in subdivisions, lots in each block to be numbered consecutively.

5. Where a plat is an addition to a plat previously recorded, numbers of blocks and lots in consecutive continuation from such previous plat.

6. The description and location of all permanent reference monuments.

7. An affidavit of a surveyor, who is an Oregon registered engineer or Oregon licensed land surveyor and who surveyed the partition or subdivision, conforming to the requirements of ORS 92.

8. The date, north point and scale of the drawing, and a sufficient description to define the location and boundaries of the partition or subdivision.

9. The locations, names and widths of all streets, existing or being created.

Since submission of the Final Subdivision application, PC 20 16 SUB 02, the private drive shown as 'Tract B' on the final subdivision plat draft has been named. This name has been approved and the name "Murrelet Lane." shall be shown on the final subdivision plat before recording, **[Condition 6]**. Other than this condition, the application meets the above criteria.

10. The width and location of all existing easements for public utilities, and such easements being created, and also all reserve strips required as provided for by this Chapter.

11. A designation of all areas covered by water, and the location, width and direction of flow of all watercourses.

12. A designation of all area being dedicated by the applicant including proposed uses, and an effective written dedication thereof.

13. Designation of all donations to the public of all common improvements including but not limited to streets, roads, parklands, multi-use trails and paths, sewage disposal and water systems, the donation of which was made a condition of approval of the tentative plat for the partition or subdivision.

Language on the plat draft include comments on private and public access areas, and utility easements. Aside from Condition 6 regarding the labeling of Murrelet Lane. to the final plat, these criteria have been met.

14. A copy of all protective deed restrictions, Covenants, Conditions, and Restrictions (CC&R's), easements, maintenance agreements and other documents pertaining to common improvements recorded and referenced on the plat.

The applicant submitted these documents with this request. These criteria have been met, (Exhibit "E"). However, the CCRs draft shall be amended with regard to the stormwater in 15th St. and the resulting maintenance agreement discussed in comments addressing FCC 9-5-4 2B, below, **[Condition 5]**.

15. A title report issued by a title insurance company licensed by the State of Oregon verifying ownership by the applicant of the real property that is to be dedicated to the public (Ord.626, 6-30-80)

No title report has been submitted to date and is not required since there is no proposal to dedicate public space. Easements are set forth in the applicant's CC&R's, (Exhibit "E").

16. A landscaping plan will be required delineating shrubs, trees, screen planning and natural vegetation corridors. The plan will show approximate height, species (and alternatives), placement and areas. The location of all trees measuring 10 inches (10") minimum (DBH) existing prior to development will be shown and those proposed to be removed. A maximum number of these trees will be retained, subject to provision of adequate area for building, parking and yard area, protection form windthrown hazard and solar access. (Ord. 626, 6-30-80; amd. Ord. 669, 5-17-82).

The applicant has provided a Landscaping Plan, (Exhibit ”K”). Aside from the 10’ strip located on the western boundary of the project and noted in Condition 4, this criterion shall be met prior to final development.

11-4-3: REVIEW BY OTHER AGENCIES AND DEPARTMENTS: Within five (5) working days after the partition or subdivision is duly submitted the Planning Director shall distribute copies thereof to the City Manager, to each public utility, the County Health Department, and to each government division that may be affected by the application for review, comments, or recommendations, If no written response is received by the Planning Director within thirty (30) days, it shall be assumed that the agency(s) approves of the application as submitted unless an extension is requested.

All relevant agencies were notified on May 21, 2020. This criterion has been met.

11-4-4: APPROVAL OF FINAL PLAT: Within ten (10) days of the receipt of all comments and recommendation requested from appropriate agencies and departments or within forty-five (45) days of the receipt of a partition or subdivision plat application as provide for in this Title, the Planning Director shall approve, deny, or, when further information is required, postpone a decision on the application. The Planning Director may or its designee shall approve, deny, or, when further information is required postpone a decision on the application. The Planning Director may require its designee to submit any tentative approval to the Director for review prior to notification of the applicant. In the event of a denial, the application shall be reviewed by the Planning Director within forty-five (45) days. Approval shall be based on the following criteria:

A. Streets, roads and alleys for public use are dedicated without any reservation or restriction other than reversionary rights upon vacation of any such street or road and easement for public utilities.

All dedications are indicated in the final plat draft document. This criterion has been met.

B. Streets and roads held for private use and indicated on the tentative plan of such partition or subdivision have been approved by the City.

The tentative plat draft was approved by the Planning Commission on November 26, 2020, (Exhibit “N”). The submitted final plat draft varies slightly in design and content only to address conditions set forth in the prior approval. A private drive will be named Murrelet Dr. and provides for the required area for vehicles to back out into the drive from the two parking lots shown on Sheet C2 of Exhibit “C.” This criterion has been met.

C. The proposal conforms to the requirements of this Title, Title 9, all applicable provisions of the Oregon Revised Statutes, the Florence Zoning Ordinance, Comprehensive Plan, and all other applicable laws and regulations as well as Section 11-1-1, Purpose, of this Title.

Staff has reviewed the content of the final plat draft and believes that it conforms to this criterion. This criterion has been met.

D. The final plat is consistent in design with the approved preliminary plat and all conditions of approval have been satisfied.

The tentative plat draft was approved by the Planning Commission on November 26, 2020, (Exhibit "N**").** The submitted final plat draft varies slightly in design and content only to address conditions set forth in the prior approval. This criterion has been met.

E. The plat and deed contains a donation to the public of all common improvements including by not limited to streets, roads, parklands, multi-use trials and paths, sewage disposal and water supply systems, the donation of which was made a condition of the approval of the tentative plan for the partition or subdivision or in the case of parklands could also have been voluntarily donated.

This criterion is not applicable since there is no dedication of public space. The internal drive is to be privately maintained. Easements, however, have been dedicated and are reflected on the final plat draft, (Exhibit "D").

F. Explanations of all common improvements required as conditions of approval of the tentative plan of the partition or subdivision have been accounted for and referenced on the plat or map.

Site improvements are provided in the PUD site plans that were submitted May 11, 2020 and will be amended in the as-builts (revised drawings upon project completion).

G. Verification by the City that water and sanitary sewer service is available to every lot depicted on the plat.

The City has reviewed the preliminary and final plans and plat and have determined that they meet this criterion.

H. Either:
1. **Improvements as required by Titles 9 and 10, or condition of tentative plan approval have been completed and filed with the City; or**
2. **A performance agreement (bond) or suitable substitute as agreed upon by the City and applicant has been filed with the Finance Officer in a sufficient amount of time to insure the completion of all required improvements; or**
3. **A petition for improvements has been property executed by the applicant and will be assessed for said improvements.**

The final plat application for DevNW Airport Road was submitted May 11, 2020. Planning Commission approval for the final plat draft is scheduled for June 9, 2020. No bond was required due to scope of the project primarily containing private facilities. These criteria are not applicable.

I. Taxes, as well as public liens, assessments and fees with respect to the partition or subdivision have been paid; or adequate guarantee has been provided assuring said taxes liens, assessments and fees will be paid prior to recordation.

The Lane County Assessment and Taxation Department is required to sign the plat before it may be recorded. The Assessor ensures taxes and fees are collected before signing the final plat.

J. As applicable, the applicant has furnished acceptable copies of Covenants, Conditions, and Restrictions (CC&R's), easements, maintenance agreements and other documents pertaining to common improvements recorded and referenced on the plat.

The applicant has submitted draft CC&R's with this proposal (Exhibit "E"), although they will need amending before finalizing as discussed in Condition 5. This criterion has been met.

K. The Plat contains an affidavit by the surveyor who surveyed the land, represented on the plat to the effect the land was correctly surveyed and marked with property monuments as provided by ORS Chapter 92, indicating the initial point of the survey, and giving the dimensions and kind of each monument and its reference to some corner approved by the County Surveyor for purposes of identifying its location.

The submitted final plat draft depicts the above criteria, (Exhibit "D"). This criterion has been met.

11-4-5: EXPIRATION OF TENTATIVE PLAN APPROVALS: If the conditions set at the time of approval are not fulfilled and the plat or map offered for recording by the partitioner or subdivider in the office of the County Recording Officer within two (2) years, unless approved as a phased subdivision tentative plan consistent with FCC 11-3-8, the tentative plan approval is null and void, and a new application for plat or map approval must be submitted for reconsideration.

An extension of the tentative plan may be pursued consistent with FCC 11-3-6.

Unless the applicant does not file the final approved plat within two years, then this criterion does not apply. If the applicant requires an extension, then Florence City Code provides for that avenue.

11-4-6: DELIVERY OF FINAL PLAT TO COUNTY RECORDER:

A. (….)

B. Subdivision: Within (60) days of City approval of the final plat the Planning Director shall:
1. **Obtain on the approved subdivision plat the signature of the County Assessor, whose signature shall certify that all taxes on the property have been paid;**
2. **Obtain on the approved subdivision plat the signature of the Planning Director, whose signature shall certify that the platting laws of the State and the requirements of this Title have been complied with; (Amd. Ord 30, Series 1990).**
3. **Deliver the approved subdivision plat to the office of the County Clerk;**
4. **Notify the subdivider that the approved subdivision plat has been delivered to the office of the County Clerk and may be offered for recording.**

C. Prerequisites to Recording the Plat:
1. **No plat shall be recorded unless all ad valorem taxes and all special assessments, fees, or other charges required by law to be placed on the tax roll have been paid in the manner provide by ORS Chapter 92.**
2. **No plat shall be recorded until the County Surveyor approves it in the manner provided by ORS Chapter 92.**

TITLE 9: UTILITIES

CHAPTER 5: STORMWATER MANAGEMENT

9-5-2: DRAINAGE PLAN SUBMITTAL REQUIREMENTS:

9-5-2-1: GENERAL:

A. A Drainage Plan is required for all development, except as provided in FCC 9-5-2-4. Submittal requirements are tailored to the size and impacts of the development. The submittal requirements are specified in the Stormwater Manual.

B. A registered Professional Engineer licensed by the State of Oregon shall prepare, certify, and seal the Drainage Plan whenever a Professional Engineer is required in the Stormwater Manual or state law. Furthermore, prior to land disturbing activity, the developer for the land disturbing activity shall certify that the proposed activities will be accomplished pursuant to the approved plan.

C. If a land use approval is required, the Drainage Plan shall be submitted and approved as part of the land use approval process. If no land use approval is required, the Drainage Plan shall be submitted as part of the application for a construction or facility permit.

An engineered drainage plan is required and has been submitted by the applicant in conjunction with their Public Facilities permit (Exhibit "G" and "H"). Additionally, a copy of the Department of Environmental Quality permit application and approved permit have been submitted (Exhibits "I" and "J"). This latter permit essentially addresses acknowledgement of the handling of stormwater discharge through the engineered drainage plan/study. However, changes in the stormwater plans will need to reflect those discussed in Condition 5.

The subject property is not identified in the Florence Stormwater Management Plan (Figure 5-4: Florence Southwest Region South View) as an area of predicted flooding, predicted groundwater flooding, or reported flooding problem. These criteria have been met.

9-5-3: STORMWATER DESIGN CRITERIA:

9-5-3-1: GENERAL:

A. The criteria in Section 9-5-3 shall be used in the design of public and private stormwater drainage and management systems. Stormwater management facilities shall be constructed in accordance with the Stormwater Manual: the 2008 Portland Stormwater Management Manual, as superseded by the December 2010 City of Florence Stormwater Design Manual; and the 2008 City of Portland Erosion and Sediment Control Manual.

9-5-3-2: STORMWATER QUANTITY (FLOW CONTROL):

A. A 25-year, return period storm shall be used for the design of all private and public stormwater drainage systems.

B. Onsite stormwater management facilities shall be required to prevent the post-development runoff rates from a project site from exceeding the pre-development runoff rates from the site, based on a 2 through 25-year storm. Exemptions to this requirement may be approved by the City Manager or his/her designee if it is determined that a more effective solution is available and that downstream capacity will accommodate the increase in flow.

C. Each new development project is responsible for mitigating its impacts on the stormwater system. This mitigation requirement can be satisfied through the use of

any of the following techniques, subject to the other limitations identified by this Code:

1. Construction of onsite facilities to limit the flow rate of stormwater runoff leaving the development site, in accordance with the Stormwater Manual.

2. Enlargement or improvement of the down gradient conveyance system in accordance with the requirements of this Code and the City of Florence Stormwater Management Plan.

D. The development of any land requiring a Drainage Plan shall address onsite and off-site drainage concerns, both up gradient and down gradient (a minimum of 1/4-mile) of the project, including:

1. Modifications to the existing onsite stormwater drainage and management facilities and drainage patterns shall not restrict or redirect flows creating backwater or direct discharge on to off-site property to levels greater than the existing condition unless approved by the affected offsite property owners and the City. Proof of off-site property owners approval shall be provided by having the affected property owner(s) sign an easement identifying the location of the backwater storage or impoundment area. This area shall be clearly shown on the submitted Drainage Plan site sheet(s). The easement shall be in a form approved by the City and recorded with the Lane County Deeds and Records Office.

2. Stormwater facilities shall be designed and constructed to accommodate all flows generated from the project property in accordance with the land use zoning as shown in the most recent approved City Code.

3. Capacity of the downstream drainage system to determine if increases in peak flow rates resulting from the proposed development can be accommodated.

E. The types of stormwater management controls presented in the Stormwater Manual are available for owners and developers to use in satisfying the pre-developed and post-development runoff requirement. More than one of these types of controls may be needed to satisfy the runoff requirement. In areas where the runoff requirement in Section 9-5-3-2-F are exempt or partially exempt, the City may require improvements to the down gradient conveyance system.

See staff response to FCC 9-5-4-2, below.

9-5-4: MAINTENANCE RESPONSIBILITY:

9-5-4-2: PRIVATE FACILITIES:

A. Private stormwater facilities must be maintained in accordance with the Operations and Maintenance Plan approved as part of the Drainage Plan. The Operations and Maintenance Agreement will be recorded with the Lane County Deeds and Records Office. The Stormwater Manual contains the Operations and Maintenance Agreement Form to be used. A log of all maintenance activity shall be kept by the owner and made available to the City upon request. The City may, at its option, inspect the facilities for compliance with the requirements. If a property owner fails to maintain their facilities, the City may issue a written notice specifying the required actions. If corrective actions are not completed in a timely manner, the City

may pursue legal remedies to enforce the provisions of the Operations and Maintenance Plan. The City will only enter the property to perform the required corrections if the public's health and public property are in imminent danger. In this situation, reasonable attempts will be made to contact the property owner(s), but a written notice may not be required. The property owner(s) will be billed for City incurred expense.

B. The Maintenance Agreement shall provide that upon notification by the City of any violation, deficiency or failure to comply with the agreement or this Code, corrections shall be completed within ten (10) days after notice thereof. Thereafter the City may pursue legal action to enforce the provisions of the agreement. In an emergency situation, the City may provide for all necessary work to place the facility in proper working conditions. The persons specified as responsible for maintenance in the Maintenance Agreement shall be charged the costs of the work performed by the City or its agents.

With the tentative stormwater plan conditionally approved in November 2019 (Exhibit "T"), water was to be handled exclusively on-site. This was also true of the most recent stormwater plan shown in Exhibit "G". More recently, it has been discovered that the existing water main is not buried deep enough to support the development of the proposed swale that was to be constructed along Airport Rd./15th St. Additionally, because Airport Rd./15th St. will be widened at some point in time, it has been determined that the planned swale will instead become a raised planting area, and that stormwater from roof gutters would now be conveyed to the swale at the NW corner of Airport. Once the street is widened, this stormwater facility may be redesigned. The private facilities on site will be maintained privately and will be constructed under a construction permit. The existing retention pond (in the public right-of-way at the NW intersection of 15th St. and Nopal) will be maintained by the property owner and/or future Homeowners Association. The use of the Public right-of-way as storm drainage triggers the need for a maintenance agreement through a formal Memorandum of Understanding. Maintenance of all private and public facilities will be per the City of Florence's Stormwater Design Manual. Repairs to storm facilities shall be made in accordance with City of Florence Public Works Department. Operations and Maintenance information is included in Appendix D of the applicant's Stormwater Report (Exhibits "G" and "R"), **[Condition 5]**.

9-5-5: EASEMENTS:

9-5-5-2: PRIVATE FACILITIES:

A. Private facilities must be placed in an easement, tract, or right-of-way that allows for the maintenance of these facilities in accordance with the Operations and Maintenance Agreement.

B. The City may determine that certain privately owned facilities are critical components of the overall stormwater system. In these situations, the City shall be granted perpetual, non-exclusive access that allows for public inspection. The access shall be defined in accordance with the requirements for a public easement, tract, or right-of-way.

See staff response to FCC 9-5-4-2, above.

Conditions of Approval for Resolution PC 19 22 PUD 03, Resolution PC 19 23 SUB 04, Resolution PC 19 25 CUP 08 (Exhibit "N"), **and Conditions of Approval for Resolution PC 20 05 CUP 01** (Exhibit "O")

Before considering final approvals (and discussed in the Narrative of these findings), it is imperative to address the conditions outlined in the tentative approvals to ensure that the proposed development remains consistent and does not significantly change. Therefore, Planning staff has provided a checklist of the conditions that need to be met from the above prior approvals, (Exhibit "Q"). Each of these conditions are taken from their respective Resolutions and retain the exact numbering for ease of review.

VI. CONDITIONS OF APPROVAL

The applications, as presented, meet or can meet applicable City codes and requirements, provided that the following conditions of approval are met.

Approval shall be shown on conditions of approval as supported by the following record:

"A"	Findings of Fact
"B"	Final PUD and Final Subdivision Plan Application
"C"	Final PUD Site Plan (5/11/2020)
"D"	Final Subdivision Plat Draft (5/11/2020)
"E"	Draft of Declaration of CC&R's
"F"	Development Schedule
"G"	Stormwater Management Plan and Drainage Study (3/6/2020)
"H"	Site Improvements Erosion and Sediment Control Plan
"I"	DEQ Stormwater Discharge Permit
"J"	DEQ Stormwater Discharge Permit Registration Letter
"K"	Landscaping Plan
"L"	Right-of-way Permit Application
"M"	Keener Place Phase 1 PUD Subdivision Plat
"N"	Resolution PC 19 22 PUD 03, PC 19 23 SUB 04, and PC 19 05 CUP 01
"O"	Condition of Approval Response from Resolution PC 20 05 CUP 01
"P"	Testimony: Chuck Trent, Boys and Girls Club
"Q"	Prior Approval Conditions Staff Checklist
"R"	Stormwater Comments (June 2, 2020)

Findings of Fact attached as Exhibit "A" are incorporated by reference and adopted in support of this decision.

1. Any modifications to the approved plans or changes of use, except those changes relating to Building Codes, will require approval by the Community Development Director or Planning Commission/Design Review Board.

2. Regardless of the content of material presented, including application text and exhibits, staff reports, testimony and/or discussions, the applicant agrees to comply with all regulations and requirements of the Florence City Code which are current on this date, EXCEPT where variance or deviation from such regulations and requirements has been specifically approved by formal Planning Commission action as documented by the records of this decision and/or the associated Conditions of Approval. The applicant shall submit to the Community Development Department a signed "Agreement of Acceptance" of all conditions of approval prior to issuance of a building permit.

3. Upon encountering any cultural or historic resources during construction, the applicant shall immediately contact the State Historic Preservation Office and the Confederated

Tribes of Coos, Lower Umpqua, and Siuslaw Indians. Construction shall cease immediately and shall not continue until permitted by either a SHPO or CTCLUSI representative.

4. The applicant shall amend the Landscaping Plan to (a) include landscaping/irrigation notes for the 10' buffer area between the western property boundary and the parking lot and (b) provide vegetation in Tract C of the proposed development in order to retain the slope. Such vegetation shall be plantings that quickly establish root systems to ensure stability of the slope.

5. Due to a recent discovery regarding how rooftop drainage is conveyed to Airport Rd./15th St, the stormwater leaving the private on-site facilities shall reflect that it will collect in a facility in the public right-of-way. As such, the applicant shall submit a draft Memorandum of Understanding for responsibility of the surface and subsurface maintenance and future relocation of this private stormwater facility. The CC&R's shall also reflect the responsibility of the future HOA in maintaining the public stormwater facility. Such memorandum shall be submitted to the Planning Department and recorded with Lane County Deeds and Records.

6. The labeling of the recently approved Murrelet Lane name, and to be located in Tract B of the final plat draft, shall be added to the final plat.

7. Condition 32 in Exhibit "N" addresses capping a sewer lateral: "Locate and cap the two existing sanitary sewer laterals that serviced the former Senior Center and the undeveloped area to the east." Changes to the final plan include reusing the existing sewer lateral located in the undeveloped area to the east. The plans note to cap the sanitary sewer lateral that serviced the former Senior Center. One lateral not referenced in the condition will connect to the sewer main located in the emergency access turnaround at the south end of Nopal St. The updated plan does not show that these are to be used, so they shall be capped.

8. The applicant shall have the photometric plans amended to illustrate that lighting remains internal to the development.

9. Condition 23 in Resolution PC 19 22 PUD 03, PC 19 23 SUB 04, and PC 19 05 CUP 01 (Exhibit "N") states that the applicant shall submit a plan for mail boxes, approved by the United States Postal Service, prior to the issuance of any building permits for residential structures.

The applicant references communication with the Building Department discussing that addresses must first be assigned before this condition can be met. The addresses have been assigned and the mailbox noted on Sheet C3's Legend, although staff was unable to confirm its location on the plans. Permanent placement of the mailbox is under the purview of the United States Postal Service, so the plans shall be amended to reflect its final location.

10. The applicant shall have the final plat draft amended to reflect the location of private stormwater drainage easements as stated in the CC&R's. Additionally, in order to satisfy Condition 38 of Resolution PC 19 22 PUD 03, Resolution PC 23 SUB 04 and Resolution PC19 05 CUP 01 (Exhibit "N"), the final plat (Exhibit "D") shall describe the areas specifically reserved as open space and common space, and that residential building/s except for storage are allowed on Tracts A and C.

11. Field investigation has changed the requirements of Condition 31, which is outlined in Resolution PC 19 22 PUD 03, Resolution PC 23 SUB 04 and Resolution PC19 05 CUP, (Exhibit "N"). What is currently on the plans is not reflective of the final changes and the following shall be noted on the as-built drawings: The proposed fire hydrant is in the correct location, but shall be connected to a new 'T' that will be cut into the existing water main. From that point continuing to the east to the connection for the water main that loops through the development, the contractor shall re-section the water main in order to remove a cross and install a new 'T' and the valve cluster (the three water main line valves). The plans shall be updated and approved by City staff accordingly.

VII. EXHIBITS

"A"	Findings of Fact
"B"	Final PUD and Final Subdivision Plan Application
"C"	Final PUD Site Plan (5/11/2020)
"D"	Final Subdivision Plat Draft (5/11/2020)
"E"	Draft of Declaration of CC&R's
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"G"	Stormwater Management Plan and Drainage Study (3/6/2020)
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"I"	DEQ Stormwater Discharge Permit
"J"	DEQ Stormwater Discharge Permit Registration Letter
"K"	Landscaping Plan
"L"	Right-of-way Permit Application
"M"	Keener Place Phase 1 PUD subdivision
"N"	Resolution PC 19 22 PUD 03, PC 19 23 SUB 04, and PC 19 05 CUP 01
"O"	Condition of Approval Response from Resolution PC 20 05 CUP 01
"P"	Testimony: Chuck Trent, Boys and Girls Club
"Q"	Prior Approval Conditions Checklist by Staff
"R"	Stormwater Comments from Public Works Director
"S"	Tentative Geotechnical Engineering and Site Recommendations
"T"	Excerpt From 2019 Tentative Stormwater Plan

City of Florence
Community Development Department
250 Highway 101
Florence, OR 97439
Phone: (541) 997 – 8237
Fax: (541) 997 – 4109
www.ci.florence.or.us

Type of Request

THIS SECTION FOR OFFICE USE ONLY

☐ Type I ☐ Type II ☐ Type III ☐ Type IV

Proposal: _____

Applicant Information

Name: Stonewood Construction, Inc Phone 1: [redacted]

E-mail Ac[redacted] Phone 2: _____

Address: [redacted]

Signature[redacted] Date: 2/4/20

Applicant's Representative (if any): Josh Shafer

Property Owner Information

Name: DevNW Phone 1: [redacted]

E-mail Add[redacted] Phone 2: _____

Address: [redacted]

Signature: [redacted] Date: _____

Applicant's Representative (if any): Erin Dey

NOTE: *If applicant and property owner are not the same individual, a signed letter of authorization from the property owner which allows the applicant to act as the agent for the property owner must be submitted to the City along with this application. The property owner agrees to allow the Planning Staff and the Planning Commission onto the property. Please inform Planning Staff if prior notification or special arrangements are necessary.*

For Office Use Only:

Received	Approved	Exhibit
		Exhibit B

Property Description

Site Address: 1424 Airport Road, Florence, OR

General Description: Undeveloped Lot from the on the southwest corner of Airport Road and Nopal Street.

Assessor's Map No.: 18 - 12 - 27 - 1 Tax lot(s): 15400

Zoning District: Multi-family Residential

Conditions & land uses within 300 feet of the proposed site that is one-acre or larger and within 100 feet of the site that is less than an acre OR add this information to the off-site conditions map (FCC 10-1-1-4-B-3): Low density residential to the west. High density residential to the south, and high density residential to the east. High density residential to the north

Project Description

Square feet of new: 48000 Square feet of existing: 0

Hours of operation: N/A Existing parking spaces: 0

Is any project phasing anticipated? (Check One): Yes ☐ No ☒

Timetable of proposed improvements: Construction to begin February 26, 2020

Will there be impacts such as noise, dust, or outdoor storage? Yes ☐ No ☒

If yes, please describe:

Proposal: (Describe the project in detail, what is being proposed, size, objectives, and what is desired by the project. Attach additional sheets as necessary)

The project consists of both public and private improvements. The public improvements include an extension to Airport Road to conform with city standards of a collector, and will include a stormwater treatment facility and sidewalk. a public water and sanitary line will extend through the site to connect to the proposed development. The private improvements will include a connecting drive aisle from Airport Road to Nopal Street with parking throughout. Twelve new homes will be constructed with an internal space for recreation serving the new development.

For Office Use Only:

Date Submitted: Fee:

Received by:

Paid

INDEX

OWNER

CORVALLIS NEIGHBORHOOD HOUSING SERVICES, INC.
212 MAIN ST
SPRINGFIELD, OR 97477

VERTICAL DATUM

OR NAD83 2011/GEOID12A–ORGN
OREGON COAST

SOIL TYPES:

ACCORDING TO THE USDA NATURAL RESOURCES CONSERVATION SERVICES WEB SOIL SURVEY, THE SITE SOIL IS MAPPED AS WALDPORT FINE SAND (MAP UNIT SYMBOLS 131C AND 131E).

GENERAL NOTES:

1. UPON ENCOUNTERING ANY CULTURAL OR HISTORIC RESOURCES DURING CONSTRUCTION, THE APPLICANT SHALL IMMEDIATELY CONTACT THE STATE HISTORIC PRESERVATION OFFICE AND THE CONFEDERATED TRIBES OF COOS, LOWER UMPQUA, AND SIUSLAW INDIANS. CONSTRUCTION SHALL CEASE IMMEDIATELY AND SHALL NOT CONTINUE UNTIL PERMITTED BY EITHER A SHPO OR CTCLUSI REPRESENTATIVE.

CURVE TABLE				
CURVE #	LENGTH	RADIUS	DELTA	CHORD
C1	9.35	20.54	26°04'01"	N13°00'28"E, 9.27

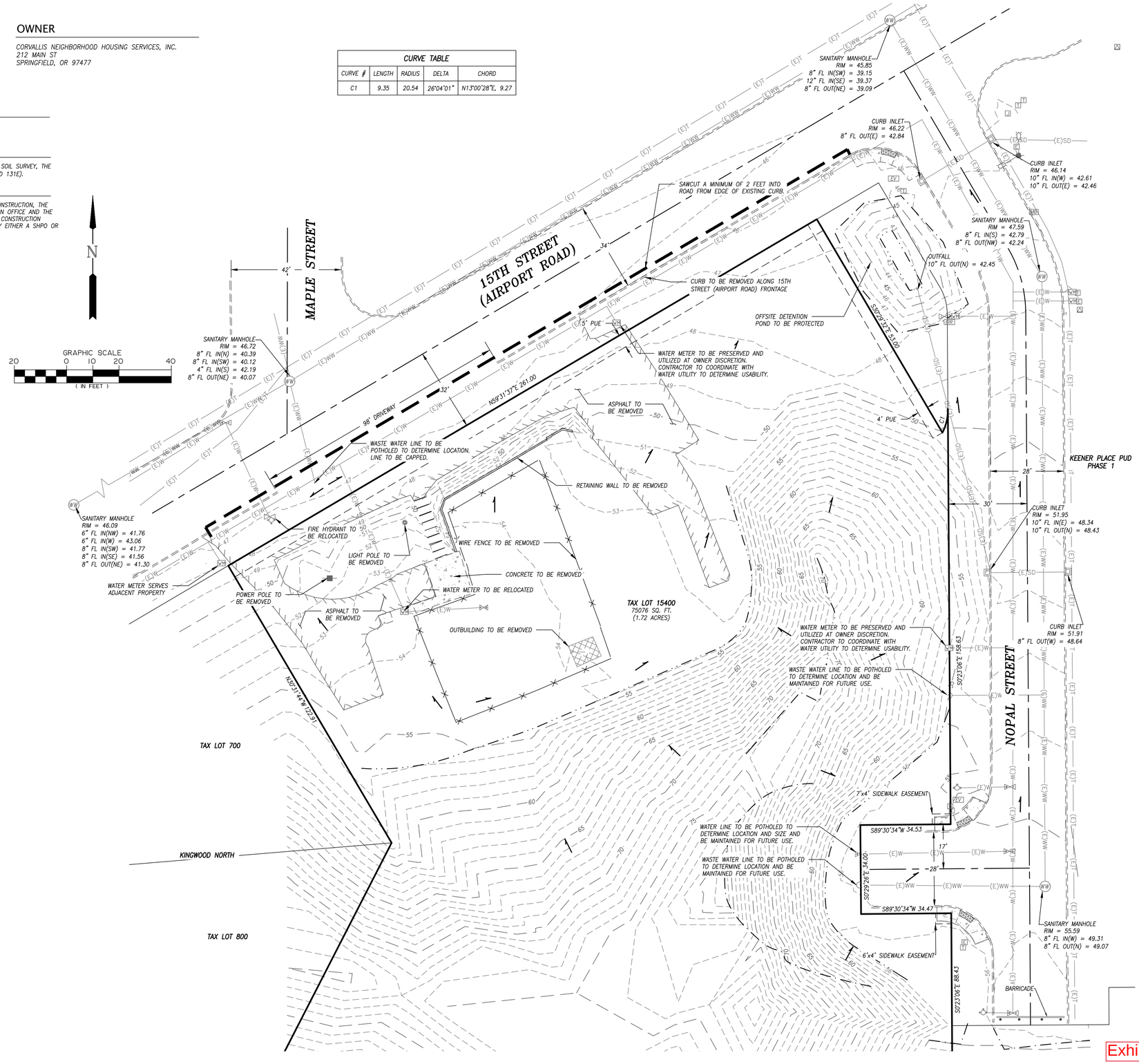

Exhibit C

LEGEND

EXISTING

- CONTOUR LINE
- SAWCUT LINE
- FENCE LINE
- STRUCTURE
- ASPHALT EDGE
- CONCRETE
- CURB
- DETECTABLE WARNING SURFACE
- STAIRS
- TOP OF SLOPE
- TOE OF SLOPE
- WATER LINE
- WATER VALVE
- WATER METER
- HOSE BIB
- FIRE HYDRANT
- IRRIGATION VALVE
- IRRIGATION BOX
- STORMWATER LINE
- STORMWATER CURB INLET
- SANITARY SEWER MAIN
- SANITARY SEWER CLEANOUT
- SANITARY SEWER MANHOLE
- UNDERGROUND COMMUNICATION LINE
- TELEPHONE RISER
- ELECTRICAL POLE
- LIGHT POLE
- ONSITE LIGHT POLE
- ELECTRIC VAULT
- ELECTRIC RISER
- JUNCTION BOX
- TRANSFORMER
- MAIL BOX
- SLOPE ARROW

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Springfield OR | Albany OR

REGISTERED PROFESSIONAL LAND SURVEYOR

DIGITALLY SIGNED

OREGON
NOVEMBER 30, 2007
RENEE CLOUGH
69162LS
EXPIRES: December 30, 2021

project title:

DEVNW AIRPORT RD. FINAL PUD

TAX MAP: 18-12-27-1, TAX LOT: 15400
FLORENCE, OREGON
97439

revisions:

date:	APRIL 3, 2020
drawn by:	AWMS
designer:	RC
project no:	18-493

EXISTING CONDITIONS AND DEMO PLAN

sheet: **C1**

Z:\2018\18-493 Keener Place\Drawings\Final PUD.dwg 5/1/2020 9:24 AM DREWS

LEGEND

EXISTING		PROPOSED	
71	CONTOUR LINE	71	CONTOUR LINE
	ASPHALT EDGE		BUILDING
	CONCRETE		ASPHALT EDGE
	CURB		ASPHALT
	DETECTABLE WARNING SURFACE		CURB
	TOP OF SLOPE		CONCRETE
	TOE OF SLOPE		STORAGE SHED
WV	WATER VALVE		DETECTABLE WARNING SURFACE
WM	WATER METER		TOP OF SLOPE
	FIRE HYDRANT		TOE OF SLOPE
IRV	IRRIGATION VALVE		STORMWATER FACILITY
IRR	IRRIGATION BOX		CURB INLET
	STORMWATER CURB INLET		RIP RAP BASIN
MW	SANITARY SEWER MANHOLE		DITCH INLET
T	TELEPHONE RISER	WM	WATER METER
	ELECTRICAL POLE	WV	WATER VALVE
	LIGHT POLE		PUBLIC FIRE HYDRANT
EV	ELECTRIC VAULT	MW	SANITARY MANHOLE
E	ELECTRIC RISER		AREA DRAIN
J	JUNCTION BOX	E	ELECTRIC VAULT
	TRANSFORMER		ELECTRIC TRANSFORMER
MB	MAIL BOX		ELECTRIC MANAGED SPACE METER
			SIGN
			WHEEL STOP
			DECORATIVE PEDESTAL MOUNTED LIGHT
			FENCE
			10'X10' VISION CLEARANCE AREA
			TREE – SEE LANDSCAPING PLAN FOR TYPE

NOTE

1. TRACTS A AND B WILL HAVE A BLANKET EASEMENT FOR PRIVATE UTILITIES AND ACCESS SERVING LOTS 1–12.
2. ELECTRIC CAR CHARGING STATION(S) MAY BE INSTALLED WITH INITIAL CONSTRUCTION OR LATER AT DEVELOPER'S DISCRETION.
3. MAILBOXES TO BE COORDINATED WITH USPS ONCE ADDRESSES ARE ASSIGNED TO DEVELOPMENT.

PAVEMENT NOTES

1. CONTRACTOR TO SCHEDULE PROOF ROLL WITH ENGINEER PRIOR TO INSTALLING BASE COURSE FOR DRIVE AISLE.
2. ALL HOMEBUILDING CONSTRUCTION ACTIVITY TO OCCUR PRIOR TO INSTALLING ASPHALTIC CONCRETE.
3. CONTRACTOR TO SCHEDULE PROOF ROLL WITH ENGINEER PRIOR TO PAVING.

LINE TABLE		
LINE #	DIRECTION	LENGTH
L1	S00°23'06"E	3.00
L2	S30°29'32"E	5.00
L3	S89°30'34"W	5.00

CURVE TABLE				
CURVE #	LENGTH	RADIUS	DELTA	CHORD
C1	9.35	20.54	26°04'01"	N13°00'28"E, 9.27
C2	29.85	28.50	60°01'03"	S60°28'54"E, 28.51

TABULATION OF COVERAGE

TABULATION OF COVERAGE INCLUDES THE TOTAL SITE AREA

DEVELOPMENT SITE

TAX MAP 18–12–27–10 TAX LOT 15400

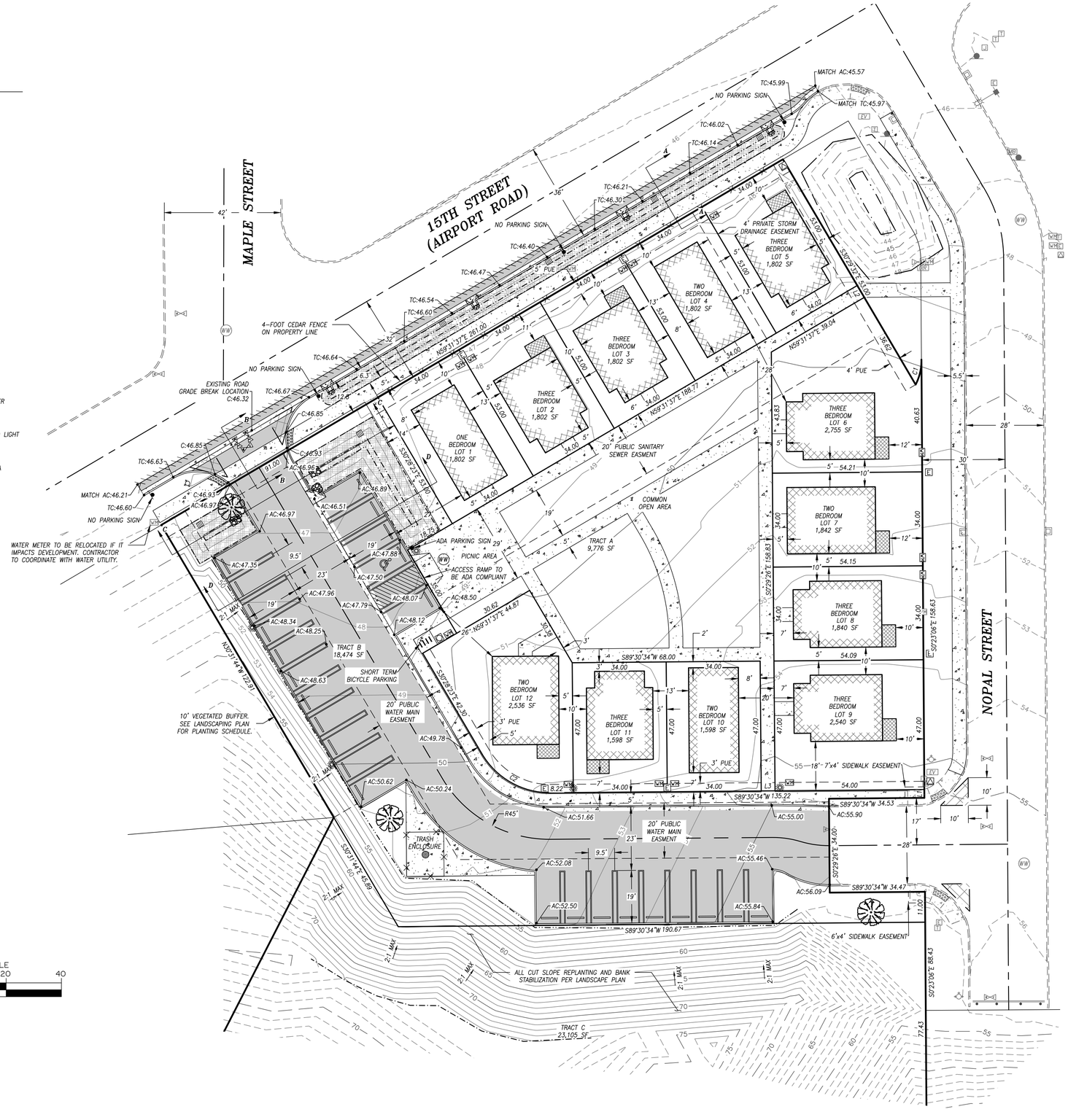
TOTAL SITE AREA	75,076 SF (1.72 ACRES)
DEVELOPMENT AREA	51,968 SF (1.19 ACRES)

EXISTING CONDITIONS

IMPERVIOUS AREA	
ROOF	83 SF (0.00 ARCES)
ASPHALT	5,508 SF (0.13 ACRES)
CONCRETE	263 SF (0.01 ACRES)
PERVIOUS AREA	46,114 SF (1.06 ACRES)

PROPOSED CONDITIONS

IMPERVIOUS AREA	
ROOF	11,808 SF (0.27 ACRES)
PARKING/DRIVE	11,165 SF (0.26 ACRES)
SIDEWALKS/CONCRETE	6,431 SF (0.15 ACRES)
PERVIOUS AREA	
YARDS	11,770 SF (0.27 ACRES)
COMMON	5,753 SF (0.13 ACRES)
CUTBANK LANDSCAPING	5,041 SF (0.12 ACRES)
INCREASE IN IMPERVIOUS AREA	23,550 SF (0.54 ACRES)
LANDSCAPED AREA	14,823 SF (0.34 ACRES)
LANDSCAPED STORMWATER FACILITIES	1,221 SF (0.03 ACRES)
UNDEVELOPED AREA	21,373 SF (0.49 ACRES)
PERCENTAGE OF TOTAL LOT LANDSCAPED	50%



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REGISTERED PROFESSIONAL ENGINEER #69162PE DIGITALLY SIGNED OREGON JANUARY 10, 2006 RENEE CLOUGH

EXPIRES: DECEMBER 30, 2021

project title:

DEVNW AIRPORT RD. FINAL PUD

TAX MAP: 18-12-27-1, TAX LOT: 15400
FLORENCE, OREGON
97439

revisions:

date:	APRIL 3, 2020
drawn by:	AWMS
designer:	RC
project no:	18-493

SITE AND GRADING PLAN

sheet: C2

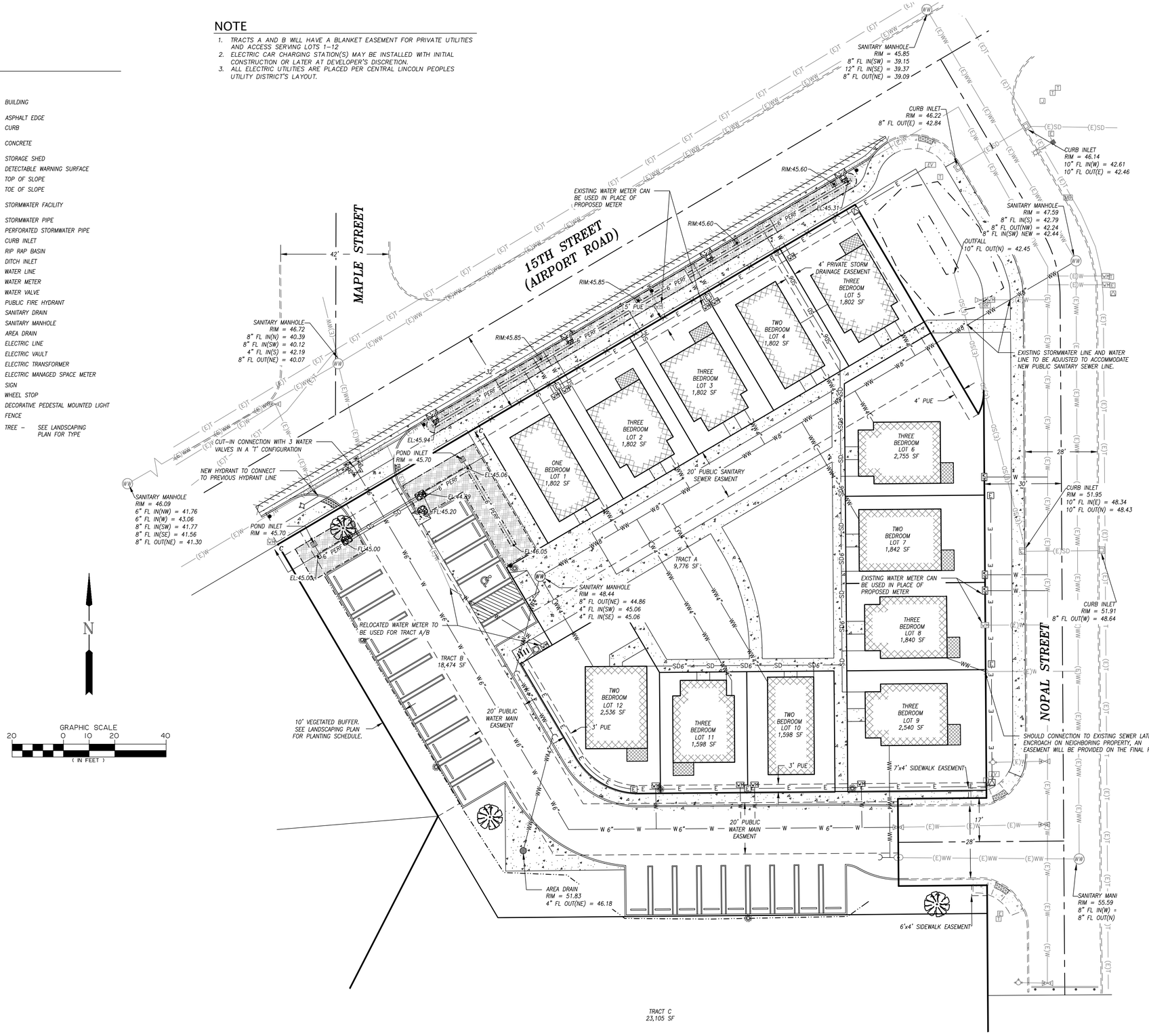
Z:\2018\18-493 Keener Place\Drawings\Final PUD.dwg 5/11/2020 9:24 AM DREWS

LEGEND

EXISTING		PROPOSED	
	ASPHALT EDGE		BUILDING
	CONCRETE		ASPHALT EDGE
	CURB		CURB
	DETECTABLE WARNING SURFACE		CONCRETE
	TOP OF SLOPE		STORAGE SHED
	TOE OF SLOPE		DETECTABLE WARNING SURFACE
(E)W	WATER LINE		TOP OF SLOPE
	WATER VALVE		TOE OF SLOPE
WM	WATER METER		STORMWATER FACILITY
	FIRE HYDRANT		
	IRRIGATION VALVE	SD SD	STORMWATER PIPE
IRR	IRRIGATION BOX	PERF	PERFORATED STORMWATER PIPE
(E)SD	STORMWATER LINE		CURB INLET
	STORMWATER CURB INLET		RIP RAP BASIN
(E)WW	SANITARY SEWER MAIN		DITCH INLET
	SANITARY SEWER CLEANOUT	W W	WATER LINE
WW	SANITARY SEWER MANHOLE	WM	WATER METER
(E)T	UNDERGROUND COMMUNICATION LINE		WATER VALVE
T	TELEPHONE RISER		PUBLIC FIRE HYDRANT
	ELECTRICAL POLE	WW WW	SANITARY DRAIN
	LIGHT POLE	WW	SANITARY MANHOLE
EV	ELECTRIC VAULT		AREA DRAIN
E	ELECTRIC RISER	E E	ELECTRIC LINE
J	JUNCTION BOX	E	ELECTRIC VAULT
	TRANSFORMER		ELECTRIC TRANSFORMER
MB	MAIL BOX		ELECTRIC MANAGED SPACE METER
			SIGN
			WHEEL STOP
			DECORATIVE PEDESTAL MOUNTED LIGHT
			FENCE
			TREE – SEE LANDSCAPING PLAN FOR TYPE

NOTE

1. TRACTS A AND B WILL HAVE A BLANKET EASEMENT FOR PRIVATE UTILITIES AND ACCESS SERVING LOTS 1–12
2. ELECTRIC CAR CHARGING STATION(S) MAY BE INSTALLED WITH INITIAL CONSTRUCTION OR LATER AT DEVELOPER'S DISCRETION.
3. ALL ELECTRIC UTILITIES ARE PLACED PER CENTRAL LINCOLN PEOPLES UTILITY DISTRICT'S LAYOUT.



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EXPIRES: DECEMBER 30, 2021

project title:

DEVNW AIRPORT RD. FINAL PUD

TAX MAP: 18-12-27-1, TAX LOT: 15400
FLORENCE, OREGON
97439

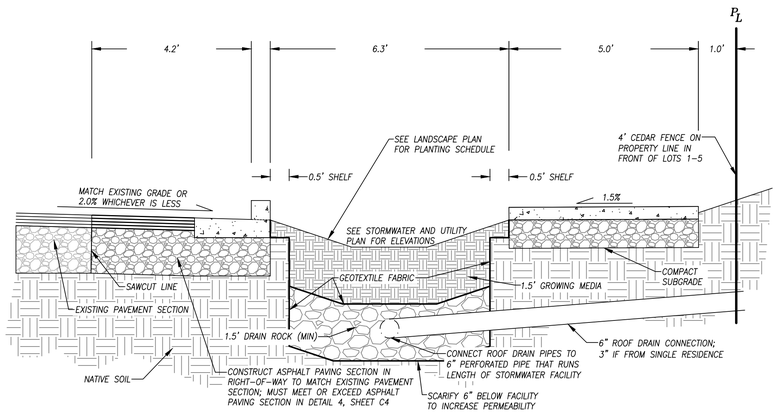
revisions:

date: APRIL 3, 2020
drawn by: AWMS
designer: RC
project no: 18-493

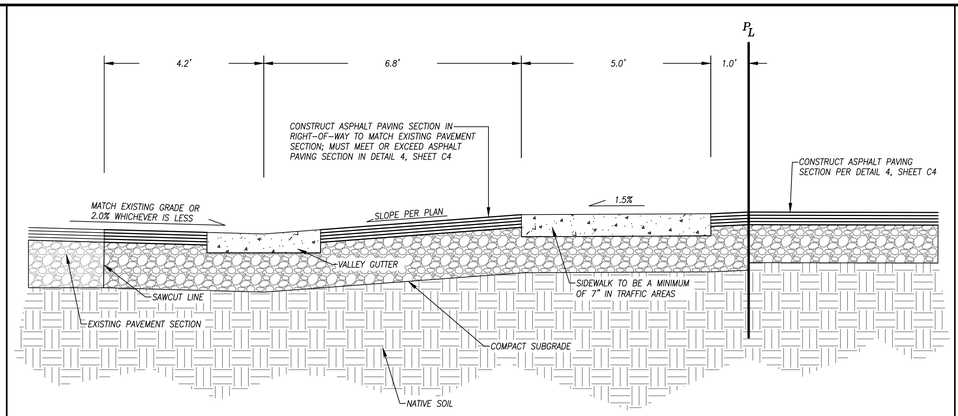
UTILITY AND STORMWATER PLAN

sheet: C3

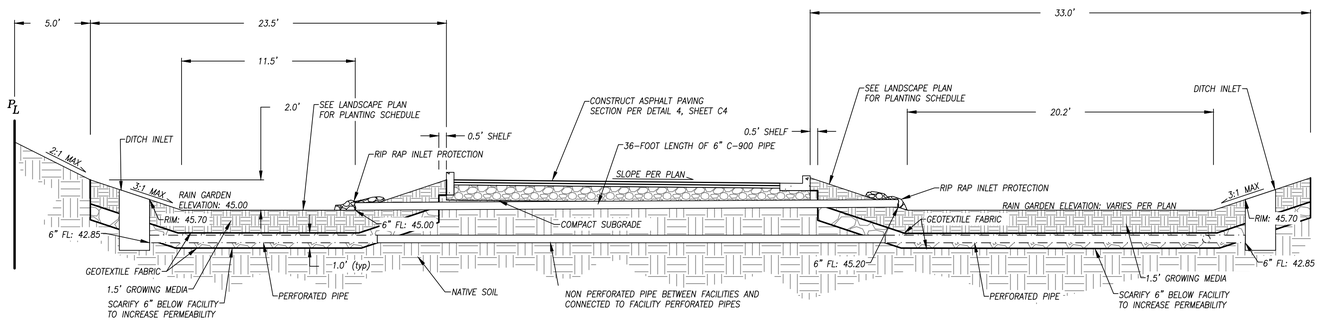
Z:\2018\18-493 Keenar Place\Drawings\Final PUD.dwg 5/11/2020 9:24 AM DREWS



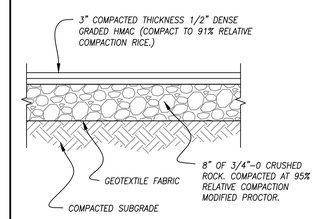
1 *SECTION VIEW A-A*
SCALE: N.T.S.



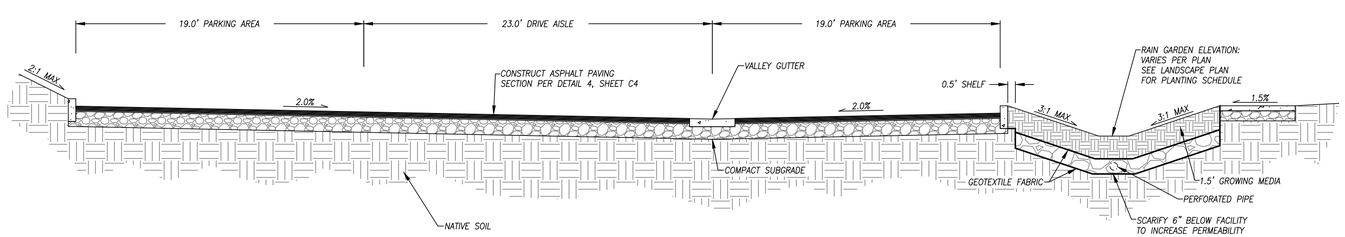
2 *SECTION VIEW B-B*
SCALE: N.T.S.



3 *SECTION VIEW C-C*
SCALE: N.T.S.



4 *AC SECTION*
SCALE: N.T.S.



5 *SECTION VIEW D-D*
SCALE: N.T.S.

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REGISTERED PROFESSIONAL ENGINEER #69162PE DIGITALLY SIGNED OREGON JANUARY 10, 2006 RENEE CLOUGH
EXPIRES: DECEMBER 30, 2021

project title:

DEVNW AIRPORT RD. FINAL PUD

TAX MAP: 18-12-27-1, TAX LOT: 15400
FLORENCE, OREGON
97439

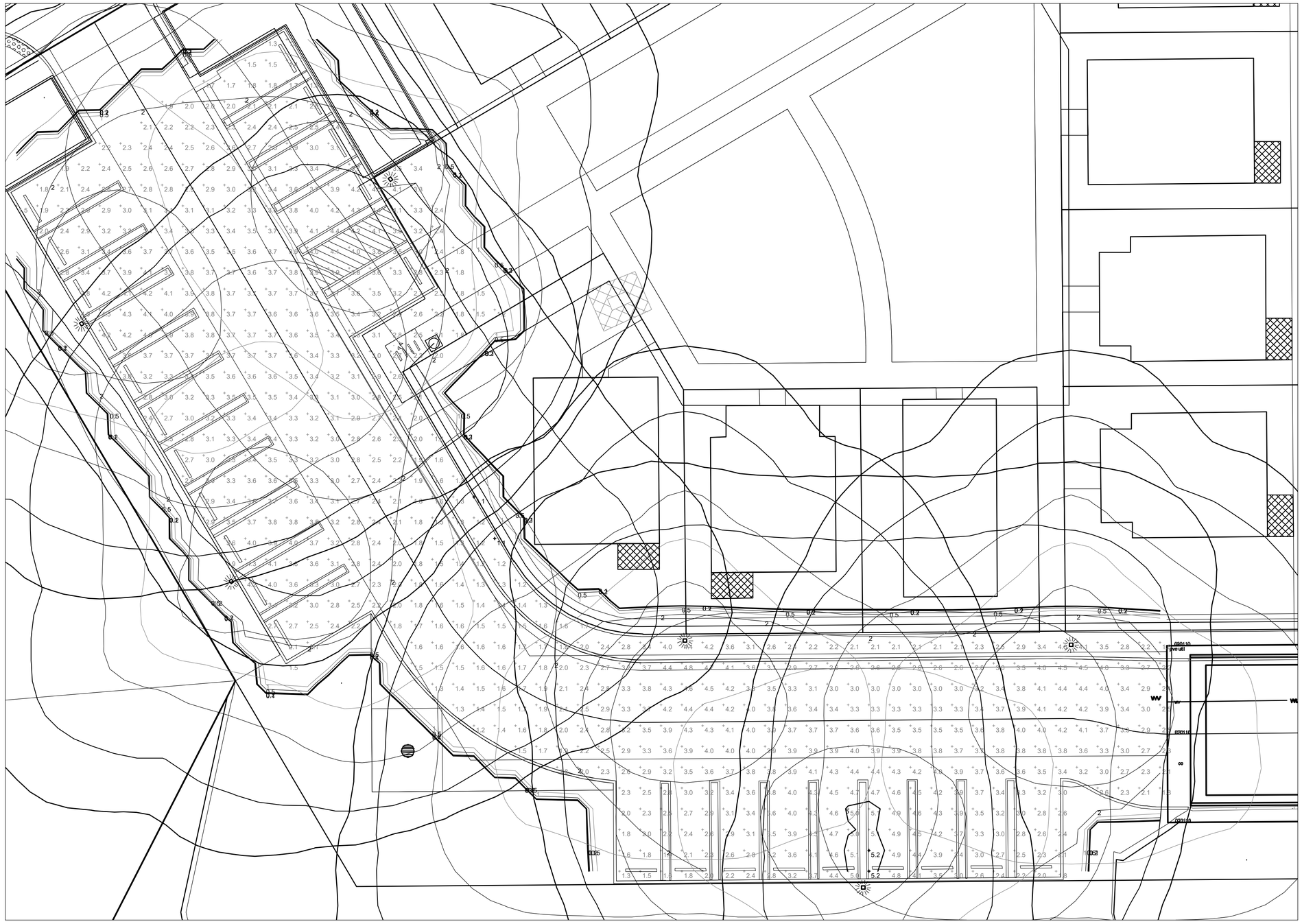
revisions:

date: APRIL 3, 2020
drawn by: AWMS
designer: RC
project no: 18-493

SECTION VIEWS AND DETAILS

sheet: **C4**

Z:\2018\18-493 Keener Pluck\Drawings\Final PUD.dwg 5/11/2020 9:24 AM DREWS



Parking Area Illumination Statistics						
Description	Symbol	Avg	Max	Min	Max/Min	Avg/Min
PARKING AREA ILLUMINANCE	+	3.0 fc	5.2 fc	1.1 fc	4.7:1	2.7:1

LIGHTING FIXTURES ANALYZED: RAB 110W LOTBLASTER LED, TYPE 4 DISTRIBUTION, 3000K COLOR TEMP, 120-277V WITH 0-10V DIMMING DRIVERS. MOUNTED AT 20 FEET. HOUSE SIDE SHIELD NOT AVAILABLE IN .IES FILE FOR ANALYSIS, BUT IS RECOMMENDED TO BE INSTALLED (/HS OPTION WHEN ORDERING) TO ELIMINATE/REDUCE LIGHT TRESPASS. MOUNTING (POLES/FOUNDATIONS), SWITCHING AND CIRCUITRY TO BE RESPONSIBILITY OF OWNER/CONTRACTOR. POLES ARE RECOMMENDED TO BE PLACED 3 FEET OR MORE FROM THE BACK OF THE CURB

Luminaire Schedule										
Symbol	Label	Quantity	Manufacturer	Catalog Number	Description	Lamp	Number Lamps	Filename	Lumens Per Lamp	Light Loss Factor	Wattage
	A	6	RAB LIGHTING INC.	LOT4T110Y/D10	CAST BRONZE PAINTED METAL HOUSING WITH BRONZE PAINTED PLASTIC DOOR, BRONZE PAINTED FINNED METAL HOUSING, TWO CIRCUIT BOARD EACH WITH 8 LEDS AND ONE CLEAR OPTICAL PLASTIC LENS ON TOP.	SIXTEEN LIGHT EMITTING DIODES (LEDS), VERTICAL BASE-UP POSITION. Area, Parking, Parks, Pathway, Pedestrian, Sidewalk, Site Sports, Utility, Roadway, Damp Location, Wet Location	16	LOT4T110Y D10 - RAB802516.IES	694	1	110

GRAPHIC SCALE
10 0 5 10 20
(IN FEET)

N

VISUAL

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REGISTERED PROFESSIONAL ENGINEER
#79199PE
DIGITALLY SIGNED
OREGON
JUNE 7, 2017
DANIEL N HAGA
EXPIRES: JUNE 30, 2021

project title:

DEVNW AIRPORT RD. FINAL PUD

TAX MAP: 18-12-27-1, TAX LOT: 15400
FLORENCE, OREGON
97439

revisions:

date: 4/27/2020
drawn by: DNH
designer: DNH
project no: 18-493

PARKING AREA LIGHTING PLAN

sheet: 1/1

Z:\2018\18-493 Keener Plaza\Drawings\LIGHTING\Final PUD ILL.dwg 5/1/2020 10:56 AM DREWS

DEVNW AIRPORT ROAD PUD
REPLAT OF LOT 11, KEENER PLACE, PUD PHASE 1
N.E. 1/4, SECTION 27, T.18S., R.12W., W.M.
FLORENCE, LANE COUNTY, OREGON
MAY 11, 2020

RECORDED

DATE _____

LANE COUNTY CLERK & RECORDER
OF CONVEYANCES

_____

LANE COUNTY SURVEYORS OFFICE
C.S. FILE No. _____
FILING DATE _____

NARRATIVE

THE PURPOSE OF THIS SURVEY IS TO MARK WITH PROPER MONUMENTS IN ACCORDANCE WITH OREGON REVISED STATUTES CHAPTER 92 AND LOCAL ORDINANCES THE SUBDIVISION PLAT OF DEVNW AIRPORT ROAD PUD, CITY OF FLORENCE FILE NUMBERS PC 19 22 PUD 03, PC 19 23 SUB 04, AND PC 19 25 CUP 08 AS GIVEN TENTATIVE APPROVAL DECEMBER 5, 2019 BY THE CITY OF FLORENCE. THE POINTS AND LINES SHOWN ON THIS PLAT ARE A RETRACEMENT OF KEENER PLACE PUD, PHASE 1 AND WERE ESTABLISHED AS FOLLOWS:

NOPAL STREET

THE CENTERLINE TANGENT SEGMENTS WERE ESTABLISHED BY HOLDING MONUMENTS A, B, C AND D. THE CENTERLINE CURVE WAS ESTABLISHED BY FILLETING A TANGENT CURVE OF RECORD RADIUS BETWEEN THE TWO TANGENT SEGMENTS. THE RIGHT-OF-WAY MARGIN WAS ESTABLISHED BY OFFSETTING THE CENTERLINE 30.00 FEET. TWO ITEMS ARE NOTABLE REGARDING THE NOPAL STREET CENTERLINE. FIRST, A 5/8" REBAR WAS FOUND SLIGHTLY SOUTH OF THE CURVE. IT APPEARS TO HAVE BEEN SET WITH THE SUBDIVISION MONUMENTS BUT IS NOT SHOWN ON THE PLAT AND HAS NO APPARENT PURPOSE; THEREFORE, IT WAS NOT USED IN THIS BOUNDARY CALCULATION. SECOND, MONUMENT A WAS SET AT THE INTERSECTION OF NOPAL STREET CENTERLINE AND THE PLAT BOUNDARY OF KEENER PLACE PUD, PHASE 1 SO IS NOT INLINE WITH THE 2.00 FOOT RIGHT-OF-WAY DEDICATION WHICH HAPPENED ON THAT PLAT.

THE CENTERLINE OF THE STUB NEAR THE SOUTH END OF NOPAL STREET WAS ESTABLISHED BY HOLDING THE TWO CENTERLINE MONUMENTS. THE RIGHT-OF-WAY MARGINS WERE ESTABLISHED BY OFFSETTING THE CENTERLINE 17.00 FEET.

15TH STREET / AIRPORT ROAD

THE RIGHT-OF-WAY MARGIN OF 15TH STREET / AIRPORT ROAD WAS ESTABLISHED BY HOLDING THE 5/8" MONUMENT FOUND AT THE NORTHWEST PLAT CORNER AND A POINT 2.00 FEET, BY PERPENDICULAR MEASUREMENT, SOUTHEASTERLY OF MONUMENT A. AS DISCUSSED IN THE NOPAL STREET SECTION OF THIS NARRATIVE, A MONUMENT WAS SET AT THE INTERSECTION OF NOPAL STREET CENTERLINE AND THE PLAT BOUNDARY OF KEENER PLACE PUD, PHASE 1 SO IS NOT INLINE WITH THE 2.00 FOOT RIGHT-OF-WAY DEDICATION WHICH HAPPENED ON THAT PLAT. THE CENTERLINE OF 15TH STREET / AIRPORT ROAD WAS ESTABLISHED BY OFFSETTING THE RIGHT-OF-WAY MARGIN 32.00 FEET.

NORTHEAST CORNER

THE NORTHEAST CORNER OF THIS PLAT WAS ESTABLISHED BY HOLDING THE ASSOCIATED MONUMENTATION. FOR THE NORTHERLY END OF THE CURVED SEGMENT, THE MONUMENT WAS OFF THE RIGHT-OF-WAY MARGIN SO RATHER THAN BEING LITERALLY HELD, A POINT ON THE RIGHT-OF-WAY MARGIN AND PERPENDICULAR TO IT WAS HELD.

BASIS OR BEARINGS

AT THE TIME OF INITIAL FIELDWORK A COMPASS BEARING WAS TAKEN BETWEEN TWO CENTERLINE MONUMENTS ALONG NOPAL STREET. WHEN THE CALCULATIONS DESCRIBED ABOVE WERE PERFORMED, THIS RESULTED IN THE CENTERLINE OF NOPAL STREET HAVING A BEARING OF SOUTH 00°23'06" EAST. THIS CENTERLINE BEARING WAS HELD AS THE BASIS OF BEARINGS FOR THIS SURVEY.

SURVEYOR'S CERTIFICATE

I, RENEE CLOUGH, A REGISTERED PROFESSIONAL LAND SURVEYOR, BEING DULY SWORN ON OATH DO HEREBY CERTIFY (1) THAT THE INITIAL POINT AS SHOWN HEREON IS MARKED BY A 5/8" IRON REBAR WITH A YELLOW PLASTIC CAP MARKED "WOBBE" AS SET IN SUBDIVISION PLAT KEENER PLACE PUD, PHASE 1, WHICH INITIAL POINT OCCUPIES THE NORTHWEST CORNER OF PARCEL 1 OF SAID SUBDIVISION PLAT AND THE LANDS SUBDIVIDED HEREON AND (2) THAT I HAVE CORRECTLY SURVEYED AND MARKED WITH PROPER MONUMENTS THE FOLLOWING DESCRIBED SUBDIVISION:

SITUATED IN THE CITY OF FLORENCE, LANE COUNTY, STATE OF OREGON IN THE NORTHEAST 1/4 OF SECTION 27, TOWNSHIP 18 SOUTH, RANGE 12 WEST OF THE WILLAMETTE MERIDIAN AND DESCRIBED AS FOLLOWS:

LOT 1 OF SUBDIVISION PLAT KEENER PLACE PUD, PHASE 1 AS PLATTED AND RECORDED IN THE LANE COUNTY OREGON PLAT RECORDS.

COVENANTS CONDITIONS AND RESTRICTIONS

1. NO BUILDING, STRUCTURE, TREE OR OTHER OBSTRUCTION SHALL BE PLACED OR LOCATED ON OR IN A PUBLIC UTILITY EASEMENT.
2. NOTICE OF OPERATIONS AND MAINTENANCE PLAN RECORDED CONCURRENT WITH THIS PLAT AS RECEPTION NUMBER _____, LCOOR.
3. THOSE COVENANTS, CONDITIONS AND RESTRICTIONS RECORDED CONCURRENT WITH THIS PLAT AS RECEPTION NUMBER _____, LCOOR.
4.

DECLARATION

KNOW ALL PERSONS BY THESE PRESENTS THAT DEVNW DOES (1) HEREBY CERTIFY THAT IT IS THE OWNER OF THE LANDS AS HEREON DESCRIBED AND DOES CAUSE THE PROPERTY TO BE SUBDIVIDED IN ACCORDANCE WITH THE PROVISIONS OF CHAPTER 92 OF THE OREGON REVISED STATUTES AS SHOWN, (2) DOES HEREBY DEDICATE AS SHOWN HEREON (A) THE PUBLIC UTILITY EASEMENT, (B) THE PUBLIC WATER MAIN EASEMENT, AND (C) THE PUBLIC SANITARY SEWER EASEMENT, (3) ACKNOWLEDGES THE EXISTING (A) PUBLIC UTILITY EASEMENT, (B) PUBLIC SIDEWALK EASEMENTS, AND (C) PUBLIC MAINTENANCE EASEMENT, (4) ACKNOWLEDGES THE GRANTING HEREON OF THE PRIVATE ROOF DRAIN EASEMENT, AND (5) ACKNOWLEDGES THE BLANKET EASEMENT ACROSS TRACT A AND TRACT B FOR (A) PEDESTRIAN AND VEHICLE ACCESS, (B) UTILITIES, AND (C) DRAINAGE FOR LOTS 1-12, TRACT A, AND TRACT B.

_____
DEVNW

PRINTED NAME: _____

TITLE: _____

ACKNOWLEDGMENT

STATE OF OREGON)
COUNTY OF _____) SS

THE FOREGOING INSTRUMENT WAS ACKNOWLEDGED BEFORE ME THE ____ DAY OF _____, 20___, BY _____, THE _____ OF DEVNW, ON BEHALF OF SAID ENTITY.

_____ COMMISSION NO. _____
SIGNATURE, NOTARY PUBLIC FOR OREGON

_____ MY COMMISSION EXPIRES: _____
PRINTED NAME, NOTARY PUBLIC FOR OREGON

REFERENCES

1. KEENER PLACE PUD, PHASE 1

OWNER

DEVNW
212 MAIN STREET
SPRINGFIELD OR, 97477

APPROVALS AND ACCEPTANCES

CITY OF FLORENCE:

_____ _____
PLANNING DIRECTOR DATE

LANE COUNTY:

_____ _____
COUNTY ASSESSOR DATE

_____ _____
SURVEYOR DATE

REGISTERED
PROFESSIONAL
LAND SURVEYOR

DIGITALLY SIGNED

OREGON
NOVEMBER 01, 2007
RENEE CLOUGH
69162LS

EXPIRES: December 30, 2021

SIGNED FOR REVIEW PURPOSES ONLY

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Exhibit D

DEVNW AIRPORT ROAD PUD
REPLAT OF LOT 11, KEENER PLACE, PUD PHASE 1
N.E. 1/4, SECTION 27, T.18S., R.12W., W.M.
FLORENCE, LANE COUNTY, OREGON
MAY 11, 2020

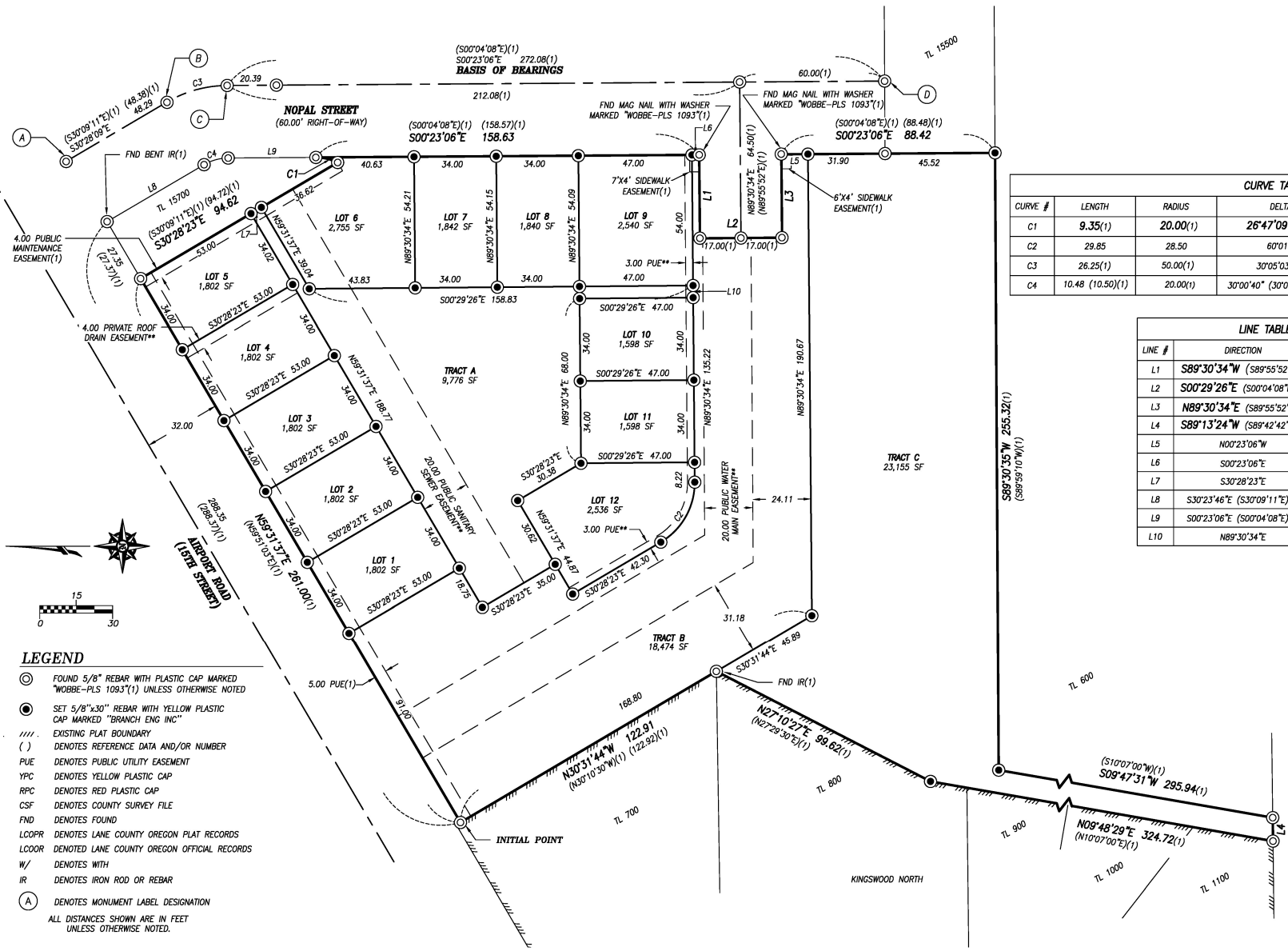
RECORDED

DATE _____

LANE COUNTY CLERK & RECORDER OF CONVEYANCES

_____

LANE COUNTY SURVEYORS OFFICE
C.S. FILE No. _____
FILING DATE _____



CURVE TABLE				
CURVE #	LENGTH	RADIUS	DELTA	CHORD
C1	9.35(1)	20.00(1)	26°47'09"(1)	N13°00'28"E (N13°19'27"E)(1), 9.27(1)
C2	29.85	28.50	60°01'03"	S60°28'54"E 28.51
C3	26.25(1)	50.00(1)	30°05'03"(1)	N15°25'38"W (N15°06'39"W)(1), 25.95(1)
C4	10.48 (10.50)(1)	20.00(1)	30°00'40" (30°05'03")(1)	N15°23'26"W (N15°06'40"W)(1), 10.36 (10.38)(1)

LINE TABLE		
LINE #	DIRECTION	LENGTH
L1	S89°30'34"W (S89°55'52")(1)	34.53 (34.50)(1)
L2	S00°29'26"E (S00°04'08"E)(1)	34.00(1)
L3	N89°30'34"E (S89°55'52")(1)	34.47 (34.50)(1)
L4	S89°13'24"W (S89°42'42"W(1)	9.67 (9.68)(1)
L5	N00°23'06"W	11.00
L6	S00°23'06"E	3.00
L7	S30°28'23"E	5.00
L8	S30°23'46"E (S30°09'11"E)(1)	46.52 (46.38)(1)
L9	S00°23'06"E (S00°04'08"E)(1)	36.27 (36.51)(1)
L10	N89°30'34"E	5.00

LEGEND

- FOUND 5/8" REBAR WITH PLASTIC CAP MARKED "WOBBE-PLS 1093"(1) UNLESS OTHERWISE NOTED
- SET 5/8"x30" REBAR WITH YELLOW PLASTIC CAP MARKED "BRANCH ENG INC"
- ////. EXISTING PLAT BOUNDARY
- ( ) DENOTES REFERENCE DATA AND/OR NUMBER
- PUE DENOTES PUBLIC UTILITY EASEMENT
- YPC DENOTES YELLOW PLASTIC CAP
- RPC DENOTES RED PLASTIC CAP
- CSF DENOTES COUNTY SURVEY FILE
- FND DENOTES FOUND
- LCOPR DENOTES LANE COUNTY OREGON PLAT RECORDS
- LCOOR DENOTED LANE COUNTY OREGON OFFICIAL RECORDS
- W/ DENOTES WITH
- IR DENOTES IRON ROD OR REBAR
- (A) DENOTES MONUMENT LABEL DESIGNATION

ALL DISTANCES SHOWN ARE IN FEET UNLESS OTHERWISE NOTED.

REGISTERED PROFESSIONAL LAND SURVEYOR

DIGITALLY SIGNED
OREGON
NOVEMBER 20, 2007
RENEE J. CLOUGH
69162LS
EXPIRES: December 30, 2021

SIGNED FOR REVIEW ONLY

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TAX MAP 18-12-27-1, TAX LOT 15400 | CITY OF FLORENCE FILE NUMBER: PC 19 22 PUD 03, PC 19 23 SUB 04, PC 19 25 CUP 08

DECLARATION OF EASEMENTS, COVENANTS, CONDITIONS, AND RESTRICTIONS FOR [DEVNW AIRPORT ROAD]

THIS DECLARATION OF EASEMENTS, COVENANTS, CONDITIONS, AND RESTRICTIONS FOR [DEVNW AIRPORT ROAD] ("**Declaration**") is made by Corvallis Neighborhood Housing Services, Inc., an Oregon nonprofit corporation, doing business as DevNW ("**Declarant**").

RECITALS

A. Declarant is the owner of all the real property and improvements thereon located in Lane County, Oregon, described as follows (collectively the "**Property**"):

> Lots 1 through 12 (each a "**Lot**" and together the "**Lots**") and Tracts A, B and C (the "**Common Area**") as shown on the plat map for "DevNW Airport Road" in Florence, Oregon, filed for record on _____, 2020, in Book ____, Page_____, in the plat records of Lane County, Oregon (the "**Plat**").

B. Declarant is an Oregon nonprofit charitable organization whose mission includes developing and operating affordable housing. Pursuant to its mission, Declarant intends to develop and operate [DevNW Airport Road] under the community land trust model of affordable homeownership. Pursuant to such model, Declarant intends to construct a home on each Lot (each a "**Home**" and together the "**Homes**") and to sell the Homes to qualified buyers together with ground leasehold interests in the Lots on which the Homes are constructed. Declarant intends to retain fee title ownership of the Lots, subject to the homebuyers' ground leasehold interests, and to retain fee title ownership of the Common Area.

C. Declarant desires to impose these mutually beneficial covenants, conditions, restrictions, easements, assessments, and liens on the Property, under a comprehensive general plan of improvement and development for the benefit of all Lots and Common Area in [DevNW Airport Road].

D. Declarant shall retain the powers and authority to own, maintain, and administer the Common Area and its facilities; to administer and enforce the covenants, conditions, and restrictions of this Declaration; and to collect and disburse the assessments and charges hereinafter created.

NOW THEREFORE, Declarant declares that the Property will be held, transferred, sold, conveyed, and occupied subject to the following covenants, conditions, restrictions, easements, charges, and liens, which will run with the land, which will be binding on all parties having or acquiring any right, title, or interest in the Property or any part thereof, and which will inure to the benefit of the Declarant and of each Owner.

Exhibit E

Article 1
DEFINITIONS

1.1 *[DevNW Airport Road]* means Lots 1 through 12 of the Property and Tracts A, B and C as designated on the Plat of [DevNW Airport Road].

1.2 *Common Area* means and refers to Tracts A, B and C shown on the recorded Plat of the Property, including any improvements located thereon, which areas and improvements are intended to be devoted to the common use and enjoyment of the Owners, subject to requirements and restrictions set forth in this Declaration.

1.3 *Declaration* means the covenants, conditions, restrictions and all other provisions set forth in this Declaration, as such may be amended from time to time as provided herein.

1.4 *Declarant* means and refers to Corvallis Neighborhood Housing Services, Inc., an Oregon nonprofit corporation, doing business as DevNW, and its successors or assigns, or any successor or assign to all or the remainder of its interest in the Property.

1.5 *Ground Lease* means and refers to the ground lease of a Lot on which an Owner's Home has been constructed and pursuant to which Owner (not including Declarant) is the tenant or ground lessee and Declarant is the landlord or ground lessor.

1.6 *Home* means and refers to any portion of a structure situated on a Lot and designed and intended for use and occupancy as a residence by a single family or household together with the Owner's leasehold interest in a Ground Lease.

1.7 *Lot* means and refers to each and any of Lots 1 through 12 of [DevNW Airport Road]; provided, however, that *Lot* does not include Tracts A, B or C.

1.8 *Occupant* means and refers to the occupant of a Home, whether such person is an Owner or any person authorized by the Owner to visit or occupy the Home, to the extent permitted by Owner's Ground Lease.

1.9 *Owner* means and refers to the record owner of a Home, whether one or more persons or entities. The foregoing does not include Declarant or persons or entities who hold an interest in any Lot or Common Area merely as security for the performance of an obligation.

1.10 *Plat* means and refers to the Plat of [DevNW Airport Road] recorded in the plat records of Lane County, Oregon, on _____, 2020 at Book _____, Page _____.

1.11 *Private Road* means the roadway within the Plat of [DevNW Airport Road] included in Tract B that serve as a means of access to Lots 1 through 12 and the Common Area.

1.12 *Property* has the meaning attributed to the term in the recitals of this Declaration.

1.13 *Reserve Account(s)* means and refers to an account, if any, set up by the Declarant to hold funds for construction, improvements, or maintenance of the Common Area.

1.14 *Rules and Regulations* means and refers to the documents containing rules, regulations, and policies adopted by the Declarant for [DevNW Airport Road], as may be amended from time to time.

Article 2
PROPERTY SUBJECT TO THIS DECLARATION

2.1 Development. The development of [DevNW Airport Road] consists of the Property, which will be held, transferred, sold, conveyed, and occupied subject to this Declaration.

2.2 No Right to Annex Additional Property or to Withdraw Property. Declarant reserves no right to annex additional property to or to withdraw property from [DevNW Airport Road].

Article 3
OWNERSHIP AND EASEMENTS

3.1 Nonseverability. The interest of each Owner in the use and benefit of the Common Area is appurtenant to the Homes. No Home may be conveyed by the Owner separately from the interest in the Common Area. Any conveyance of any Home automatically transfers the right to use the Common Area without the necessity of express reference in the instrument of conveyance. There may be no judicial partition of the Common Area. Each Owner, whether by deed, gift, devise, or operation of law, for the Owner's benefit and for the benefit of all other Owners, specifically waives and abandons all rights, interests, and causes of action for judicial partition of any interest in the Common Area and agrees that no action for judicial partition may be instituted, prosecuted, or reduced to judgment. Ownership interests in the Common Area and Homes are subject to the easements granted and reserved in this Declaration. Each of the easements granted or reserved herein will be deemed to be established upon the recordation of this Declaration, will thenceforth be deemed to be covenants running with the land for the use and benefit of Declarant, the Owners, Homes, Lots and Common Area, and will be superior to all other encumbrances applied against or in favor of any portion of [DevNW Airport Road] except for encumbrances that have been recorded against the Property prior to the recording of this Declaration.

3.2 Ownership of Lots. Title to each Home on the Lots in [DevNW Airport Road] will be conveyed to an Owner. **If more than one person owns an undivided interest in the same Home, such persons or entities will constitute one Owner.**

3.3 Ownership of Common Area. Declarant shall retain title to the Common Area and fee title ownership as ground lessor of each Lot.

3.4 Easements. Individual deeds to Homes and the Ground Leases may, but are not required to, set forth the easements specified in this Article.

3.4.1 Easements on Plat. The Common Area, Homes and Lots are subject to the easements and rights-of-way shown on the Plat.

3.4.2 Easements for Common Area. Every Owner has a nonexclusive right and easement of use and enjoyment in and to the Common Area, which is appurtenant to and passes with the title to every Home, subject to the restrictions set forth in this Declaration. Tracts A and B are subject to a blanket pedestrian and vehicular access easement and a blanket utility easement as shown on the Plat and as further described below. Tract C shall be designated as a vegetative zone with limited or no access to the Owners, other than by Declarant for maintenance purposes.

3.4.3 Easements Reserved by Declarant. Declarant reserves an easement over, under, and across the Common Area in order to carry out sales activities necessary or convenient for the sale of Homes. Declarant hereby retains a right and easement of ingress and egress to, from, over, in, upon, under, and across the Common Area, and the right to store materials thereon and to make such other use thereof as may be reasonably necessary or incident to the construction of the improvements on the Property in such a way as not to interfere unreasonably with the occupancy, use, enjoyment, or access to an Owner's Home by the Owner or the Owner's family, guests, or invitees.

3.4.4 Additional Utility and Drainage Easements; Public Walkway Easements. Notwithstanding anything expressed or implied to the contrary, this Declaration is subject to all easements granted by Declarant on the Plat or separately for the installation and maintenance of utilities and drainage facilities necessary for the development of [DevNW Airport Road] now or in the future. Such easements include without limitation public and private walkway easements, utility easements, and stormwater drainage easement(s) as shown on the Plat. No structure, planting, or other material that may damage or interfere with the installation or maintenance of utilities, that may change the direction of flow of drainage channels in the easements, or that may obstruct or retard the flow of water through drainage channels in the easement areas may be placed or permitted to remain within any easement area.

3.4.5 Declarant's Easements. Declarant, for itself and its duly authorized agents and representatives, retains such easements over the Lots and Common Area as are reasonably necessary for access and to perform the duties and obligations of the Declarant as set forth in this Declaration, as the same may be amended.

3.4.6 Easement to Governmental Entities. Declarant grants a nonexclusive easement over the Common Area to all governmental agencies, utilities, and their agents for the purposes of performing their duties as utility and emergency responders.

3.4.7 Perimeter Easement Benefiting Declarant. Declarant, for itself and its duly authorized agents and representatives, retains an easement over that perimeter portion of each Lot that is included within the building setbacks established by applicable ordinances for

the purposes of installation, maintenance, repair, and replacement of utilities, communication lines, and drainage. Declarant may grant or convey the easements reserved herein to any governmental body or agency, any public or private utility company or provider, or any combination of the foregoing, if necessary or convenient for the development, maintenance and operation of [DevNW Airport Road].

3.4.8 Perimeter Easements Benefiting Owners. Every Owner holds an easement over that perimeter portion of other Lots that is included within the building setbacks established by applicable ordinances as may be reasonably necessary to reach the Owner's Home and the Lot on which the Home is located for purposes of exterior maintenance and repair of the Owner's Home and for maintaining the landscaping on the Owner's Lot. Such easement rights shall be exercised in a reasonable manner and times. Any damage caused to the servient Lot or Home by such maintenance, repair, removal, or replacement, including without limitation of electrical service lines, must be paid by the Owner causing the damage.

3.5 Declarant's Right to Dedicate Common Area and Grant Easements. Declarant reserves the right and power to dedicate, convey, or dedicate and convey any portion or all of the Common Area to any governmental body or agency. Declarant further reserves the right and power to grant an easement over the Common Area to any governmental body or agency or any public or private utility company or provider. The provisions of this section 3.5 control over any provisions to the contrary contained in any other section of the Declaration; however, none of the rights under this section 3.5 will deprive the Owners from using Tracts A or B for access to their Lots.

3.6 Private Road and Parking Area Easement. That portion of the Common Area constructed as a Private Road and parking lot (the "**Parking Area**") shall be used for vehicular ingress and egress and parking as follows:

3.6.1 The Private Road shall not be blocked so as to interfere with access and egress to, from and through the development.

3.6.2 The Parking Area may be used only for the parking of functioning motor vehicles in spaces specifically designated by striping for parking purposes.

3.6.3 Each Home will be assigned parking space(s) for use by the Homeowner and their guests. Homes with one bedroom shall be assigned one parking space, and Homes with two or more bedrooms shall be assigned two parking spaces. The remaining parking spaces shall be used by all visitors to the Property on a first-come, first-served basis. No visitor on the Property may park any vehicle in the Parking Area longer than seventy-two (72) hours without the prior written consent of Declarant.

3.6.4 The Parking Area and Private Road may be used for emergency vehicles and for public turnaround purposes.

3.6.5 The Parking Area may be used for the placement of trash receptacles in a location or locations designated by Declarant to serve all of the Property in accordance with Rules and Regulations adopted from time to time by the Declarant.

3.6.6 No vehicle, recreational vehicle (RV), camper, mobile home, boat, trailer, commercial vehicle, or piece of motorized equipment shall be parked on any Lot at any time. Vehicles parked for loading and unloading may not be parked for more than four (4) hours. Except in cases of emergency, no passenger vehicle (other than passenger automobiles belonging to the Owners and their guests), recreational vehicle (RV), camper, mobile home, boat, trailer, commercial vehicle, or piece of motorized equipment, regardless of weight or size, shall be parked in the Parking Area or anywhere on the Property overnight.

3.6.7 No vehicle shall be left in a dismantled or inoperable condition in the Parking Area or elsewhere on the Property. No vehicle maintenance or repair shall occur in the Parking Area or elsewhere on the Property; provided that flat tire repair and the recharging of car batteries shall be allowed. No oil changes shall be permitted except as may be expressly allowed according to rules and regulations adopted by Declarant from time to time.

3.6.8 No Owner may permit any vehicle that is in a state of disrepair or that is not currently licensed to be abandoned or to remain parked on the Common Area or on any street on or adjacent to the Property at any time. If an Owner fails to remove such a vehicle within five days following the date on which Declarant mails or delivers to the Owner a notice directing the removal, Declarant may have the vehicle removed from the Property and charge the expense of the removal to the Owner as a Reimbursement Assessment, which may be collected and enforced as any other assessments imposed under this Declaration.

3.6.9 No vehicle (including any trailer or other cargo carrying device) may be parked, loaded or unloaded in the Common Area at any time if such vehicle, trailer or cargo carrying device contains any flammable, explosive, corrosive, hazardous, toxic, or other similarly dangerous material.

Article 4
LOTS AND HOMES

4.1 Residential Use. Lots may be used only for residential purposes. Except with the Declarant's consent, no trade, craft, business, profession, commercial activity, or similar activity of any kind may be conducted on any Lot, and no goods, equipment, vehicles, materials, or supplies used in connection with any trade, service, or business may be kept or stored on any Lot. Nothing in this section 4.1 will be deemed to prohibit (a) activities relating to the sale of residences, (b) the right of Declarant or any contractor or homebuilder to construct residences on any Lot, to store construction materials and equipment on such Lots in the normal course of construction, and to use any residence as a sales office or model home for purposes of sales in [DevNW Airport Road], or (c) the right of the Owner of a Home to maintain the Owner's personal business or professional library, keep the Owner's personal business or professional records or accounts, handle the Owner's personal business or professional telephone calls, or confer with business or professional associates, clients, or customers in the Owner's residence.

Declarant will not approve commercial activities otherwise prohibited by this section 4.1 unless Declarant determines that only normal residential activities would be observable outside of the residence and that the activities would not be in violation of applicable local government ordinances.

4.2 Landscaping. After purchasing a Home, each Owner may install landscaping as the Owner chooses except that no spreading invasive plants may be planted and no trees may be planted without Declarant's prior written approval. Landscaping for all portions of a Lot must commence within 60 days after purchase and must be completed within six months thereafter. The water charge for irrigation will be borne by the Declarant as a common area expense if connected to the common water system and borne by the individual Owners if the water system is connected to the individual Home around which landscaping is installed. Owners must irrigate their entire yards to keep lawns green and other landscaping fresh. Declarant may enter the Lots and water from hose bibs connected to individual Homes of Owners who fail to properly water their yards. If plantings on any Lot have died or are dying because the Owner of a Home neglected to properly care for and water the plants, or because of other harm to the plants caused by the Owner, Declarant may replace the plantings and may assess the Owner for the cost as a Reimbursement Assessment (defined in section 8.5.5), which may be collected and enforced as any other assessments imposed under this Declaration.

4.3 Maintenance of Lots and Homes. Each Owner must maintain the Lot on which Owner's Home is located and all improvements thereon in a clean and attractive condition, in good repair, and in such fashion as not to create a fire hazard. Such maintenance includes, without limitation, maintenance of windows, doors, garage doors, walks, patios, chimneys, and other exterior improvements and glass surfaces. All repainting or re-staining and exterior remodeling will be subject to prior review and approval by the Declarant. Each Owner must repair damage caused to the Owner's Home, and the Lot on which the Home is located, by fire, flood, storm, earthquake, riot, vandalism, or other causes within a reasonable period. Insurance purchased by the Declarant may be used to make such repairs, subject to the Declarant's right to adjust the losses with the Declarant's insurance carrier.

4.4 Rental of Homes. An Owner may not rent or sublease the Owner's Home or any portion thereof except to the extent (if at all) that (a) renting or subletting is allowed under the Owner's Ground Lease and (b) Declarant has given prior written consent to the renting or subletting. To the extent Declarant consents to renting or subletting, the Owner shall provide the renter or subtenant a copy of this Declaration and the Rules and Regulations with the express written understanding that (a) the tenant is subject to all provisions of this Declaration and Rules and Regulations, and (b) a failure to comply with any provision of the Declaration and Rules and Regulations constitutes a default under the rental or sublease agreement as well as a default under this Declaration.

4.5 Animals. No animals, livestock, or poultry of any kind, other than a reasonable number of household pets that are not kept, bred, or raised for commercial purposes and that are reasonably controlled so as not to be a nuisance, may be raised, bred, kept, or permitted within any Lot. Owners whose pets cause any inconvenience or unpleasantness to other Owners must take all steps reasonably necessary to prevent recurrence thereof, and Owners whose pets

damage other Owners' Homes or Lots or personal property must reimburse the other Owners for reasonable costs actually incurred by the other Owners in repairing the damage. An Owner must ensure that the Owner's dog is leashed when on the Property and outside of the Owner's Lot. An Owner may be required to remove a pet upon the receipt of the third notice in writing from the Declarant of a violation of any rule, regulation, or restriction governing pets within the Property.

4.6 Nuisance. No noxious, harmful, or offensive activities may be carried out on any Lot or Common Area. Nor may anything be done or placed on any Lot or Common Area that interferes with or jeopardizes the enjoyment of, or that is a source of annoyance to, the Owners or other Occupants.

4.7 Signs. No signs may be erected or maintained on any Lot except "for sale" signs if permitted by Declarant considering the circumstances and restrictions imposed by an Owner's Lease Interest. The restrictions contained in this section 4.7 do not prohibit the temporary placement of "political" signs on any Lot by the Owner or Occupant. However, political signs must be removed within three days after the election day pertaining to the subject of the sign. Real estate signs must be removed within three days after the sale closing date. This section 4.7 shall not apply to Declarant.

4.8 Rubbish and Trash. No Lot or part of the Common Area may be used as a dumping ground for trash or rubbish of any kind. All garbage and other waste must be kept in appropriate containers for proper disposal and must be kept out of public view. Yard rakings, dirt, and other material resulting from landscaping work may not be dumped onto streets, the Common Area, or any Lots. If an Owner fails to remove any trash, rubbish, garbage, yard rakings, or any similar materials from any Lot, any streets, or the Common Area where deposited by the Owner or the Occupants of the Owner's Lot after notice has been given by Declarant to the Owner, Declarant may have the materials removed and charge the expense of the removal to the Owner. Such a charge will constitute a Reimbursement Assessment, which may be collected and enforced as any other assessments imposed under the Declaration.

4.9 Fences and Hedges. No fences or boundary hedges may be installed or replaced without prior written approval of Declarant. All such fences and hedges must have convenient access ways to allow Declarant to carry out its landscaping maintenance and landscaping responsibilities, if any. No chain link fences, including chain link fences with slats of any kind, shall be allowed on the Property.

4.10 Service Facilities. Service facilities (garbage containers, fuel tanks, clotheslines, etc.) shall be screened so that the facilities are not visible at any time from the street or a neighboring property and screened in a visually appealing manner. Declarant, in its sole discretion, may determine if screening fails to meet the foregoing requirements. All telephone, electrical, cable television, and other utility installations must be placed underground in conformance with applicable law and subject to approval by Declarant.

4.11 Antennas and Satellite Dishes. Except as otherwise provided by law or this section, no exterior antennas, satellite dishes, microwave, aerial, tower, or other devices for the transmission or reception of television, radio, or other forms of sound or electromagnetic

radiation may be erected, constructed, or placed on any Lot. With prior written consent from the Declarant, exterior satellite dishes or antennas with a surface diameter of one meter or less and antennas designed to receive television broadcast signals only may be placed on any Lot if they are not visible from the street and are screened from neighboring Lots in a visually appealing manner. Declarant may adopt reasonable rules and regulations governing the installation, safety, placement, and screening of such antennas, satellite dishes, and other transmission devices. Such rules may not unreasonably delay or increase the cost of installation, maintenance, or use or preclude reception of a signal of acceptable quality. (Declarant, in its sole discretion, may determine what constitutes a signal of acceptable quality.) Such rules may prohibit installation of exterior satellite dishes or antennas if signals of acceptable quality can be received by placing antennas inside a Home without causing an unreasonable delay or cost increase. The foregoing restriction and the authority of Declarant in this matter are subject to any regulations issued by the Federal Communications Commission or any other applicable governmental authority.

4.12 Exterior Lighting or Noise-Making Devices. Except with the consent of Declarant, no exterior lighting or noise-making devices, other than security and fire alarms, may be installed or maintained on any Lot.

4.13 Basketball Hoops. No Owner may install a permanent basketball hoop on any Lot without Declarant's prior approval. Declarant may, in its discretion, prohibit such basketball hoops or impose permitted hours of use for such basketball hoops. Basketball hoops are prohibited in the Common Area and on any Lot if the area of play is intended to be the street or any Common Area or will impact other Lots.

4.14 Grades, Slopes, and Drainage. There may be no interference with the stormwater facility on the Property. In addition, there may be no interference with established drainage patterns or systems over or through any Lot that affects any other Lot or Common Area or any real property outside the Property unless adequate alternative provision is made for proper drainage and is approved by Declarant before any such work. The term *established drainage* means the drainage swales, conduits, inlets, and outlets designed and constructed for Declarant.

4.15 Tree-Cutting Restrictions. No tree the diameter of which is six inches or more may be removed from any Lot without the prior approval of Declarant unless it is diseased, poses an immediate danger to persons or property, or is within 10 feet of an existing or proposed building or five feet of a paved surface. However, Declarant has unfettered authority, but not the obligation, to trim or top trees, shrubs, or hedges located on any Lot that is creating a nuisance, is damaging, or is a threat to any structures, or that increases the cost of insurance for Declarant.

4.16 Damage or Destruction to Home or Lot. If all or any portion of a Home is damaged by fire or other casualty, the Owner must either (a) restore the damaged improvements or (b) remove all damaged improvements, including foundations, and leave the Lot in a clean and safe condition. Any restoration proceeding under (a) in this section 4.16 must be performed so that the improvements are in substantially the same condition that they were in before the damage, unless the Owner complies with the provisions of Article 6. The Owner must commence such work within 60 days after the damage occurs and must complete the work within six months thereafter. Notwithstanding the foregoing, in the event of conflict between this section

and the provisions of Owner's Ground Lease, the provisions of the Owner's Ground Lease shall control.

4.17 Right of Maintenance and Entry by Declarant. If an Owner fails to perform maintenance, repair, or both that the Owner is obligated to perform under this Declaration, and if Declarant determines, after notice, that the maintenance, repair, or both is necessary to preserve the attractiveness, quality, nature, value, or any combination thereof of the Property, Declarant may cause the maintenance, repair, or both to be performed and may enter any Lot whenever entry is necessary in connection with the performance thereof. An Owner may request, and the Declarant will conduct, a hearing on the matter. The Owner's request must be in writing delivered within five days after receipt of the notice, and the hearing must be conducted within not less than five days nor more than 20 days after the request for a hearing is received. Entry must be made with as little inconvenience to an Owner as practicable and only after advance written notice of not less than 48 hours, except in emergency situations. The costs of such maintenance, repair, or both, are chargeable to the Owner as a Reimbursement Assessment, which may be collected and enforced as any other assessments authorized hereunder.

4.18 Rules and Regulations. Declarant from time to time may adopt, modify, or revoke Rules and Regulations governing the conduct of persons and the operation and use of Lots and the Common Area as it may deem necessary or appropriate to ensure the peaceful and orderly use, operation and enjoyment of the Property. Declarant shall deliver a copy of the Rules and Regulations, upon adoption, and a copy of each amendment, modification, or revocation thereof, to each Owner. The Rules and Regulations will be binding on all Owners and Occupants of all Lots on the date of delivery or actual notice thereof.

4.19 Ordinances and Regulations. The standards and restrictions set forth in this Article 4 are the minimum required. To the extent that local governmental ordinances and regulations are more restrictive or provide for a higher or different standard, the local governmental ordinances and regulations will prevail.

4.20 Temporary Structures. No structure of a temporary character or any trailer, basement, tent, shack, garage, barn, or other outbuilding may be used on any Lot as a residence, either temporarily or permanently.

Article 5
COMMON AREA

5.1 Use of Common Area. Use of the Common Area is subject to the provisions of the Declaration and the Rules and Regulations. There must be no obstruction of any part of the Common Area. Nothing may be stored or kept in the Common Area without the prior written consent of Declarant. No alterations or additions to the Common Area will be permitted without the prior written consent of Declarant.

5.2 Maintenance of Common Area. Declarant shall be responsible for the maintenance, repair and replacement of (a) the storm water maintenance facility located on Tract B and (b) the rest of the Common Area, except when maintenance is provided by a utility

company. All such work performed by Declarant or on its behalf shall be at the equal expense of the Owners (not including Declarant). Declarant shall keep the Common Area in good condition and repair, provide for all necessary services, and cause all acts to be done that may be reasonably necessary or appropriate for the maintenance of the Common Area.

5.3 Alterations to Common Area. Only Declarant may construct, reconstruct, or alter any improvement located on the Common Area and may do so as Declarant deems necessary or appropriate for the [DevNW Airport Road] development.

5.4 Funding. Expenditures for replacement or major repairs to an existing improvement for which a reserve has been collected will be made from the Reserve Account. Regular maintenance, repair, and operating expenses will be funded by annual assessments as provided in section 10.4. As provided in section 10.5, Declarant may levy a special assessment to fund any construction, alteration, repair, or maintenance of an improvement (or any other portions of the Common Area) for which no reserve has been collected or for which the Reserve Account is insufficient to cover the cost of the proposed construction, alteration, repair, or maintenance.

5.5 Landscaping. All landscaping on any Lot or on the Common Area must be maintained and cared for in a manner that is consistent with Declarant's original approval of the landscaping. Weeds and diseased or dead lawn, trees, groundcover, or shrubs must be removed and replaced. Lawns must be neatly mowed, and trees and shrubs must be neatly trimmed. Declarant shall maintain all landscaping located in the Common Area, and each Owner shall maintain all landscaping on the Owner's Lot. All landscaping shall be irrigated in a horticulturally appropriate manner, subject to water use restrictions or moratoria by government bodies or agencies.

5.6 Condemnation of Common Area. If all or any portion of the Common Area is taken for any public or quasi-public use under any statute, by right of eminent domain, or by purchase in lieu of eminent domain, Declarant will receive and expend the entire award in a manner that, in Declarant's discretion, is in the best interest of the Owners, including Declarant, and [DevNW Airport Road] development. Declarant, in its discretion, may represent the interest of all Owners in any negotiations, suit, action, or settlement in connection with such matters.

5.7 Damage or Destruction of Common Area. If all or any portion of the Common Area is damaged or destroyed by an Owner or any of the Owner's guests, Occupants, tenants, licensees, agents, or members of the Owner's family in a manner that would subject the Owner to liability for the damage under Oregon law, the Owner hereby authorizes Declarant to repair the damage. Declarant shall repair the damage and restore the area in workmanlike manner as originally constituted or as may be modified or altered subsequently by Declarant in its discretion. Reasonable costs incurred in connection with effecting the repairs will become a special assessment on the Home and against the Owner who caused or is responsible for the damage.

5.8 Power of Declarant to Sell, Dedicate, or Transfer Common Area. Declarant may sell, dedicate, transfer, grant a security interest in, or grant an easement for installation and maintenance of utilities or for similar purposes with respect to, any portion of the Common Area.

Article 6
ARCHITECTURAL REVIEW

6.1 Architectural Review. No improvement may be commenced, erected, placed, or altered on any Lot until the construction plans and specifications showing the nature, shape, heights, materials, colors, and proposed location of the improvement have been submitted to and approved in writing by Declarant. This Article's purpose is to ensure quality of workmanship and materials and harmony between exterior design and the existing improvements and landscaping and between location and topography and finished-grade elevations. Declarant is not responsible for determining compliance with structural and building codes, ordinances, zoning codes, or other governmental regulations, all of which are the applicant's responsibility. The provisions of this Article 6 apply in all instances in which this Declaration requires Declarant's consent.

6.2 Decision. Declarant shall use reasonable efforts to render its written decision approving or denying each application submitted to it within 15 business days (not including Saturdays, Sundays, and legal holidays) after its receipt of all materials required with respect to the application. If Declarant fails to render its written decision within 30 days of its receipt of all required materials or request an extension, the application will be deemed approved. Declarant is entitled to request one or more extensions of time, not to exceed 45 days. In the event of any extension requests, if Declarant does not render a written decision within 15 days after the expiration of the extension(s), the application will be deemed approved. However, the applicant may agree to further extensions to allow the applicant to complete or supplement the application.

6.3 Discretion. Subject to applicable law, Declarant, in its sole discretion, may withhold consent to any proposed work if Declarant finds that the proposed work would be inappropriate for the particular Lot or incompatible with the design standards that Declarant intends for the Property. Declarant may consider siting, shape, size, color, design, height, solar access, or other effects on the enjoyment of other Lots or the Common Area, and any other factors that it reasonably believes to be relevant in determining whether to consent to any proposed work.

6.4 Nonwaiver. Consent by Declarant to any matter proposed to it or within its jurisdiction will not constitute precedent or waiver impairing its right to withhold approval of any similar matter thereafter proposed or submitted to it for consent.

6.5 Effective Period of Consent. Declarant s consent to any proposed work will automatically expire three months after issuance unless construction of the project has been commenced or the Owner has applied for and received an extension of time from Declarant.

6.6 Determination of Compliance. Declarant may inspect, from time to time, all work performed and determine whether it is in substantial compliance with the approval granted.

If Declarant finds that the work was not performed in substantial compliance with the approval granted, or if Declarant finds that the approval required was not obtained, Declarant must notify the Owner in writing of the noncompliance. The notice must specify the particulars of noncompliance and must require the Owner to remedy the noncompliance.

6.7 Noncompliance. If Declarant determines that an Owner has not constructed an improvement consistent with the specifications of Declarant's approval or has constructed an improvement without obtaining Declarant's approval, sends a notice of noncompliance to the Owner, and the Owner fails to commence diligently remedying the noncompliance in accordance with the notice, then, effective at 5:00 p.m. on the third day after issuance of the notice, Declarant shall provide notice of a hearing to consider the Owner's continuing noncompliance. The hearing must be set not more than 30 days from the date on which the notice of noncompliance was issued. At the hearing, if Declarant finds that there is no valid reason for the continuing noncompliance, Declarant shall determine the estimated costs of achieving compliance and may issue a fine against the noncomplying Owner for that amount. Declarant shall also require the Owner to remedy the noncompliance within 10 days after the date of Declarant's determination. If the Owner does not comply with Declarant's ruling within the 10-day period or any extension thereof granted by Declarant, at its sole discretion, Declarant may remove the noncomplying improvement, remedy the noncompliance, record a notice of noncompliance in the county deed records, or take any combination of those actions. The costs of any such action will be assessed against the Owner as a Reimbursement Assessment either before or after any remedial action is taken.

6.8 Liability. Declarant will be liable to any Owner, Occupant, or builder or any contractor, for any damage, loss, or prejudice suffered or claimed on account of any action or failure to act of Declarant, as long as Declarant has acted in good faith.

6.9 Estoppel Certificate. Within 15 working days after Declarant's receipt of a written request from an Owner and Declarant's receipt of payment of a reasonable fee fixed by Declarant to cover costs, Declarant must provide the Owner with a certificate executed by the Declarant certifying with respect to any Lot on which a Home owned by the Owner is located that, as of the date thereof, either (a) all improvements made or done on the Lot comply with this Declaration, or (b) the improvements do not so comply, in which event, the certificate must also identify the noncomplying improvements and set forth with particularity the nature of the noncompliance. The Owner and the Owner's heirs, devisees, successors, and assigns will be entitled to rely on the certificate with respect to the matters set forth therein. The certificate will be conclusive as among Declarant and all Owners, and all persons deriving any interest through any of them.

[**6.10 Fees.** Declarant may charge applicants a reasonable application fee and additional costs incurred or expected to be incurred by Declarant to retain architects, attorneys, engineers, and other consultants to advise Declarant concerning any aspect of the applications or compliance with any appropriate architectural criteria or standards, including, without limitation, those pertinent to house siting and height. The fees will be collectible as assessments under Article 8.]

6.11 Ground Lease to Control. If any provision of this Article 6 directly conflicts with the provisions of an Owner's Ground Lease governing design and construction of an Owner's Home improvements, the provisions of the Ground Lease shall control.

Article 7
DECLARANT'S SPECIAL RIGHTS

7.1 General. Declarant is undertaking the work of developing the Lots, constructing residences on the Lots, constructing improvements in the Common Area, and making other improvements within the [DevNW Airport Road] development. The completion of the development work and the marketing and sale of the Homes is essential to the establishment and welfare of the Property as a community land trust residential community. Declarant reserves the special rights set forth in this Article 7.

7.2 Marketing Rights. Declarant has the right to maintain a sales office and model on one or more of the Homes that Declarant owns. Declarant and prospective purchasers and their agents have the right to use and occupy the sales office and models during reasonable hours any day of the week. Declarant may maintain a reasonable number of "For Sale" signs at reasonable locations on the Property, including, without limitation, on the Common Area.

7.3 Declarant Easements. Declarant reserves easements over the Property as more fully described in Article 3.

7.4 Community Land Trust development. Declarant reserves rights to modify provisions in this Declaration as Declarant deems necessary or appropriate to conform this Declaration over time to the requirements of Declarant's form of Ground Lease, to comply with federal, state or local laws, to operate the development in conformance with the community land trust model of affordable housing, or to preserve the overall welfare of the [DevNW Airport Road] community.

7.4 Additional rights. Declarant reserves the rights stated elsewhere in this Declaration including without limitation those in section 9.6.

Article 8
FUNDS AND ASSESSMENTS

8.1 Purpose of Assessments; Expenses. The assessments levied by Declarant will be used to promote the recreation, health, safety, aesthetics, and welfare of the Owners of [DevNW Airport Road], for the improvement, operation, and maintenance of the Common Area, for the administration and operation of the Common Area and [DevNW Airport Road] as a community land trust community, for the payment of the pro rata share of common area assessments, and for property and liability insurance.

8.2 Covenants to Pay. Each Owner covenants and agrees to pay to Declarant the assessments and any additional charges levied by Declarant under this Declaration. All

assessments for operating expenses, repairs and replacement, and reserves will be allocated among the Lots and their Owners as set forth in section 8.4.2.

8.2.1 Funds Held in Trust. The assessments collected by Declarant will be held by Declarant for and on behalf of each Owner and may be used solely as set forth in section 8.1. Upon the sale or transfer of any Lot, the Owner's interest in such funds will be deemed automatically transferred to the successor in interest to the Owner.

8.2.2 Offsets. No offsets against any assessment will be permitted for any reason, including, without limitation, any claim that Declarant is not properly discharging its duties.

8.2.3 Right to Profits. Declarant profits, if any, will be the property of Declarant and will be contributed to the Current Operating Account.

8.3 Basis of Assessment; Commencement of Assessments. Declarant shall pay all Common Area expenses of the development until the Homes and Common Area are assessed for common expenses. The amount and date of commencement of the initial annual assessment, including the assessment of reserves, if any, to Owners other than Declarant will be determined by Declarant. In the sole and unfettered discretion of Declarant, Declarant may defer payment of reserves, if any, for a Home until the Home is conveyed to a third party.

8.4 Annual Assessments. Annual assessments for each fiscal year will be established when Declarant approves the budget for that fiscal year. The initial annual assessment will be determined by Declarant and will be prorated on a monthly basis at the time of the closing of the first sale from Declarant. For proration purposes, any portion of a month will count as a full month. Annual assessments will be payable on a periodic basis, not more frequently than monthly, as determined by Declarant. The fiscal year will be the calendar year unless another year is adopted by Declarant.

8.4.1 Budgeting. Each year Declarant will use reasonable efforts to prepare, approve, and make available to each Owner a pro forma operating statement (budget) containing (a) estimated revenue and expenses on an accrual basis; (b) the amount of the total cash reserves of [DevNW Airport Road] currently available for replacement or major repair of the Common Area and for contingencies; (c) at Declarant's option, an itemized estimate for the remaining life of improvements, and the methods of funding to defray repair, replacement, or additions to major components of improvements, as provided in section 8.6.2; and (d) a general statement setting forth the procedures used by Declarant in the calculation and establishment of reserves to defray the costs of repair, replacement, or additions to major components of the Common Area. Notwithstanding that budgeting will be done on an accrual basis, Declarant's books for [DevNW Airport Road] accounts will be kept on a cash basis. For the first fiscal year, the budget shall be prepared by Declarant no later than the date on which annual assessments are scheduled to commence. Thereafter, Declarant shall annually prepare the budget and distribute a copy or summary thereof to each Owner, together with written notice of the amount of the annual assessments to be levied against each Owner's Home, within 30 days after adoption of the budget.

8.4.2 Allocation of Assessments. Except for Reimbursement Assessments, the total amount in the budget will be charged equally, based on number of Owners, against all Homes as annual assessments.

18.4.3 Nonwaiver of Assessments. If before the expiration of any fiscal year the Declarant fails to fix annual assessments for the next fiscal year, the annual assessments established for the preceding year will continue until a new annual assessment is fixed.

8.5 Special Assessments. Declarant has the power to levy special assessments against an Owner or all Owners in the following manner for the following purposes:

8.5.1 Correct a Deficit. To correct a deficit in the operating budget;

8.5.2 Special Obligations of an Owner. To collect amounts due to Declarant from an Owner for breach of the Owner's obligations under this Declaration or the Rules and Regulations;

8.5.3 Repairs. To collect additional amounts necessary to make repairs or renovations to the Common Area if sufficient funds are not available from the operating budget or replacement reserve accounts; or

8.5.4 Capital Improvements. To make capital acquisitions, additions, or improvements.

8.5.5 Reimbursement Assessments. Declarant shall levy an assessment against any Owner and the Owner's Home if a failure to comply with this Declaration, Architectural Standards, or any Rules and Regulations has (a) necessitated an expenditure of monies by Declarant to effect compliance or (b) resulted in the imposition of a fine or penalty against the Owner or the Owner's Home (a "**Reimbursement Assessment**"). A Reimbursement Assessment is due and payable to Declarant when levied. A Reimbursement Assessment may not be levied by Declarant except on at least 10 days' written notice to the Owner being assessed. If, within the 10-day period, the Owner makes a written request to Declarant for a hearing, Declarant shall conduct a hearing not less than 10 nor more than 30 days after the request by the Owner and shall make its decision within not more than 30 days after the hearing is held. If a notice has been previously given, and the hearing has already been held or waived (in writing or by the Owner's failure to appear) for the violation resulting in the Reimbursement Assessment, no additional notice and hearing is required before levying the Reimbursement Assessment.

8.6 Accounts.

8.6.1 Types of Accounts. Assessments collected by the Declarant shall be deposited into two or more separate accounts with a bank, which accounts will be designated as (a) the Current Operating Account and (b) if reserves are collected, the Reserve Account. Declarant shall deposit those portions of the assessments collected for current maintenance and operation into the Current Operating Account and shall deposit those portions of the assessments

collected as reserves for replacement and deferred maintenance of capital improvements into the Reserve Account. In its books and records, Declarant shall account separately for operating expenses relating to the Common Area and operating expenses relating to all other matters, if any, as well as for reserves relating to the Common Area and reserves relating to all other matters.

8.6.2 Reserve Account. If Declarant establishes a Reserve Account, Declarant shall hold the funds in the Reserve Account separate from all other funds held by Declarant for [DevNW Airport Road]. Declarant will pay out of the Reserve Account only those costs that are attributable to the maintenance, repair, or replacement of Common Area that normally requires replacement, in whole or in part, within one to 30 years and not for regular or periodic maintenance and expenses. No funds collected for the Reserve Account shall be used for ordinary current maintenance and operation purposes.

8.6.2.1 Loan from Reserve Account. Declarant may borrow funds from the Reserve Account to meet high seasonal demands on Declarant's regular operating fund for [DevNW Airport Road] or to meet unexpected increases in expenses. Funds borrowed must be repaid later from assessments.

8.6.2.2 Increase, Reduction, or Elimination of Reserve Account Assessment. At any time, Declarant may increase or reduce future assessments for the Reserve Account as Declarant deems necessary or appropriate in its discretion for the orderly operation and maintenance of [DevNW Airport Road].

8.6.2.3 Investment of Reserve Account. Nothing in this section 8.6 prohibits the prudent investment of Reserve Account funds, subject to any constraints imposed by applicable law.

8.6.2.4 Refunds of Assessments. Assessments paid into the Reserve Account are the property of Declarant and are not refundable to sellers or Owners of Homes. Sellers or Owners of Homes may treat their outstanding share of the Reserve Account's balance as a separate item in the sales contract providing for the conveyance of their Lot.

8.6.3 Current Operating Account. All costs other than those to be paid from the Reserve Account under section 8.6.2 may be paid from the Current Operating Account.

8.7 Default in Payment of Assessments; Enforcement of Liens.

8.7.1 Personal Obligation. Any assessment properly imposed under this Declaration is the joint and several personal obligations of all Owners of the Home to which the assessment pertains. In a voluntary conveyance (i.e., one other than through foreclosure or a deed in lieu of foreclosure), the grantees will be jointly and severally liable with the grantors for all assessments imposed through the recording date of the instrument effecting the conveyance. A suit for a money judgment may be initiated by Declarant or on its behalf to recover the assessments without either waiving or foreclosing Declarant's lien.

8.7.2 Declarant Lien. Declarant holds a lien against each Home for any assessment (of any type provided for by this Declaration) or installment thereof that is delinquent. The lien will accumulate all future assessments or installments, interest, late fees, penalties, fines, attorney fees (whether or not suit or action is instituted), actual administrative costs, and other appropriate costs properly chargeable to an Owner by Declarant under the Declaration, until such amounts are fully paid. Recording of this Declaration constitutes record notice and perfection of the lien. The lien may be foreclosed at any time in accordance with Oregon law including without limitation ORS 94.704 through 94.719 of the Oregon Planned Community Act, with Declarant having all powers of the declarant, association and governing entity as provided in such statutes. Declarant shall record a notice of a claim of lien for assessments and other charges in the deed records of Lane County, Oregon, before any suit to foreclose may be filed. Declarant's lien will be superior to all other liens and encumbrances except property taxes and assessments; any first mortgage, deed of trust, or land sale contract recorded before Declarant's notice of lien; and any mortgage or deed of trust granted to an institutional lender that is recorded before Declarant's notice of lien.

8.7.3 Interest, Fines, Late Fees, and Penalties. Declarant, in its reasonable discretion, may from time to time set the rate of interest and impose late fees, fines, and penalties on delinquent assessments or for violations of the provisions of this Declaration, the Architectural Standards, and the Rules and Regulations. The adoption of such impositions shall be communicated to all Owners in writing not less than 30 days before the effective date by a notice mailed to the assessment billing address of each Owner. The impositions will be considered assessments that are lienable and collectible in the same manner as any other assessments; however, fines or penalties for violation of this Declaration and the Rules and Regulations, other than late fees, fines, or interest arising from an Owner's failure to pay regular, special, or reimbursement assessments, may not be imposed against an Owner or the Owner's Home until the Owner is given an opportunity for a hearing as elsewhere provided herein.

8.7.4 Acceleration of Assessments. If an Owner is delinquent in payment of any assessment or installment on any assessment, Declarant, on not less than 10 days' written notice to the Owner, may accelerate the due date of the full annual assessment for that fiscal year and all future installments of any special assessments.

8.7.5 Declarant's Right to Rents; Receiver. In any foreclosure suit by Declarant with respect to a lien described in section 8.7.2, Declarant is entitled to collect reasonable rent from the defaulting Owner for the use of the Owner's Home and is entitled to the appointment of a receiver.

8.7.6 Default under Ground Lease. A default by an Owner under this Declaration shall constitute a default under the Owner's Ground Lease.

Article 9
GENERAL PROVISIONS

9.1 Records. Declarant shall keep accurate financial records, including individual assessment accounts of the Owners, the balance sheet, and income and expense statements. Individual assessment accounts shall designate the name and address of the Owner or Owners of a Home, the amount of each assessment as it becomes due, the amounts paid on the account, and the balance due on the assessments. Declarant's financial records shall be maintained in the State of Oregon and reasonably available for review and copying by the Owners. A reasonable charge may be imposed by Declarant for providing copies.

9.2 Enforcement; Attorney Fees. Declarant, the Owners, and any governmental or institutional mortgagee holding an interest in a Home, a Lot or the Common Area, shall have the right to enforce all of the covenants, conditions, restrictions, reservations, easements, liens, and charges now or hereinafter imposed by any of the provisions of this Declaration as may pertain specifically to such parties or Owners by any proceeding at law or in equity. Failure by either Declarant or any Owner or mortgagee to enforce any covenant, condition, or restriction herein contained will in no event be deemed a waiver of their right to do so thereafter. If suit or action is commenced to enforce the terms and provisions of this Declaration (including without limitations, suit or action for the collection of assessments), the prevailing party will be entitled to its actual administrative costs incurred because of a matter or event that is the subject of the suit or action, attorney fees and costs in the suit or action to be fixed by the trial court, and in the event of an appeal, the cost of the appeal, together with reasonable attorney fees, to be set by the appellate court. In addition, Declarant will be entitled to its reasonable attorney fees and costs incurred in any enforcement activity or to collect delinquent assessments, together with Declarant's actual administrative costs, whether or not suit or action is filed.

9.3 Severability. Invalidation of any one of these covenants, conditions, or restrictions by judgment or court order will not affect the other provisions hereof and the same will remain in full force and effect.

9.4 Duration. The covenants, conditions, and restrictions of this Declaration run with and bind the land for a term of 99 years from the date of this Declaration being recorded, unless agreed to be rescinded by a vote of at least 75 percent of the Owners and 90 percent of the first mortgagees; provided that, in any case, this Declaration may not be rescinded unless so approved by Declarant which approval may be granted or denied in Declarant's sole and absolute discretion.

9.5 Amendment. Except as otherwise provided in section 9.4, and the restrictions set forth elsewhere herein, this Declaration may be amended at any time by an instrument approved by Declarant and by not less than 75 percent of the Owners assigning one vote per Owner. Any amendment must be executed and recorded as provided by law; however, no amendment affecting the general plan of development or any other right of Declarant herein contained may be effected without the express written consent of Declarant or its successors and assigns, including, without limitation, amendment of this section 9.5, which consent may be granted or denied in Declarant's sole discretion.

9.6 Unilateral Amendment by Declarant. In addition to all other special rights of Declarant provided in this Declaration, Declarant may amend this Declaration in order to comply with the requirements of the Federal Housing Administration of the United States, the Federal National Mortgage Association, the Government National Mortgage Association, the Federal Home Loan Mortgage Corporation, any department, bureau, board, commission, or agency of the United States or the State of Oregon, or any other state in which the Homes are marketed and sold, or any corporation wholly owned, directly or indirectly, by the United States or the State of Oregon, or such other state, the approval of which entity is required in order for it to insure, guarantee, or provide financing in connection with development of the Property and sale of the Homes.

9.7 Oregon Planned Community Act. This Declaration and the [DevNW Airport Road] development are not subject to the Oregon Planned Community Act (the "Act"). Without limiting the foregoing, the provisions of the Act relating to turnover meetings and actions, the formation of an association and bylaws, meetings and other requirements shall not apply to the [DevNW Airport Road] development. However, for the orderly operation of the [DevNW Airport Road] development for its intended long-term affordable community land trust purposes, Declarant may apply or be guided by provisions of the Act as Declarant elects to apply or be guided by in its sole discretion, including without limitation provisions of the Act relating to common area and other assessments and the liability, collection, liens and foreclosure with respect thereto. Upon such election, Declarant shall have all powers granted by the Act to a declarant, association, board of directors or governing entity, as defined in the Act. Nothing in the foregoing shall be construed to imposed on Declarant the liabilities and obligations of a declarant, association, board of directors or governing entity under the Act unless Declarant so elects in its sole and absolute discretion.

9.8 Resolution of Document Conflicts. In the event of a conflict among any of the provisions in the documents governing [DevNW Airport Road], the conflict must be resolved by looking to the following documents in the order shown below:

1. Ground Lease restrictions;
2. Declaration;
3. Rules and Regulations.

IN WITNESS WHEREOF, Declarant has executed this instrument this _____ day of _____, 2020.

CORVALLIS NEIGHBORHOOD HOUSING SERVICES, INC., an Oregon nonprofit corporation, doing business as DevNW

By:_____
Emily Reiman, Executive Director

STATE OF OREGON)
) ss.
County of Lane)

This instrument was acknowledged before me on _____, 2020, by Emily Reiman, Chief Executive Officer of Corvallis Neighborhood Housing Services, Inc., an Oregon nonprofit corporation, doing business as DevNW.

_____
Notary Public for Oregon
My commission expires: _____

STONEWOOD
CONSTRUCTION, INC CCB# 120103

Development Schedule: DevNW Airport RD PUD

This project will be completed in a single phase, including the construction of all 12 single-family homes and all the approved infrastructure, parking and landscaping. While the duration of tasks may change, our projected construction timeline is as follows:

April-May 2020:	Site clearing, preparation, underground utilities installation and house pad preparation.
June 2020:	Prep and place concrete foundations
July- November 2020:	Framing and rough trades (plumbing, electrical, mechanical)
	Installation of raingardens/ bioswale. Landscaping preparation, irrigation installation.
	Lawn seeding.
December 2020-Jan 2021:	Insulation and drywall.
	Preparation for site concrete (sidewalks, curbs, flatwork)
February- May 2021:	Interior Finishing in homes.
	Site concrete placement
	AC Paving/ Striping
	Final Landscape planting
June 2021:	Project Complete

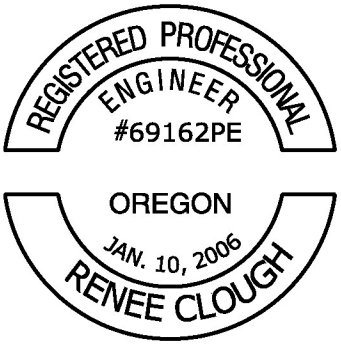
Exhibit F

935 Oak Street, Eugene, OR 97401 ◦ 541.485.6638 ◦ (fax) 541.349.9291 ◦ stonewoodconstruction.com

Stormwater Management Plan and Drainage Study

DevNW Airport Road PUD
Florence, Oregon

For
Willamette Neighborhood Housing Services
212 Main Street
Springfield OR 97477



EXPIRES: 12/31/21

Branch ENGINEERING inc
Since 1977
civil · transportation
structural · geotechnical
SURVEYING
www.BranchEngineering.com

March 6, 2020

Exhibit G

Contents

Page No.

Appendices

	Description
Appendix A	Stormwater Management Drainage Basin Map
Appendix B	Site Soils and Map
Appendix C	HydroCAD Analysis
Appendix D	Operation and Maintenance Plan
Appendix E	Well Logs and Infiltration Test Data

1.0 INTRODUCTION

This Stormwater Management Plan (SWMP) report has been prepared for a Final PUD application to build a housing project at the intersection of 15th Street and Nopal Street. The subject site is southeast of 15th Street and west of Nopal Street. The subject property is identified as Tax Map 18-12-27-10, Tax Lot 15400. The stormwater runoff from the twelve houses will be directed to a new stormwater facility that will also be designed to capture and treat stormwater from improvements to 15th Street. The stormwater runoff from the new drive/parking area and picnic area will be directed to a rain garden for stormwater treatment and retention. The purpose of this report is to document the design and establish maintenance requirements.

2.0 EXISTING CONDITIONS

The site is 1.73 acres located in Florence, Oregon on the southeast side of 15th Street just west of Nopal Street.

2.1 TOPOGRAPHY

The subject property is underdeveloped with improvements only in the front 0.57 acres. The developed portion has a small paved area for parking and a community garden. The undeveloped portion is composed of heavy brush and a dune which rises approximately 30-40 feet above the surrounding area.

2.2 SOILS

The Natural Resources Conservation Service (NRCS) Web Soil Survey maps the subject site as containing only Waldport fine sand (131C). The dune that is located on the site is of the same soil type but classified as national map unit symbol 131E, as this portion has slopes between 12-30%

Waldport fine sand is described as an excessively drained eolian sand of mixed origin and is in Hydrologic Soil Group A. A soils map and individual soil information is provided in Appendix B.

A geotechnical report was developed for the site to determine infiltration rates and depth to ground water table. The investigation found infiltration rates ranging from 40-60 in/hr with one outlier at 136 in/hr. No ground water was found when digging test pits; the static groundwater was inferred from surrounding well logs, and is approximately 8.5 feet below the lowest point on the site. Infiltration testing data and the nearest well log reports are included in Appendix E.

2.3 EXISTING STORM SYSTEM

The only existing storm facilities are located just to the northeast of the property, and serve Nopal Street. These storm facilities function as a Nopal Street retention pond per the stormwater report titled "Storm Water Management Plan for Keener Place for Florence Habitat for Humanity," Signed by Michael N. McAllister on October 19, 2009. It should be noted that the report describes the facilities as swales, and differentiates them by referring to them as lower and upper. For the purpose of this report, the upper swale will be referred to as the eastern swale, and the lower swale will be referred to as the western swale.

The following table details the existing stormwater facilities that will be utilized by this project.

Facility	Maximum Inflow (cfs)		Maximum Depth of Water (ft)	
	25 yr	100 yr	25 yr	100 yr
Western Swale	0.49	0.61	2.43	2.79
Eastern Swale	0.50	0.67	2.11	2.47

Table 1: Existing swales' current inflow rates and water depths.

See Pages 1-4 in Appendix C for the complete HydroCAD results.

3.0 PROPOSED DEVELOPMENT

3.1 PUBLIC IMPROVEMENTS

The proposed development includes public improvements to both Nopal Street and 15th Street, as well as public utility systems within the site. The west side of Nopal Street will include a curbside sidewalk. The runoff from the sidewalk will be directed to the existing stormwater facilities that Nopal Street currently flows to.

15th Street will also be improved with an additional 2'2" width in the paving area, as well as a setback sidewalk. This increase in impervious area will occur from the northwest property corner to the existing ADA ramp located on the southwest corner of the Nopal Street and 15th Street intersection. Within the landscape area between the curb and sidewalk, a public stormwater facility will be installed to capture and treat the runoff from the 15th Street improvements.

3.2 PRIVATE IMPROVEMENTS

The proposed development consists of 12 single-family houses surrounding a common area that has paved walkways, a small picnic area, and large vegetated areas. Nopal Street and 15th Street will be connected with a private drive aisle through the site. 25 parking spaces (including an ADA space with van access) will take access from the drive aisle.

On the northwest corner of the site near the 15th Street entrance a 1,220 square foot rain garden will treat and retain the runoff from the drive aisle/parking area and the shared picnic area. The proposed public swale/rain garden adjacent to 15th Street will treat and retain the water from the roof runoff from the single-family houses.

4.0 STORMWATER CONSTRAINTS

The main stormwater constraint is the lack of a public system. Due to this, all stormwater had to be treated and retained on site. This gave less flexibility with the stormwater facilities' design and function.

Another constraint on the site was accommodating treatment of the large drive aisle and parking area, while still maintaining other project requirements. The relatively high infiltration rates allowed the facilities to be designed to fully infiltrate without becoming overly large.

The existing topography of 15th Street has a ridge line near Maple Street. This ridge line diverts stormwater runoff in the east and west direction. Given the location of the entrance of the site, all new impervious area to the west of this ridge line, approximately 600 square feet, cannot be captured and treated. The remaining 2,700 square feet of new impervious area will be captured and treated in the proposed swale/rain garden. Furthermore, the existing pavement south of the centerline of 15th Street to the east of the Maple Street ridge line will be treated and retained in the proposed swale/rain garden. Although 600 square feet of new impervious area can't be treated and retained, 3,950 square feet of existing impervious area will be treated and retained. The runoff from this area can be seen on pages 23-24 of Appendix C

5.0 PROPOSED DEVELOPMENT STORMWATER DESCRIPTION

The following stormwater facilities are designed to meet the City of Florence's Stormwater Design Manual for water quality and retention.

5.1 PUBLIC STORMWATER DESCRIPTION

In order to treat and retain the stormwater runoff for the public improvements along 15th Street a swale/rain garden will be installed in the landscape area between the curb and the sidewalk. The facility is 190 feet long, 6.3 feet wide, and 0.72 feet deep. The bottom of the facility is 2 feet wide and slopes at 0.3% toward the northeast, following the natural slope of 15th Street.

The proposed sidewalk along Nopal Street increase the impervious area that drains to the existing western and eastern swales. Both swales' capacities were checked to meet the needs of the development.

5.2 PRIVATE STORMWATER DESCRIPTION

The proposed stormwater for the private development consists of a large rain garden at the 15th Street entrance to the site. The rain garden is designed to treat and retain the stormwater runoff from the private drive aisle/parking area and the picnic area. The rain garden is a stormwater treatment best management practice (BMP) to meet the water quality standards of the City of Florence. A Stormwater Management Basin Map is included in Appendix A.

The homes' roof drains will connect directly into the rock under the 15th Street swale/rain garden; per the standards of the City of Florence's Stormwater Design Manual, roofs do not need to be treated, but do need to be conveyed to a disposal point. In Section 8.1 of this report it will show that the proposed swale/rain garden along 15th Street has enough capacity for the stormwater runoff from 15th Street and all the proposed houses in the development.

6.0 HYDROLOGIC AND HYDRAULIC ANALYSIS

6.1 COMPUTER MODEL

In preparing this Stormwater Management Plan for the project site, Branch Engineering utilized the HydroCAD 10.0 software. This is a computer program used to model, analyze and design hydro systems of drainage basins.

HydroCAD computes Santa Barbara Urban Hydrographs (SBUH) using rainfall data supplied by the designer. The SBUH method is a recognized analysis method by the Oregon DEQ and is appropriate for a project site of this size. Once the appropriate data is input to HydroCAD, each drainage basin has a hydrograph and runoff flow for the desired storm event.

HydroCAD also computes data using the rational method. This method was used in order to compute data analyzed in an accepted stormwater report by the City of Florence in 2009. In order to retain the integrity of the previous report, the improvements that are being proposed that affect that report used the same calculation method.

6.2 COMPUTER MODEL DATA (SBUH)

HydroCAD needs data supplied from the designer that describes the drainage basin in order to create the hydrograph. Below is the data that is needed to describe each drainage basin.

- Storm Event

For the purposes of this design, the design storm events are as follows:

Water Quality Event	0.83 inches / 24 hours
2-year Storm Event	3.46 inches / 24 hours
10-year Storm Event	4.48 inches / 24 hours
25-year Storm Event	5.06 inches / 24 hours

- Impervious Area

Pavement, sidewalks, hardscapes and rooftops are all impervious surfaces. Each drainage basin's impervious area was calculated using the proposed site plan.

- Pervious Area

Lawns and open space are pervious areas. Each drainage basin's pervious area is all that area that is not impervious.

- Runoff Curve Numbers

Each drainage basin has a Runoff Curve Number for the impervious areas and the pervious areas. The Runoff Curve Number is based on the type of surface and the Hydrologic Group of the soils. Table 2-2a of *Urban Hydrology for Small Watersheds* (commonly referred to as TR-55) has the curve number for impervious area as 98 and 39 for pervious.

- Time of Concentration

The Time of Concentration was estimated at 10 minutes for each sub basin, as each sub basin is less that one acre in size. For such a small area, this is a reasonable assumption

6.3 COMPUTER MODEL DATA (RATIONAL METHOD)

HydroCAD needs data supplied from the designer that describes the drainage basin in order to create the hydraulic model. Below is the data that is needed to describe each drainage basin.

- Storm Event

For the purposes of this design, the design storm events are as follows:

25-year Storm Event	3.0 inches / 60-minute duration
100-year Storm Event	3.7 inches / 60-minute duration

These values were utilized in the referenced 2009 report. To retain integrity, they were used here.

- Impervious Area

Pavement, sidewalks, hardscapes and rooftops are all impervious surfaces. Each drainage basin's impervious area was calculated using the proposed site plan.

- **Runoff Coefficient**

Each drainage basin has a Runoff Coefficient for the impervious areas. For all impervious areas, the runoff coefficient of 0.90 was used.

- **Time of Concentration**

The Time of Concentration was estimated at 10 minutes for each sub basin, as each sub basin is less that one acre in size. For such a small area, this is a reasonable assumption

7.0 EXISTING STORMWATER FACILITY

An analysis of the stormwater report for the Keener Place PUD Phase 1 was conducted in order to determine if the existing facilities could be used for treatment and retention for the runoff from the proposed public sidewalk along Nopal Street. According to the previous report, the curb inlets serve as mechanical treatment before entering the swales. The increase in impervious area along Nopal Street is 1,400 square feet. The increase in impervious area to the western swale is 430 sq. ft. and the eastern swale is 970 sq. ft.

Both swales detailed in the report were designed to capture and retain the water up to a 100-year storm. Using the same calculation method from the previous report, the western and eastern swale will have an increase in peak flow of 0.03 cfs and 0.07 cfs, respectively, during the 25-year design storm and 0.03 cfs and 0.08 cfs, respectively, during the 100-year design storm. This translates to a 0.20-foot increase in water depth in the eastern swale and a 0.09-foot increase in water depth in the western swale during the 100-year design storm. Both swales were designed to have about 1-foot of freeboard. The slight increase in the water depth during the 100-year design storm will not affect the capacity of the existing swales and still meets the City of Florence's Stormwater Design Manual of 0.5-foot freeboard depth; no new method for capturing this additional runoff from Nopal Street is proposed.

Facility	Maximum Inflow (cfs)		Maximum Depth of Water (ft)	
	25 yr	100 yr	25 yr	100 yr
Western Swale	0.52	0.61	2.52	2.88
Eastern Swale	0.61	0.67	2.29	2.67

Table 2: Existing swales' proposed inflow rates and water depths.

See Pages 5-8 in Appendix C for the complete HydroCAD results.

8.0 PROPOSED STORMWATER FACILITIES

8.1 PUBLIC STORMWATER FACILITY

As discussed in Section 5.2 of this report, the southern portion of 15th Street and all roof drains are routed to the 15th Street swale/rain garden.

The swale/rain garden will function as a water treatment and retention facility for the runoff from 15th Street. Four ditch inlets will be placed throughout the facility for storm events that exceed the water

quality depth within the facility. This will direct the water to the storage aggregate below the facility. Infiltration tests conducted throughout the site and the results of the test pits show the soil on site is very homogenous at the depth of the storage aggregate invert elevation. Infiltration tests performed throughout the site gave reasonably similar results of a very high infiltration rate (40-60 inches per hour). The assumed infiltration rate for the soil below the storage aggregate used a Factor of Safety of 5 on the lowest tested infiltration rate. An infiltration rate of 8 inches/hour was assumed for the soil. Results from the swale/rain garden and storage aggregate are summarized in the table below.

	Maximum Depth of Facility	Peak Water Elevation		Peak Inflow		Peak Outflow		Method of Outflow
		(feet)		(cfs)		(cfs)		
	(feet)	WQ	25 yr	WQ	25 yr	WQ	25 yr	
15th Street Swale/Rain Garden	0.72	0.27	0.32	0.03	0.20	0.01	0.20	Route to 15th Street Storage Aggregate
15th Street Storage Aggregate	1.50	0.00	1.32	0.05	0.50	0.05	0.22	Infiltration

Table 3: Proposed public swale/rain garden inflow rates, outflow rates and water depths.

See Pages 9-16 in Appendix C for the complete HydroCAD results.

8.2 PRIVATE STORMWATER FACILITY

The proposed private stormwater facility is a rain garden located at the 15th Street entrance to the site. The facility is actually two rain gardens that are connected with a 6-inch pipe to allow water to freely flow from one to the other. Both sections of the rain garden will function as treatment facilities, with an over flow ditch inlet for larger storm events. The ditch inlets will direct water to the storage aggregate below the facility. Infiltration tests performed throughout the site gave reasonably similar results of a very high infiltration rate (40-60 inches per hour). The assumed infiltration rate for the soil below the storage aggregate used a Factor of Safety of 5 on the lowest tested infiltration rate. An infiltration rate of 8 inches/hour was assumed for the soil. Results from the rain garden and storage aggregate are summarized in the table below.

	Maximum Depth of Facility	Peak Water Elevation		Peak Inflow		Peak Outflow		Method of Outflow
		(feet)		(cfs)		(cfs)		
	(feet)	WQ	25 yr	WQ	25 yr	WQ	25 yr	
Rain Garden	2.00	0.66	1.55	0.05	0.40	0.02	0.40	Route to Storage Aggregate
Storage Aggregate	1.00	0.00	0.69	0.02	0.40	0.02	0.22	Infiltration

Table 4: Proposed private rain garden inflow rates, outflow rates and water depths.

See Pages 17-22 in Appendix C for the complete HydroCAD results.

9.0 MAINTENANCE

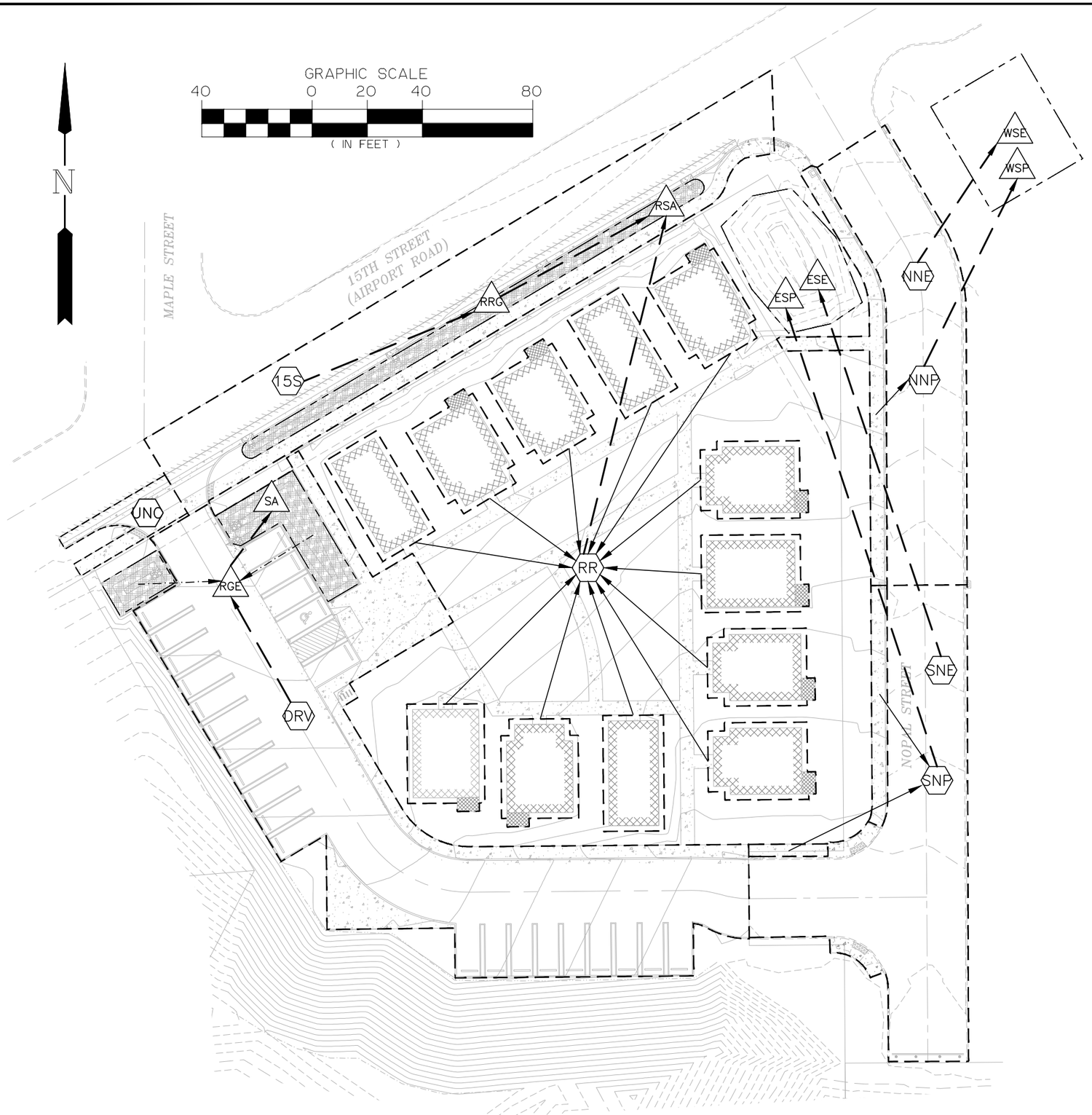
The facilities on site will be maintained privately since they receive water only from private improvements and will be constructed under a Building Permit. The existing swales and the proposed swale/rain garden will be maintained by the City of Florence since they receive public runoff. Maintenance will be per the City of Florence's Stormwater Design Manual. Repairs to storm facilities shall be made in accordance with City of Florence Public Works Department. Detailed Operations and Maintenance information is included in Appendix D.

10.0 CONCLUSION

Compliance has been established for the stormwater system designed herein for the new site improvements. Water quality and flow control are accomplished through a swale/rain garden, a rain garden and an existing retention pond. Treatment will occur through the filtering effects of the rain garden and disposal will occur through infiltration.

APPENDIX A

Stormwater Management Drainage Basin Map



LEGEND

- DIRECTION OF FLOW
- BASIN AREA
- ## BASIN DESIGNATION SYMBOL
- COMBINED BASIN LEADER
- FACILITY AREA
- ## FACILITY DESIGNATION SYMBOL
- COMBINED FACILITY LEADER
- UNCAPTURED BASIN AREA
- ## UNCAPTURED BASIN DESIGNATION SYMBOL

Branch ENGINEERING inc
Since 1977
civil • transportation
structural • geotechnical
SURVEYING
310 5th Street
Springfield, OR 97477
p: 541.746.0637
www.BranchEngineering.com
Springfield OR | Albany OR

project title:

DEVNW AIRPORT RD. FINAL PUD
STORMWATER BASIN MAP

TAX MAP: 18-12-27-1, TAX LOT: 15400
FLORENCE, OREGON
97439

revisions:

date:	FEB. 21, 2020
drawn by:	AWMS
designer:	RC
project no:	18-493

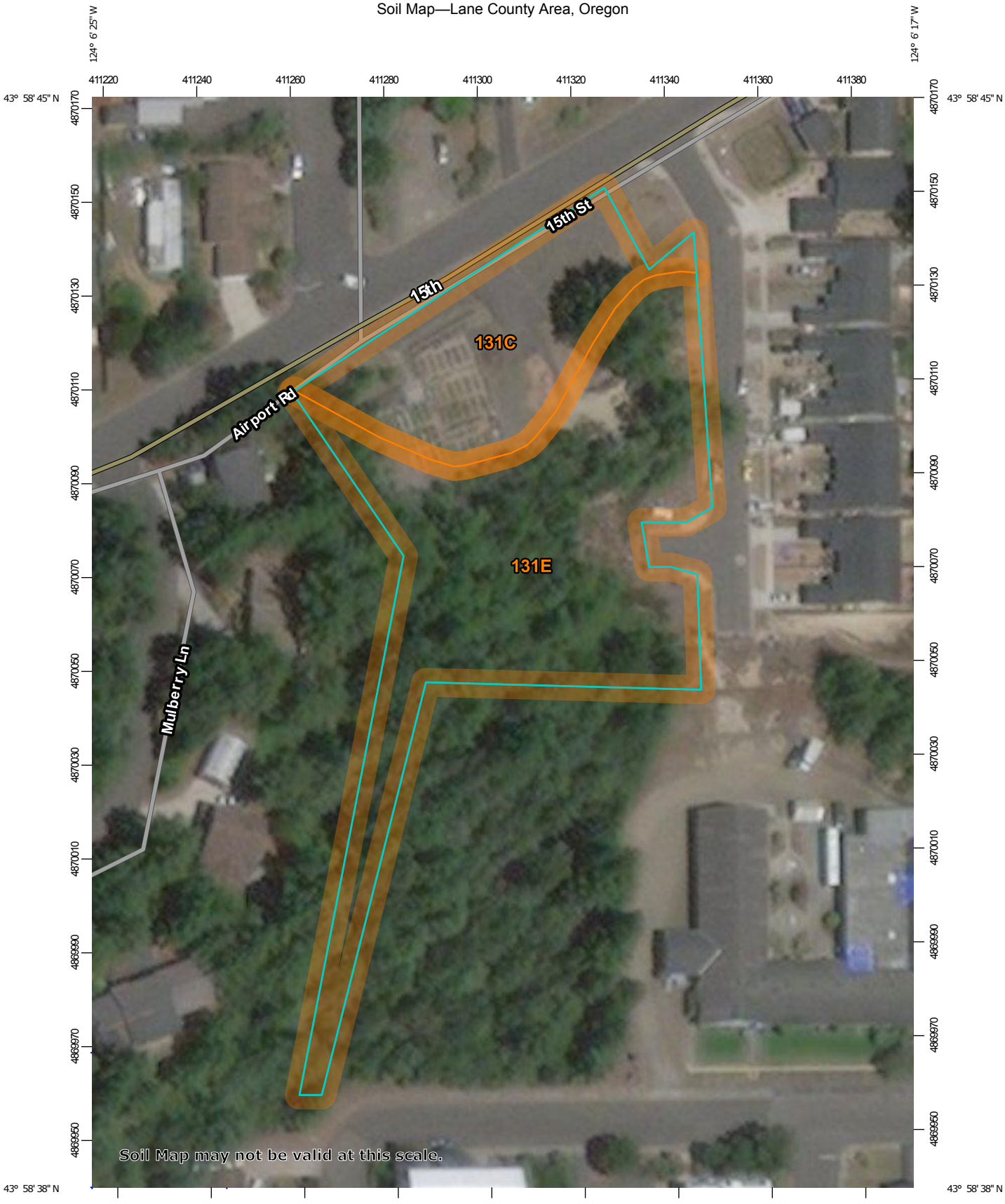
STORMWATER
BASIN MAP

sheet: 1

Z:\2018\18-493 Keener Plaza\Drawings\Final PUD.dwg 2/22/2020 7:13 AM DREWS

APPENDIX B

Site Soils and Map



Map Scale: 1:1,130 if printed on A portrait (8.5" x 11") sheet.

N

Meters: 0 15 30 60 90

Feet: 0 50 100 200 300

Map projection: Web Mercator Corner coordinates: WGS84 Edge tics: UTM Zone 10N WGS84

MAP LEGEND

Area of Interest (AOI)
- Area of Interest (AOI)

Soils
- Soil Map Unit Polygons
- Soil Map Unit Lines
- Soil Map Unit Points

Special Point Features
- Blowout
- Borrow Pit
- Clay Spot
- Closed Depression
- Gravel Pit
- Gravelly Spot
- Landfill
- Lava Flow
- Marsh or swamp
- Mine or Quarry
- Miscellaneous Water
- Perennial Water
- Rock Outcrop
- Saline Spot
- Sandy Spot
- Severely Eroded Spot
- Sinkhole
- Slide or Slip
- Sodic Spot
- Spoil Area
- Stony Spot
- Very Stony Spot
- Wet Spot
- Other
- Special Line Features

Water Features
- Streams and Canals

Transportation
- Rails
- Interstate Highways
- US Routes
- Major Roads
- Local Roads

Background
- Aerial Photography

MAP INFORMATION

The soil surveys that comprise your AOI were mapped at 1:20,000.

Warning: Soil Map may not be valid at this scale.

Enlargement of maps beyond the scale of mapping can cause misunderstanding of the detail of mapping and accuracy of soil line placement. The maps do not show the small areas of contrasting soils that could have been shown at a more detailed scale.

Please rely on the bar scale on each map sheet for map measurements.

Source of Map: Natural Resources Conservation Service
Web Soil Survey URL:
Coordinate System: Web Mercator (EPSG:3857)

Maps from the Web Soil Survey are based on the Web Mercator projection, which preserves direction and shape but distorts distance and area. A projection that preserves area, such as the Albers equal-area conic projection, should be used if more accurate calculations of distance or area are required.

This product is generated from the USDA-NRCS certified data as of the version date(s) listed below.

Soil Survey Area: Lane County Area, Oregon
Survey Area Data: Version 15, Sep 18, 2018

Soil map units are labeled (as space allows) for map scales 1:50,000 or larger.

Date(s) aerial images were photographed: Aug 27, 2007—Sep 15, 2016

The orthophoto or other base map on which the soil lines were compiled and digitized probably differs from the background imagery displayed on these maps. As a result, some minor shifting of map unit boundaries may be evident.

Map Unit Legend

Map Unit Symbol	Map Unit Name	Acres in AOI	Percent of AOI
131C	Waldport fine sand, 0 to 12 percent slopes	0.5	30.1%
131E	Waldport fine sand, 12 to 30 percent slopes	1.2	69.9%
Totals for Area of Interest		**1.8**	**100.0%**

Lane County Area, Oregon

131C—Waldport fine sand, 0 to 12 percent slopes

Map Unit Setting

National map unit symbol: 234r
Elevation: 0 to 150 feet
Mean annual precipitation: 60 to 100 inches
Mean annual air temperature: 48 to 54 degrees F
Frost-free period: 165 to 300 days
Farmland classification: Not prime farmland

Map Unit Composition

Waldport and similar soils: 85 percent
Minor components: 8 percent
Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Waldport

Setting

Landform: Dunes
Down-slope shape: Linear
Across-slope shape: Linear
Parent material: Eolian sand of mixed origin

Typical profile

Oi - 0 to 1 inches: slightly decomposed plant material
Oe - 1 to 3 inches: moderately decomposed plant material
H1 - 3 to 8 inches: fine sand
H2 - 8 to 60 inches: fine sand

Properties and qualities

Slope: 0 to 12 percent
Depth to restrictive feature: More than 80 inches
Natural drainage class: Excessively drained
Capacity of the most limiting layer to transmit water (Ksat): High to very high (5.95 to 99.90 in/hr)
Depth to water table: More than 80 inches
Frequency of flooding: None
Frequency of ponding: None
Available water storage in profile: Low (about 4.8 inches)

Interpretive groups

Land capability classification (irrigated): None specified
Land capability classification (nonirrigated): 6e
Hydrologic Soil Group: A
Hydric soil rating: No

Minor Components

Heceta

Percent of map unit: 4 percent

Landform: Interdunes
Hydric soil rating: Yes

Yaquina
Percent of map unit: 4 percent
Landform: Marine terraces
Hydric soil rating: Yes

Data Source Information

Soil Survey Area: Lane County Area, Oregon
Survey Area Data: Version 15, Sep 18, 2018

Lane County Area, Oregon

131E—Waldport fine sand, 12 to 30 percent slopes

Map Unit Setting

National map unit symbol: 234s
Elevation: 0 to 150 feet
Mean annual precipitation: 60 to 100 inches
Mean annual air temperature: 48 to 54 degrees F
Frost-free period: 165 to 300 days
Farmland classification: Not prime farmland

Map Unit Composition

Waldport and similar soils: 85 percent
Minor components: 6 percent
Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Waldport

Setting

Landform: Dunes
Down-slope shape: Linear
Across-slope shape: Linear
Parent material: Eolian sand of mixed origin

Typical profile

Oi - 0 to 1 inches: slightly decomposed plant material
Oe - 1 to 3 inches: moderately decomposed plant material
H1 - 3 to 8 inches: fine sand
H2 - 8 to 60 inches: fine sand

Properties and qualities

Slope: 12 to 30 percent
Depth to restrictive feature: More than 80 inches
Natural drainage class: Excessively drained
Capacity of the most limiting layer to transmit water (Ksat): High to very high (5.95 to 99.90 in/hr)
Depth to water table: More than 80 inches
Frequency of flooding: None
Frequency of ponding: None
Available water storage in profile: Low (about 4.8 inches)

Interpretive groups

Land capability classification (irrigated): None specified
Land capability classification (nonirrigated): 7e
Hydrologic Soil Group: A
Hydric soil rating: No

Minor Components

Heceta

Percent of map unit: 3 percent

Landform: Interdunes
Hydric soil rating: Yes

Yaquina
Percent of map unit: 3 percent
Landform: Marine terraces
Hydric soil rating: Yes

Data Source Information

Soil Survey Area: Lane County Area, Oregon
Survey Area Data: Version 15, Sep 18, 2018

APPENDIX C

HydroCAD Analysis

Summary for Pond ESE: Eastern Swale - Existing Conditions

Inflow Area = 8,717 sf, 0.00% Impervious, Inflow Depth = 2.70"
Inflow = 0.54 cfs @ 0.09 hrs, Volume= 1,961 cf
Outflow = 0.23 cfs @ 1.05 hrs, Volume= 1,961 cf, Atten= 58%, Lag= 57.5 min
Discarded = 0.23 cfs @ 1.05 hrs, Volume= 1,961 cf

Routing by Dyn-Stor-Ind method, Time Span= 0.00-24.00 hrs, dt= 0.01 hrs
Peak Elev= 40.91' @ 1.05 hrs Surf.Area= 0.023 ac Storage= 0.031 af

Plug-Flow detention time= 66.2 min calculated for 1,961 cf (100% of inflow)
Center-of-Mass det. time= 66.3 min (98.8 - 32.5)

Volume	Invert	Avail.Storage	Storage Description
#1	38.80'	0.079 af	**15.80'W x 21.80'L x 3.70'H Prismatoid Z=3.0**

Device	Routing	Invert	Outlet Devices
#1	Discarded	38.80'	**10.000 in/hr Exfiltration over Surface area** Phase-In= 0.01'

Discarded OutFlow Max=0.23 cfs @ 1.05 hrs HW=40.91' (Free Discharge)
1=Exfiltration (Exfiltration Controls 0.23 cfs)

Summary for Pond WSE: Western Swale - Existing Conditions

Inflow Area = 7,918 sf, 0.00% Impervious, Inflow Depth = 2.70"
Inflow = 0.49 cfs @ 0.09 hrs, Volume= 1,782 cf
Outflow = 0.21 cfs @ 1.05 hrs, Volume= 1,782 cf, Atten= 58%, Lag= 57.5 min
Discarded = 0.21 cfs @ 1.05 hrs, Volume= 1,782 cf

Routing by Dyn-Stor-Ind method, Time Span= 0.00-24.00 hrs, dt= 0.01 hrs
Peak Elev= 41.43' @ 1.05 hrs Surf.Area= 0.020 ac Storage= 0.029 af

Plug-Flow detention time= 71.2 min calculated for 1,781 cf (100% of inflow)
Center-of-Mass det. time= 71.2 min (103.7 - 32.5)

Volume	Invert	Avail.Storage	Storage Description
#1	39.00'	0.062 af	**8.50'W x 24.00'L x 3.70'H Prismatoid Z=3.0**

Device	Routing	Invert	Outlet Devices
#1	Discarded	39.00'	**10.000 in/hr Exfiltration over Surface area** Phase-In= 0.01'

Discarded OutFlow Max=0.21 cfs @ 1.05 hrs HW=41.43' (Free Discharge)
1=Exfiltration (Exfiltration Controls 0.21 cfs)

Summary for Pond ESE: Eastern Swale - Existing Conditions

Inflow Area = 8,717 sf, 0.00% Impervious, Inflow Depth = 3.33"
Inflow = 0.67 cfs @ 0.09 hrs, Volume= 2,419 cf
Outflow = 0.26 cfs @ 1.05 hrs, Volume= 2,419 cf, Atten= 61%, Lag= 57.7 min
Discarded = 0.26 cfs @ 1.05 hrs, Volume= 2,419 cf

Routing by Dyn-Stor-Ind method, Time Span= 0.00-24.00 hrs, dt= 0.01 hrs
Peak Elev= 41.27' @ 1.05 hrs Surf.Area= 0.026 ac Storage= 0.040 af

Plug-Flow detention time= 75.5 min calculated for 2,418 cf (100% of inflow)
Center-of-Mass det. time= 75.6 min (108.1 - 32.5)

Volume	Invert	Avail.Storage	Storage Description
#1	38.80'	0.079 af	**15.80'W x 21.80'L x 3.70'H Prismatoid Z=3.0**

Device	Routing	Invert	Outlet Devices
#1	Discarded	38.80'	**10.000 in/hr Exfiltration over Surface area** Phase-In= 0.01'

Discarded OutFlow Max=0.26 cfs @ 1.05 hrs HW=41.27' (Free Discharge)
1=Exfiltration (Exfiltration Controls 0.26 cfs)

Summary for Pond WSE: Western Swale - Existing Conditions

Inflow Area = 7,918 sf, 0.00% Impervious, Inflow Depth = 3.33"
Inflow = 0.61 cfs @ 0.09 hrs, Volume= 2,197 cf
Outflow = 0.24 cfs @ 1.05 hrs, Volume= 2,197 cf, Atten= 61%, Lag= 57.7 min
Discarded = 0.24 cfs @ 1.05 hrs, Volume= 2,197 cf

Routing by Dyn-Stor-Ind method, Time Span= 0.00-24.00 hrs, dt= 0.01 hrs
Peak Elev= 41.79' @ 1.05 hrs Surf.Area= 0.024 ac Storage= 0.036 af

Plug-Flow detention time= 79.5 min calculated for 2,197 cf (100% of inflow)
Center-of-Mass det. time= 79.5 min (112.0 - 32.5)

Volume	Invert	Avail.Storage	Storage Description
#1	39.00'	0.062 af	**8.50'W x 24.00'L x 3.70'H Prismatoid Z=3.0**

Device	Routing	Invert	Outlet Devices
#1	Discarded	39.00'	**10.000 in/hr Exfiltration over Surface area** Phase-In= 0.01'

Discarded OutFlow Max=0.24 cfs @ 1.05 hrs HW=41.79' (Free Discharge)
1=Exfiltration (Exfiltration Controls 0.24 cfs)

Summary for Pond ESP: Eastern Swale - Proposed Conditions

Inflow Area = 9,687 sf, 0.00% Impervious, Inflow Depth = 2.70"
Inflow = 0.61 cfs @ 0.09 hrs, Volume= 2,180 cf
Outflow = 0.24 cfs @ 1.05 hrs, Volume= 2,180 cf, Atten= 60%, Lag= 57.6 min
Discarded = 0.24 cfs @ 1.05 hrs, Volume= 2,180 cf

Routing by Dyn-Stor-Ind method, Time Span= 0.00-24.00 hrs, dt= 0.01 hrs
Peak Elev= 41.09' @ 1.05 hrs Surf.Area= 0.024 ac Storage= 0.035 af

Plug-Flow detention time= 70.9 min calculated for 2,179 cf (100% of inflow)
Center-of-Mass det. time= 70.9 min (103.4 - 32.5)

Volume	Invert	Avail.Storage	Storage Description
#1	38.80'	0.079 af	**15.80'W x 21.80'L x 3.70'H Prismatoid Z=3.0**

Device	Routing	Invert	Outlet Devices
#1	Discarded	38.80'	**10.000 in/hr Exfiltration over Surface area** Phase-In= 0.01'

Discarded OutFlow Max=0.24 cfs @ 1.05 hrs HW=41.09' (Free Discharge)
1=Exfiltration (Exfiltration Controls 0.24 cfs)

Summary for Pond WSP: Western Swale - Proposed Conditions

Inflow Area = 8,348 sf, 0.00% Impervious, Inflow Depth = 2.70"
Inflow = 0.52 cfs @ 0.09 hrs, Volume= 1,878 cf
Outflow = 0.21 cfs @ 1.05 hrs, Volume= 1,878 cf, Atten= 59%, Lag= 57.6 min
Discarded = 0.21 cfs @ 1.05 hrs, Volume= 1,878 cf

Routing by Dyn-Stor-Ind method, Time Span= 0.00-24.00 hrs, dt= 0.01 hrs
Peak Elev= 41.52' @ 1.05 hrs Surf.Area= 0.021 ac Storage= 0.030 af

Plug-Flow detention time= 73.3 min calculated for 1,878 cf (100% of inflow)
Center-of-Mass det. time= 73.3 min (105.8 - 32.5)

Volume	Invert	Avail.Storage	Storage Description
#1	39.00'	0.062 af	**8.50'W x 24.00'L x 3.70'H Prismatoid Z=3.0**

Device	Routing	Invert	Outlet Devices
#1	Discarded	39.00'	**10.000 in/hr Exfiltration over Surface area** Phase-In= 0.01'

Discarded OutFlow Max=0.21 cfs @ 1.05 hrs HW=41.52' (Free Discharge)
1=Exfiltration (Exfiltration Controls 0.21 cfs)

Summary for Pond ESP: Eastern Swale - Proposed Conditions

Inflow Area = 9,687 sf, 0.00% Impervious, Inflow Depth = 3.33"
Inflow = 0.75 cfs @ 0.09 hrs, Volume= 2,688 cf
Outflow = 0.28 cfs @ 1.05 hrs, Volume= 2,688 cf, Atten= 63%, Lag= 57.7 min
Discarded = 0.28 cfs @ 1.05 hrs, Volume= 2,688 cf

Routing by Dyn-Stor-Ind method, Time Span= 0.00-24.00 hrs, dt= 0.01 hrs
Peak Elev= 41.47' @ 1.05 hrs Surf.Area= 0.028 ac Storage= 0.045 af

Plug-Flow detention time= 80.5 min calculated for 2,688 cf (100% of inflow)
Center-of-Mass det. time= 80.5 min (113.0 - 32.5)

Volume	Invert	Avail.Storage	Storage Description
#1	38.80'	0.079 af	**15.80'W x 21.80'L x 3.70'H Prismatoid Z=3.0**

Device	Routing	Invert	Outlet Devices
#1	Discarded	38.80'	**10.000 in/hr Exfiltration over Surface area** Phase-In= 0.01'

Discarded OutFlow Max=0.28 cfs @ 1.05 hrs HW=41.47' (Free Discharge)
1=Exfiltration (Exfiltration Controls 0.28 cfs)

Summary for Pond WSP: Western Swale - Proposed Conditions

Inflow Area = 8,348 sf, 0.00% Impervious, Inflow Depth = 3.33"
Inflow = 0.64 cfs @ 0.09 hrs, Volume= 2,317 cf
Outflow = 0.25 cfs @ 1.05 hrs, Volume= 2,317 cf, Atten= 62%, Lag= 57.7 min
Discarded = 0.25 cfs @ 1.05 hrs, Volume= 2,317 cf

Routing by Dyn-Stor-Ind method, Time Span= 0.00-24.00 hrs, dt= 0.01 hrs
Peak Elev= 41.88' @ 1.05 hrs Surf.Area= 0.024 ac Storage= 0.039 af

Plug-Flow detention time= 81.6 min calculated for 2,317 cf (100% of inflow)
Center-of-Mass det. time= 81.6 min (114.2 - 32.5)

Volume	Invert	Avail.Storage	Storage Description
#1	39.00'	0.062 af	**8.50'W x 24.00'L x 3.70'H Prismatoid Z=3.0**

Device	Routing	Invert	Outlet Devices
#1	Discarded	39.00'	**10.000 in/hr Exfiltration over Surface area** Phase-In= 0.01'

Discarded OutFlow Max=0.25 cfs @ 1.05 hrs HW=41.88' (Free Discharge)
1=Exfiltration (Exfiltration Controls 0.25 cfs)

Summary for Subcatchment 15S: 15th Street

Runoff = 0.03 cfs @ 7.99 hrs, Volume= 0.009 af, Depth= 0.63"

Runoff by SBUH method, Split Pervious/Imperv., Time Span= 0.00-72.00 hrs, dt= 0.01 hrs
Type IA 24-hr WQ Rainfall=0.83"

	Area (sf)	CN	Description
*	2,430	98	New Impervious Area
*	3,950	98	Existing Impervious Area
*	1,197	98	Swale/Rain Garden
	7,577	98	Weighted Average
	7,577	98	100.00% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
10.0					**Direct Entry,**

Summary for Subcatchment RR: Roof Runoff

Runoff = 0.04 cfs @ 7.99 hrs, Volume= 0.014 af, Depth= 0.63"

Runoff by SBUH method, Split Pervious/Imperv., Time Span= 0.00-72.00 hrs, dt= 0.01 hrs
Type IA 24-hr WQ Rainfall=0.83"

	Area (sf)	CN	Description
*	11,808	98	
	11,808	98	100.00% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
10.0					**Direct Entry,**

Summary for Pond RRG: Roadside Swale/Rain Garden

Inflow Area = 0.174 ac,100.00% Impervious, Inflow Depth = 0.63" for WQ event
Inflow = 0.03 cfs @ 7.99 hrs, Volume= 0.009 af
Outflow = 0.01 cfs @ 8.48 hrs, Volume= 0.009 af, Atten= 51%, Lag= 29.5 min
Primary = 0.01 cfs @ 8.48 hrs, Volume= 0.009 af
Secondary = 0.00 cfs @ 0.00 hrs, Volume= 0.000 af

Routing by Dyn-Stor-Ind method, Time Span= 0.00-72.00 hrs, dt= 0.01 hrs
Peak Elev= 45.57' @ 8.48 hrs Surf.Area= 281 sf Storage= 44 cf

Plug-Flow detention time= 26.7 min calculated for 0.009 af (100% of inflow)
Center-of-Mass det. time= 26.7 min (755.4 - 728.7)

Volume	Invert	Avail.Storage	Storage Description
#1	45.30'	289 cf	**Custom Stage Data (Prismatic)** Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
45.30	59	0	0
45.40	131	10	10
45.50	216	17	27
45.60	308	26	53
45.70	436	37	90
45.80	579	51	141
45.90	754	67	208
46.00	870	81	289

Device	Routing	Invert	Outlet Devices
#1	Primary	45.30'	**2.000 in/hr Exfiltration over Surface area** Phase-In= 0.01'
#2	Secondary	45.60'	**18.0" Horiz. Orifice/Grate X 2.00** C= 0.600 Limited to weir flow at low heads
#3	Secondary	45.85'	**18.0" Horiz. Orifice/Grate X 2.00** C= 0.600 Limited to weir flow at low heads

Primary OutFlow Max=0.01 cfs @ 8.48 hrs HW=45.57' TW=42.30' (Dynamic Tailwater)
└─**1=Exfiltration** (Exfiltration Controls 0.01 cfs)

Secondary OutFlow Max=0.00 cfs @ 0.00 hrs HW=45.30' TW=42.30' (Dynamic Tailwater)
├─**2=Orifice/Grate** (Controls 0.00 cfs)
└─**3=Orifice/Grate** (Controls 0.00 cfs)

Summary for Pond RSA: Roadside Storage Aggregate

Inflow Area = 0.445 ac,100.00% Impervious, Inflow Depth = 0.63" for WQ event
Inflow = 0.05 cfs @ 8.00 hrs, Volume= 0.023 af
Outflow = 0.05 cfs @ 8.00 hrs, Volume= 0.023 af, Atten= 0%, Lag= 0.2 min
Discarded = 0.05 cfs @ 8.00 hrs, Volume= 0.023 af

Routing by Dyn-Stor-Ind method, Time Span= 0.00-72.00 hrs, dt= 0.01 hrs
Peak Elev= 42.30' @ 8.00 hrs Surf.Area= 1,200 sf Storage= 1 cf

Plug-Flow detention time= 0.3 min calculated for 0.023 af (100% of inflow)
Center-of-Mass det. time= 0.3 min (739.4 - 739.1)

Volume	Invert	Avail.Storage	Storage Description
#1	42.30'	587 cf	**Custom Stage Data (Prismatic)** Listed below (Recalc) 1,800 cf Overall - 37 cf Embedded = 1,763 cf x 33.3% Voids
#2	42.34'	37 cf	**1.50'D x 3.50'H Vertical Cone/Cylinder** x 6 -Impervious
#3	42.30'	37 cf	**6.0" Round Pipe Storage** Inside #1 L= 190.0'
		661 cf	Total Available Storage

Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
42.30	1,200	0	0
43.80	1,200	1,800	1,800

Device	Routing	Invert	Outlet Devices
#1	Discarded	42.30'	**8.000 in/hr Exfiltration over Surface area** Phase-In= 0.01'

Discarded OutFlow Max=0.05 cfs @ 8.00 hrs HW=42.30' (Free Discharge)
↑**1=Exfiltration** (Exfiltration Controls 0.05 cfs)

Summary for Subcatchment 15S: 15th Street

Runoff = 0.20 cfs @ 7.96 hrs, Volume= 0.070 af, Depth= 4.82"

Runoff by SBUH method, Split Pervious/Imperv., Time Span= 0.00-72.00 hrs, dt= 0.01 hrs
Type IA 24-hr 25 yr Rainfall=5.06"

	Area (sf)	CN	Description
*	2,430	98	New Impervious Area
*	3,950	98	Existing Impervious Area
*	1,197	98	Swale/Rain Garden
	7,577	98	Weighted Average
	7,577	98	100.00% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
10.0					**Direct Entry,**

Summary for Subcatchment RR: Roof Runoff

Runoff = 0.31 cfs @ 7.96 hrs, Volume= 0.109 af, Depth= 4.82"

Runoff by SBUH method, Split Pervious/Imperv., Time Span= 0.00-72.00 hrs, dt= 0.01 hrs
Type IA 24-hr 25 yr Rainfall=5.06"

	Area (sf)	CN	Description
*	11,808	98	
	11,808	98	100.00% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
10.0					**Direct Entry,**

Summary for Pond RRG: Roadside Swale/Rain Garden

Inflow Area = 0.174 ac,100.00% Impervious, Inflow Depth = 4.82" for 25 yr event
Inflow = 0.20 cfs @ 7.96 hrs, Volume= 0.070 af
Outflow = 0.20 cfs @ 7.97 hrs, Volume= 0.070 af, Atten= 0%, Lag= 0.7 min
Primary = 0.02 cfs @ 7.97 hrs, Volume= 0.029 af
Secondary = 0.18 cfs @ 7.97 hrs, Volume= 0.041 af

Routing by Dyn-Stor-Ind method, Time Span= 0.00-72.00 hrs, dt= 0.01 hrs
Peak Elev= 45.63' @ 7.97 hrs Surf.Area= 350 sf Storage= 64 cf

Plug-Flow detention time= 25.0 min calculated for 0.070 af (100% of inflow)
Center-of-Mass det. time= 25.0 min (684.5 - 659.5)

Volume	Invert	Avail.Storage	Storage Description
#1	45.30'	289 cf	**Custom Stage Data (Prismatic)** Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
45.30	59	0	0
45.40	131	10	10
45.50	216	17	27
45.60	308	26	53
45.70	436	37	90
45.80	579	51	141
45.90	754	67	208
46.00	870	81	289

Device	Routing	Invert	Outlet Devices
#1	Primary	45.30'	**2.000 in/hr Exfiltration over Surface area** Phase-In= 0.01'
#2	Secondary	45.60'	**18.0" Horiz. Orifice/Grate X 2.00** C= 0.600 Limited to weir flow at low heads
#3	Secondary	45.85'	**18.0" Horiz. Orifice/Grate X 2.00** C= 0.600 Limited to weir flow at low heads

Primary OutFlow Max=0.02 cfs @ 7.97 hrs HW=45.63' TW=43.01' (Dynamic Tailwater)
└─**1=Exfiltration** (Exfiltration Controls 0.02 cfs)

Secondary OutFlow Max=0.18 cfs @ 7.97 hrs HW=45.63' TW=43.01' (Dynamic Tailwater)
├─**2=Orifice/Grate** (Weir Controls 0.18 cfs @ 0.59 fps)
└─**3=Orifice/Grate** (Controls 0.00 cfs)

Summary for Pond RSA: Roadside Storage Aggregate

Inflow Area = 0.445 ac,100.00% Impervious, Inflow Depth = 4.82" for 25 yr event
Inflow = 0.50 cfs @ 7.96 hrs, Volume= 0.179 af
Outflow = 0.22 cfs @ 7.60 hrs, Volume= 0.179 af, Atten= 56%, Lag= 0.0 min
Discarded = 0.22 cfs @ 7.60 hrs, Volume= 0.179 af

Routing by Dyn-Stor-Ind method, Time Span= 0.00-72.00 hrs, dt= 0.01 hrs
Peak Elev= 43.62' @ 8.56 hrs Surf.Area= 1,200 sf Storage= 566 cf

Plug-Flow detention time= 8.2 min calculated for 0.179 af (100% of inflow)
Center-of-Mass det. time= 8.2 min (677.5 - 669.3)

Volume	Invert	Avail.Storage	Storage Description
#1	42.30'	587 cf	**Custom Stage Data (Prismatic)** Listed below (Recalc) 1,800 cf Overall - 37 cf Embedded = 1,763 cf x 33.3% Voids
#2	42.34'	37 cf	**1.50'D x 3.50'H Vertical Cone/Cylinder** x 6 -Impervious
#3	42.30'	37 cf	**6.0" Round Pipe Storage** Inside #1 L= 190.0'
		661 cf	Total Available Storage

Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
42.30	1,200	0	0
43.80	1,200	1,800	1,800

Device	Routing	Invert	Outlet Devices
#1	Discarded	42.30'	**8.000 in/hr Exfiltration over Surface area** Phase-In= 0.01'

Discarded OutFlow Max=0.22 cfs @ 7.60 hrs HW=42.34' (Free Discharge)
↑**1=Exfiltration** (Exfiltration Controls 0.22 cfs)

Summary for Subcatchment DRV: Drive Aisle/ Parking/ Picnic/ Trash Enclosure

Runoff = 0.05 cfs @ 7.99 hrs, Volume= 0.018 af, Depth= 0.63"

Runoff by SBUH method, Split Pervious/Imperv., Time Span= 0.00-72.00 hrs, dt= 0.01 hrs
Type IA 24-hr WQ Rainfall=0.83"

	Area (sf)	CN	Description
*	15,250	98	Drive aisle/Sidewalk/Trash Enclosure
	15,250	98	100.00% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
10.0					**Direct Entry,**

Summary for Pond RG: PVT Rain Garden

Inflow Area = 0.350 ac,100.00% Impervious, Inflow Depth = 0.63" for WQ event
Inflow = 0.05 cfs @ 7.99 hrs, Volume= 0.018 af
Outflow = 0.02 cfs @ 9.12 hrs, Volume= 0.018 af, Atten= 66%, Lag= 68.0 min
Primary = 0.02 cfs @ 9.12 hrs, Volume= 0.018 af
Secondary = 0.00 cfs @ 0.00 hrs, Volume= 0.000 af

Routing by Dyn-Stor-Ind method, Time Span= 0.00-72.00 hrs, dt= 0.01 hrs
Peak Elev= 45.66' @ 9.12 hrs Surf.Area= 315 sf Storage= 137 cf

Plug-Flow detention time= 75.5 min calculated for 0.018 af (100% of inflow)
Center-of-Mass det. time= 75.4 min (804.1 - 728.7)

Volume	Invert	Avail.Storage	Storage Description
#1	45.00'	656 cf	**2.00'W x 33.50'L x 2.00'H Prismatoid Z=3.0**
#2	46.00'	376 cf	**2.00'W x 16.00'L x 2.00'H Prismatoid Z=3.0**
#3	45.00'	304 cf	**2.00'W x 11.50'L x 2.00'H Prismatoid Z=3.0**
#4	45.00'	7 cf	**6.0" Round Pipe Storage**-Impervious L= 36.0' S= 0.0056 '/'
		1,343 cf	Total Available Storage

Device	Routing	Invert	Outlet Devices
#1	Primary	45.00'	**2.500 in/hr Exfiltration over Surface area** Phase-In= 0.01'
#2	Secondary	45.70'	**18.0" Horiz. Orifice/Grate X 2.00** C= 0.600 Limited to weir flow at low heads

Primary OutFlow Max=0.02 cfs @ 9.12 hrs HW=45.66' TW=42.50' (Dynamic Tailwater)
↑—**1=Exfiltration** (Exfiltration Controls 0.02 cfs)

Secondary OutFlow Max=0.00 cfs @ 0.00 hrs HW=45.00' TW=42.50' (Dynamic Tailwater)
↑—**2=Orifice/Grate** (Controls 0.00 cfs)

Summary for Pond SA: PVT Storage Aggregate

Inflow Area = 0.350 ac,100.00% Impervious, Inflow Depth = 0.63" for WQ event
Inflow = 0.02 cfs @ 9.12 hrs, Volume= 0.018 af
Outflow = 0.02 cfs @ 9.13 hrs, Volume= 0.018 af, Atten= 0%, Lag= 0.3 min
Discarded = 0.02 cfs @ 9.13 hrs, Volume= 0.018 af

Routing by Dyn-Stor-Ind method, Time Span= 0.00-72.00 hrs, dt= 0.01 hrs
Peak Elev= 42.50' @ 9.13 hrs Surf.Area= 1,214 sf Storage= 0 cf

Plug-Flow detention time= 0.3 min calculated for 0.018 af (100% of inflow)
Center-of-Mass det. time= 0.3 min (804.4 - 804.1)

Volume	Invert	Avail.Storage	Storage Description
#1	42.50'	399 cf	**Custom Stage Data (Prismatic)** Listed below (Recalc) 1,210 cf Overall - 12 cf Embedded = 1,198 cf x 33.3% Voids
#2	42.50'	12 cf	**1.50'D x 3.35'H Vertical Cone/Cylinder** x 2
#3	42.85'	12 cf	**6.0" Round Pipe Storage** Inside #1 L= 61.0'
		423 cf	Total Available Storage

Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
42.50	1,210	0	0
43.50	1,210	1,210	1,210

Device	Routing	Invert	Outlet Devices
#1	Discarded	42.50'	**8.000 in/hr Exfiltration over Surface area** Phase-In= 0.01'

Discarded OutFlow Max=0.02 cfs @ 9.13 hrs HW=42.50' (Free Discharge)
↑**1=Exfiltration** (Exfiltration Controls 0.02 cfs)

Summary for Subcatchment DRV: Drive Aisle/ Parking/ Picnic/ Trash Enclosure

Runoff = 0.40 cfs @ 7.96 hrs, Volume= 0.141 af, Depth= 4.82"

Runoff by SBUH method, Split Pervious/Imperv., Time Span= 0.00-72.00 hrs, dt= 0.01 hrs
Type IA 24-hr 25 yr Rainfall=5.06"

	Area (sf)	CN	Description
*	15,250	98	Drive aisle/Sidewalk/Trash Enclosure
	15,250	98	100.00% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
10.0					**Direct Entry,**

Summary for Pond RG: PVT Rain Garden

Inflow Area = 0.350 ac,100.00% Impervious, Inflow Depth = 4.82" for 25 yr event
Inflow = 0.40 cfs @ 7.96 hrs, Volume= 0.141 af
Outflow = 0.40 cfs @ 7.97 hrs, Volume= 0.141 af, Atten= 0%, Lag= 0.6 min
Primary = 0.02 cfs @ 7.97 hrs, Volume= 0.040 af
Secondary = 0.38 cfs @ 7.97 hrs, Volume= 0.101 af

Routing by Dyn-Stor-Ind method, Time Span= 0.00-72.00 hrs, dt= 0.01 hrs
Peak Elev= 45.75' @ 7.97 hrs Surf.Area= 352 sf Storage= 168 cf

Plug-Flow detention time= 35.9 min calculated for 0.141 af (100% of inflow)
Center-of-Mass det. time= 35.9 min (695.4 - 659.5)

Volume	Invert	Avail.Storage	Storage Description
#1	45.00'	656 cf	**2.00'W x 33.50'L x 2.00'H Prismatoid Z=3.0**
#2	46.00'	376 cf	**2.00'W x 16.00'L x 2.00'H Prismatoid Z=3.0**
#3	45.00'	304 cf	**2.00'W x 11.50'L x 2.00'H Prismatoid Z=3.0**
#4	45.00'	7 cf	**6.0" Round Pipe Storage**-Impervious L= 36.0' S= 0.0056 '/'
		1,343 cf	Total Available Storage

Device	Routing	Invert	Outlet Devices
#1	Primary	45.00'	**2.500 in/hr Exfiltration over Surface area** Phase-In= 0.01'
#2	Secondary	45.70'	**18.0" Horiz. Orifice/Grate X 2.00** C= 0.600 Limited to weir flow at low heads

Primary OutFlow Max=0.02 cfs @ 7.97 hrs HW=45.75' TW=42.91' (Dynamic Tailwater)
↑—**1=Exfiltration** (Exfiltration Controls 0.02 cfs)

Secondary OutFlow Max=0.38 cfs @ 7.97 hrs HW=45.75' TW=42.91' (Dynamic Tailwater)
↑—**2=Orifice/Grate** (Weir Controls 0.38 cfs @ 0.75 fps)

Summary for Pond SA: PVT Storage Aggregate

Inflow Area = 0.350 ac,100.00% Impervious, Inflow Depth = 4.82" for 25 yr event
Inflow = 0.40 cfs @ 7.97 hrs, Volume= 0.141 af
Outflow = 0.22 cfs @ 7.66 hrs, Volume= 0.141 af, Atten= 43%, Lag= 0.0 min
Discarded = 0.22 cfs @ 7.66 hrs, Volume= 0.141 af

Routing by Dyn-Stor-Ind method, Time Span= 0.00-72.00 hrs, dt= 0.01 hrs
Peak Elev= 43.19' @ 8.35 hrs Surf.Area= 1,214 sf Storage= 287 cf

Plug-Flow detention time= 3.2 min calculated for 0.141 af (100% of inflow)
Center-of-Mass det. time= 3.2 min (698.6 - 695.4)

Volume	Invert	Avail.Storage	Storage Description
#1	42.50'	399 cf	**Custom Stage Data (Prismatic)** Listed below (Recalc) 1,210 cf Overall - 12 cf Embedded = 1,198 cf x 33.3% Voids
#2	42.50'	12 cf	**1.50'D x 3.35'H Vertical Cone/Cylinder** x 2
#3	42.85'	12 cf	**6.0" Round Pipe Storage** Inside #1 L= 61.0'
		423 cf	Total Available Storage

Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
42.50	1,210	0	0
43.50	1,210	1,210	1,210

Device	Routing	Invert	Outlet Devices
#1	Discarded	42.50'	**8.000 in/hr Exfiltration over Surface area** Phase-In= 0.01'

Discarded OutFlow Max=0.22 cfs @ 7.66 hrs HW=42.54' (Free Discharge)
↑**1=Exfiltration** (Exfiltration Controls 0.22 cfs)

Summary for Subcatchment UNC: Uncaptured Impervious Area

Runoff = 0.00 cfs @ 7.99 hrs, Volume= 0.001 af, Depth= 0.63"

Runoff by SBUH method, Split Pervious/Imperv., Time Span= 0.00-72.00 hrs, dt= 0.01 hrs
Type IA 24-hr WQ Rainfall=0.83"

	Area (sf)	CN	Description
*	600	98	New Impervious Area
	600	98	100.00% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
10.0					**Direct Entry,**

Summary for Subcatchment UNC: Uncaptured Impervious Area

Runoff = 0.02 cfs @ 7.96 hrs, Volume= 0.006 af, Depth= 4.82"

Runoff by SBUH method, Split Pervious/Imperv., Time Span= 0.00-72.00 hrs, dt= 0.01 hrs
Type IA 24-hr 25 yr Rainfall=5.06"

	Area (sf)	CN	Description
*	600	98	New Impervious Area
	600	98	100.00% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
10.0					**Direct Entry,**

APPENDIX D

Operation and Maintenance Plan

Rain Gardens

Operations & Maintenance Plan

Training and/or written guidance information for operating and maintaining vegetated infiltration basins shall be provided to all property owners and tenants. A copy of the O&M Plan shall be provided to all property owners and tenants.

Access to the infiltration basin shall be safe and efficient. Egress and ingress routes shall be maintained to design standards. Roadways shall be maintained to accommodate size and weight of vehicles, if applicable.

- Obstacles preventing maintenance personnel and/or equipment access to the infiltration basin shall be removed.
- Gravel or ground cover shall be added if erosion occurs, e.g., due to vehicular or pedestrian traffic.

Insects & Rodents shall not be harbored in the infiltration basin. Pest control measures shall be taken when insects/rodents are found to be present.

- If a complaint is received or an inspection reveals that a stormwater facility is significantly infested with mosquitoes or other vectors, the property owner/owners or their designee may be required to eliminate the infestation at the City inspector's discretion. Control of the infestation shall be attempted by using first non-chemical methods and secondly, only those chemical methods specifically approved by the City's inspector. Acceptable methods include but are not limited to the following:
  i) Installation of predacious bird or bat nesting boxes.
  ii) Alterations of pond water levels approximately every four days in order to disrupt mosquito larval development cycles.
  iii) Stocking ponds and other permanent water facilities with fish or other predatory species.
  iv) If non-chemical methods have proved unsuccessful, contact the City inspector prior to use of chemical methods such as the mosquito larvicides Bacillus thurengensis var. israeliensis or other approved larvacides. These materials may only be used with City inspector approval if evidence can be provided that these materials will not migrate off-site or enter the public stormwater system. Chemical larvicides shall be applied by a licensed individual or contractor.
- Holes in the ground located in and around the infiltration basin shall be filled.

If used at this site, the following will be applicable:

Fences shall be maintained to preserve their functionality and appearance.

- Collapsed fences shall be restored to an upright position.
- Jagged edges and damaged fences shall be repaired or replaced.

Rain Gardens

Operations & Maintenance Plan

A **vegetated Infiltration Basin** is a vegetated depression created by excavation, berms, or small dams to provide for short-term ponding of surface water until it percolates into the soil. The basin shall infiltrate stormwater within 24 hours. All facility components and vegetation shall be inspected for proper operations and structural stability, at a minimum, quarterly for the first 2 years from the date of installation, 2 times per year thereafter, and within 48 hours after each major storm event. The facility owner must keep a log, recording all inspection dates, observations, and maintenance activities. The following items shall be inspected and maintained as stated:

Basin Inlet shall assure unrestricted stormwater flow to the vegetated basin.

- Sources of erosion shall be identified and controlled when native soil is exposed or erosion channels are present.
- Inlet shall be cleared when conveyance capacity is plugged.
- Rock splash pads shall be replenished to prevent erosion.

Embankment, Dikes, Berms & Side Slopes retain water in the infiltration basin.

- Structural deficiencies shall be corrected upon discovery:
- Slopes shall be stabilized using appropriate erosion control measures when soil is exposed/ flow channels are forming.
- Sources of erosion damage shall be identified and controlled.

Overflow or Emergency Spillway conveys flow exceeding reservoir capacity to an approved stormwater receiving system.

- Overflow shall be cleared when 25% of the conveyance capacity is plugged.
- Sources of erosion damage shall be identified and controlled when soil is exposed.
- Rocks or other armament shall be replaced when only one layer of rock exists.

Filter Media shall allow stormwater to percolate uniformly through the infiltration basin. If water remains 36-48 hours after storm, sources of possible clogging shall be identified and corrected.

- Basin shall be raked and, if necessary, soil shall be excavated, and cleaned or replaced.

Sediment/ Basin Debris Management shall prevent loss of infiltration basin volume caused by sedimentation. Gauges located at the opposite ends of the basin shall be maintained to monitor sedimentation.

- Sediment and debris exceeding 4" in depth shall be removed every 2-5 years or sooner if performance is affected.

Debris and Litter shall be removed to ensure stormwater infiltration and to prevent clogging of overflow drains and interference with plant growth.

- Restricted sources of sediment and debris, such as discarded lawn clippings, shall be identified and prevented.

Vegetation shall be healthy and dense enough to provide filtering while protecting underlying soils from erosion.

- Mulch shall be replenished as needed to ensure healthy plant growth.
- Vegetation, large shrubs or trees that limit access or interfere with basin operation shall be pruned or removed.
- Grass shall be mowed to 4"-9" high and grass clippings shall be removed no less than 2 times per year.
- Fallen leaves and debris from deciduous plant foliage shall be raked and removed.
- Nuisance or prohibited vegetation from the Eugene Plant List (such as blackberries or English Ivy) shall be removed when discovered. Invasive vegetation contributing up to 25% of vegetation of all species shall be removed.
- Dead vegetation shall be removed to maintain less than 10% of area coverage or when infiltration basin function is impaired. Vegetation shall be replaced within 3 months, or immediately if required to control erosion.

Spill Prevention measures shall be exercised when handling substances that contaminate stormwater. Releases of pollutants shall be corrected as soon as identified.

- Obstacles preventing maintenance personnel and/or equipment access to the swale shall be removed.
- Gravel or ground cover shall be added if erosion occurs, e.g., due to vehicular or pedestrian traffic.

Insects & Rodents shall not be harbored in the swale. Pest control measures shall be taken when insects/rodents are found to be present.

- If a complaint is received or an inspection reveals that a stormwater facility is significantly infested with mosquitoes or other vectors, the property owner/owners or their designee may be required to eliminate the infestation at the City inspector's discretion. Control of the infestation shall be attempted by using first non-chemical methods and secondly, only those chemical methods specifically approved by the City's inspector. Acceptable methods include but are not limited to the following:
  i) Installation of predacious bird or bat nesting boxes.
  ii) Alterations of pond water levels approximately every four days in order to disrupt mosquito larval development cycles.
  iii) Stocking ponds and other permanent water facilities with fish or other predatory species.
  iv) If non-chemical methods have proved unsuccessful, contact the City inspector prior to use of chemical methods such as the mosquito larvicides Bacillus thurengensis var. israeliensis or other approved larvacides. These materials may only be used with City inspector approval if evidence can be provided that these materials will not migrate off-site or enter the public stormwater system. Chemical larvicides shall be applied by a licensed individual or contractor.
- Holes in the ground located in and around the swale shall be filled.

If used at this site, the following will be applicable:

Check Dams shall control and distribute flow.

- Causes for altered water flow shall be identified, and obstructions cleared upon discovery.
- Causes for channelization shall be identified and repaired.

Swales (Vegetated, Grassy, and Street)
Operations & Maintenance Plan

Swales are planted or grassed open channels that trap pollutants by filtering and slowing flows, allowing particles to settle out. The swale should drain within 48 hours of a storm event. All facility components, vegetation, and source controls shall be inspected for proper operations and structural stability, at a minimum, quarterly for the first 2 years from the date of installation, 2 times per year thereafter, and within 48 hours after each major storm event. The facility owner must keep a log, recording all inspection dates, observations, and maintenance activities. The facility owner must keep a log, recording all inspection dates, observations, and maintenance activities. The following items shall be inspected and maintained as stated:

Swale Inlet (such as curb cuts or pipes) shall maintain a calm flow of water entering the swale**.**

- Source of erosion shall be identified and controlled when native soil is exposed or erosion channels are forming.
- Sediment accumulation shall be hand-removed with minimum damage to vegetation using proper erosion control measures. Sediment shall be removed if it is more than 4" thick or so thick as to damage or kill vegetation.
- Inlet shall be cleared when conveyance capacity is plugged. Sources of sediment and debris shall be identified and corrected.
- Rock splash pads shall be replenished to prevent erosion.

Side Slopes shall be maintained to prevent erosion that introduces sediment into the swale.

- Slopes shall be stabilized and planted using appropriate erosion control measures when native soil is exposed or erosion channels are forming.

Swale Media shall allow stormwater to percolate uniformly through the landscape swale. If the swale does not drain within 48 hours, it shall be tilled and replanted according to design specifications.

- Annual or semi-annual tilling shall be implemented if compaction or clogging continues.
- Debris in quantities that inhibit operation shall be removed routinely (e.g., no less than quarterly), or upon discovery.

Swale Outlet shall maintain sheet flow of water exiting swale unless a collection drain is used. Source of erosion damage shall be identified and controlled when native soil is exposed or erosion channels are forming.

- Outlets such as drains and overland flow paths shall be cleared when 50% of the conveyance capacity is plugged.
- Sources of sediment and debris shall be identified and corrected.

Vegetation shall be healthy and dense enough to provide filtering while protecting underlying soils from erosion.

Mulch shall be replenished as needed to ensure survival of vegetation.

- Vegetation, large shrubs or trees that interfere with landscape swale operation shall be pruned.
- Fallen leaves and debris from deciduous plant foliage shall be removed.
- Grassy swales shall be mowed to keep grass 4" to 9" in height. Clippings shall be removed to remove pollutants absorbed in grasses.
- Nuisance and prohibited vegetation from the Eugene Plant List (such as blackberries and English Ivy) shall be removed when discovered. Invasive vegetation contributing up to 25% of vegetation of all species shall be removed and replaced.
- Dead vegetation and woody material shall be removed to maintain less than 10% of area coverage or when swale function is impaired. Vegetation shall be replaced within 3 months, or immediately if required to maintain cover density and control erosion where soils are exposed.

Debris and Litter shall be removed to ensure stormwater conveyance and to prevent clogging of inlet drains and interference with plant growth.

Spill Prevention measures shall be exercised when handling substances that contaminate stormwater. Releases of pollutants shall be corrected as soon as identified.

Training and/or written guidance information for operating and maintaining swales shall be provided to all property owners and tenants. A copy of the O&M Plan shall be provided to all property owners and tenants.

Access to the swale shall be safe and efficient. Egress and ingress routes shall be maintained to design standards. Roadways shall be maintained to accommodate size and weight of vehicles, if applicable.

APPENDIX E

Well Logs and Infiltration Test Data

LANE 70972

lane 70972

STATE OF OREGON
MONITORING WELL REPORT

(as required by ORS 537.765 & OR 690-240-0395)

* AMENDED *

WELL LABEL # L 105957

START CARD # ~~101257~~ 199633

(1) LAND OWNER

Owner Well I.D. B - 7

First Name _____ Last Name _____

Company City of Florence

Address 250 Highway 101

City Florence State OR Zip 97439

(2) TYPE OF WORK

☒ New ☐ Deepening ☐ Conversion ☐ Alteration (repair/recondition) ☐ Abandonment

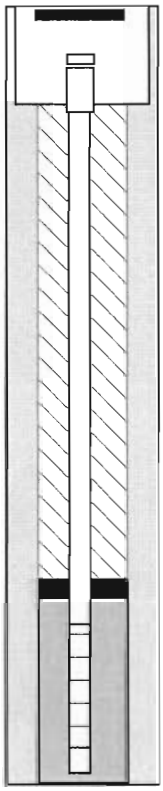
(3) DRILL METHOD

☐ Rotary Air ☐ Rotary Mud ☐ Cable ☐ Hollow Stem Auger ☐ Cable Mud ☐ Reverse Rotary ☒ Other Push Probe

(4) CONSTRUCTION

Piezometer Well ☒

Depth of Completed Well 20 ft. Special Standard ☐



MONUMENT/VAULT Below Ground
From 0 To 1

BORE HOLE
Diameter 2 From 0 To 20

CASING
Dia. .75 From ☒ 0 To 10
Gauge sch40 Wld ☐ Thrd ☒
Material ○ Steel ◉ Plastic

LINER
Dia. _____ From ☐ _____ To _____
Gauge _____ Wld ☐ Thrd ☐
Material ○ Steel ○ Plastic

SEAL
From 1 To 9
Material Bentonite Chips
Amount 10 P Grout weight _____

SCREEN
Casing/Liner Casing Material sch40
Diameter .75 From 10 To 20
Slot Size .02

FILTER
From 9 To 20 Material silica sand Size of pack 10/20

(5) WELL TESTS

○ Pump ○ Bailer ○ Air ○ Flowing Artesian

Yield gal/min	Drawdown	Drill stem/Pump depth	Duration (hr)

Temperature _____ °F Lab analysis ☐ Yes By _____

Supervising Geologist/Engineer _____

Water quality concerns? ☐ Yes (describe below)

From	To	Description	Amount	Units

(6) LOCATION OF WELL (legal description)

County LANE Twp 18 S N/S Range 12 W E/W WM
Sec 23 SW 1/4 of the SW 1/4 Tax Lot city right of way
Tax Map Number _____ Lot _____
Lat ° ' " or _____ DMS or DD
Long ° ' " or _____ DMS or DD
○ Street address of well ◉ Nearest address

Corner of 15th St. and Oak St. Florence OR.

(7) STATIC WATER LEVEL

	Date	SWL(psi)	+	SWL(ft)
Existing Well / Predeepening			☐	
Completed Well	02-04-2010		☒	9

Flowing Artesian? ☐ Dry Hole? ☐

WATER BEARING ZONES Depth water was first found 9

SWL Date	From	To	Est Flow	SWL(psi)	+	SWL(ft)
02-04-2010	9	20			☒	9
					☐	
					☐	
					☐	
					☐	

(8) WELL LOG

Ground Elevation _____

Material	From	To
Asphalt, gravel	0	1
Sand, loose	1	8
Sand medium dense	7	16
Sand dense	16	20

RECEIVED
FEB 25 2011
WATER RESOURCES DEPT
SALEM, OREGON

RECEIVED
JUN 24 2011
WATER RESOURCES DEPT
SALEM, OREGON

Date Started 02-04-2010 Completed 02-04-2010

(unbonded) Monitor Well Constructor Certification

I certify that the work I performed on the construction, deepening, alteration, or abandonment of this well is in compliance with Oregon monitoring well construction standards. Materials used and information reported above are true to the best of my knowledge and belief.

License Number 10496 Date 2/23/11

Password : (if filing electronically)

Signed _____

(bonded) Monitor Well Constructor Certification

I accept responsibility for the construction, deepening, alteration, or abandonment work performed on this well during the construction dates reported above. All work performed during this time is in compliance with Oregon monitoring well construction standards. This report is true to the best of my knowledge and belief.

License Number 10288 Date 2-23-11

Password : (if filing electronically)

Signed _____

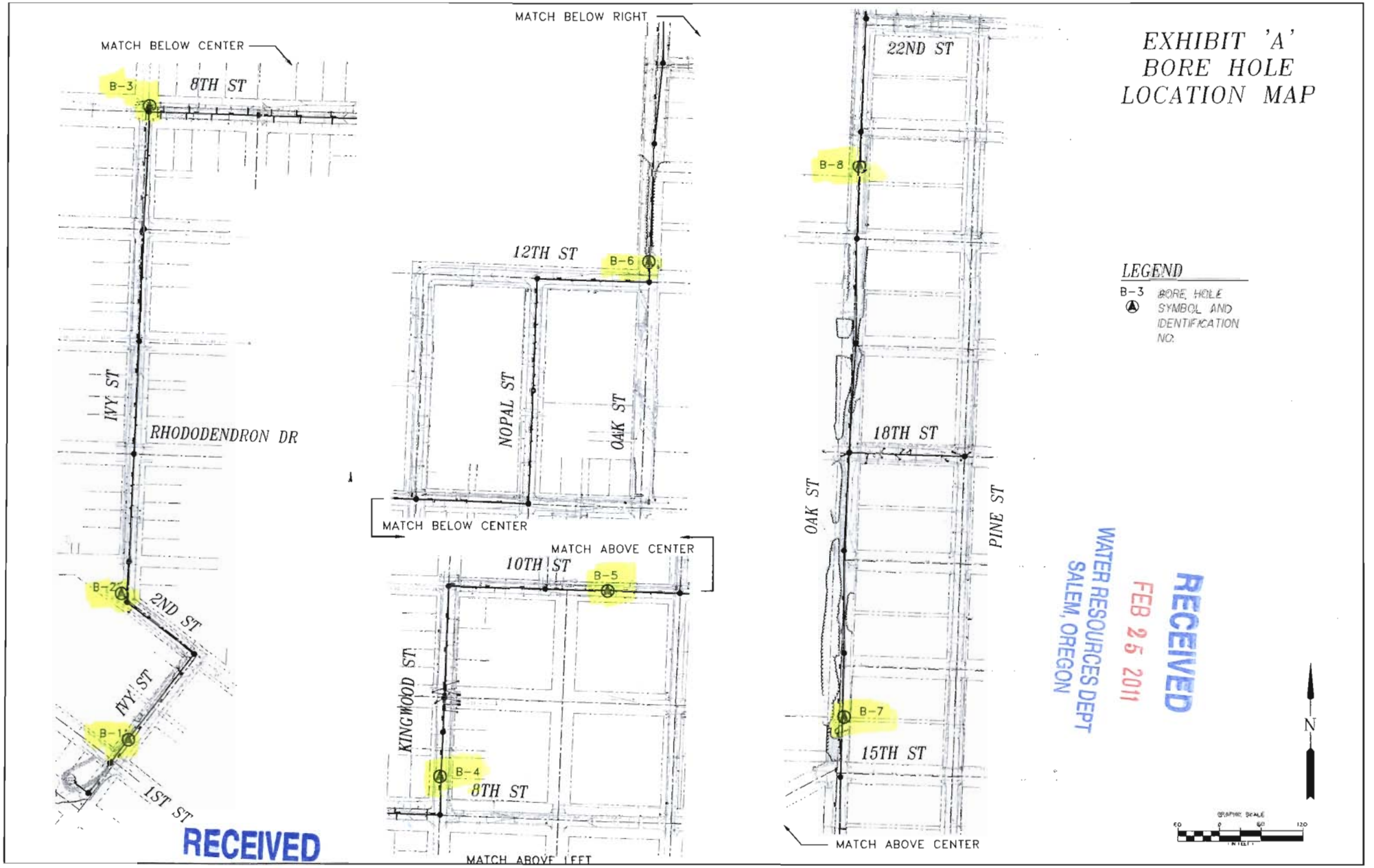
Contact Info (optional)

ORIGINAL - WATER RESOURCES DEPARTMENT

THIS REPORT MUST BE SUBMITTED TO THE WATER RESOURCES DEPARTMENT WITHIN 30 DAYS OF COMPLETION OF WORK

Form Version: 0.95

LANE 70972



LANE 70972

STATE OF OREGON
MONITORING WELL REPORT
(as required by ORS 537.765 & OAR 690-240-0395)

WELL LABEL # L 105957
START CARD # 1012527

(1) LAND OWNER

Owner Well I.D. B - 7
First Name ____ Last Name ____
Company City of Florence
Address 250 Highway 101
City Florence State OR Zip 97439

(2) TYPE OF WORK

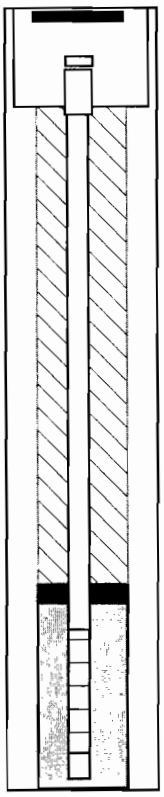
☒ New ☐ Deepening ☐ Conversion ☐ Alteration (repair/recondition) ☐ Abandonment

(3) DRILL METHOD

☐ Rotary Air ☐ Rotary Mud ☐ Cable ☐ Hollow Stem Auger ☐ Cable Mud ☐ Reverse Rotary ☒ Other Push Probe

(4) CONSTRUCTION

Piezometer Well ☒
Depth of Completed Well 20 ft. Special Standard ☐



MONUMENT/VAULT Below Ground
From 0 To 1

BORE HOLE
Diameter 2 From 0 To 20

CASING
Dia. .75 From ☒ 0 To 10
Gauge sch40 Wld Thrd
Material ◯Steel ◉Plastic ☐ ☒

LINER
Dia. ____ From ☐ ____ To ____
Gauge ____ Wld Thrd
Material ◯Steel ◯Plastic ☐ ☐

SEAL
From 1 To 9
Material Bentonite Chips
Amount 10 P Grout weight ____

SCREEN
Casing/Liner Casing Material sch40
Diameter .75 From 10 To 20
Slot Size .02

FILTER
From 9 To 20 Material silica sand Size of pack 10/20

(5) WELL TESTS

◯ Pump ◯ Bailer ◯ Air ◯ Flowing Artesian

Yield gal/min	Drawdown	Drill stem/Pump depth	Duration (hr)

Temperature ____ °F Lab analysis ☐ Yes By ____
Supervising Geologist/Engineer ____
Water quality concerns? ☐ Yes (describe below)

From	To	Description	Amount	Units

(6) LOCATION OF WELL (legal description)

County LANE Twp 18 S N/S Range 12 W E/W WM
Sec 23 SW 1/4 of the SW 1/4 Tax Lot city right of way
Tax Map Number ____ Lot ____
Lat ____ ° ____ ' ____ " or ____ DMS or DD
Long ____ ° ____ ' ____ " or ____ DMS or DD
◯ Street address of well ◉ Nearest address

Corner of 15th St. and Oak St. Florence OR.

(7) STATIC WATER LEVEL

	Date	SWL(psi)	+	SWL(ft)
Existing Well / Predeepening			☐	
Completed Well	02-04-2010		☒	9

Flowing Artesian? ☐ Dry Hole? ☐
WATER BEARING ZONES Depth water was first found 9

SWL Date	From	To	Est Flow	SWL(psi)	+	SWL(ft)
02-04-2010	9	20			☒	9
					☐	
					☐	
					☐	
					☐	

(8) WELL LOG

Ground Elevation ____

Material	From	To
Asphalt, gravel	0	1
Sand, loose	1	8
Sand medium dense	7	16
Sand dense	16	20

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FEB 25 2011
WATER RESOURCES DEPT
SALEM, OREGON

Date Started 02-04-2010 Completed 02-04-2010

(unbonded) Monitor Well Constructor Certification

I certify that the work I performed on the construction, deepening, alteration, or abandonment of this well is in compliance with Oregon monitoring well construction standards. Materials used and information reported above are true to the best of my knowledge and belief.

License Number 10496 Date 2/23/11
Password : (if filing electronically) ____
Signed [signature]

(bonded) Monitor Well Constructor Certification

I accept responsibility for the construction, deepening, alteration, or abandonment work performed on this well during the construction dates reported above. All work performed during this time is in compliance with Oregon monitoring well construction standards. This report is true to the best of my knowledge and belief.

License Number 100288 Date 2-23-11
Password : (if filing electronically) ____
Signed [signature]
Contact Info (optional) ____

ORIGINAL - WATER RESOURCES DEPARTMENT
THIS REPORT MUST BE SUBMITTED TO THE WATER RESOURCES DEPARTMENT WITHIN 30 DAYS OF COMPLETION OF WORK

Form Version: 0.95

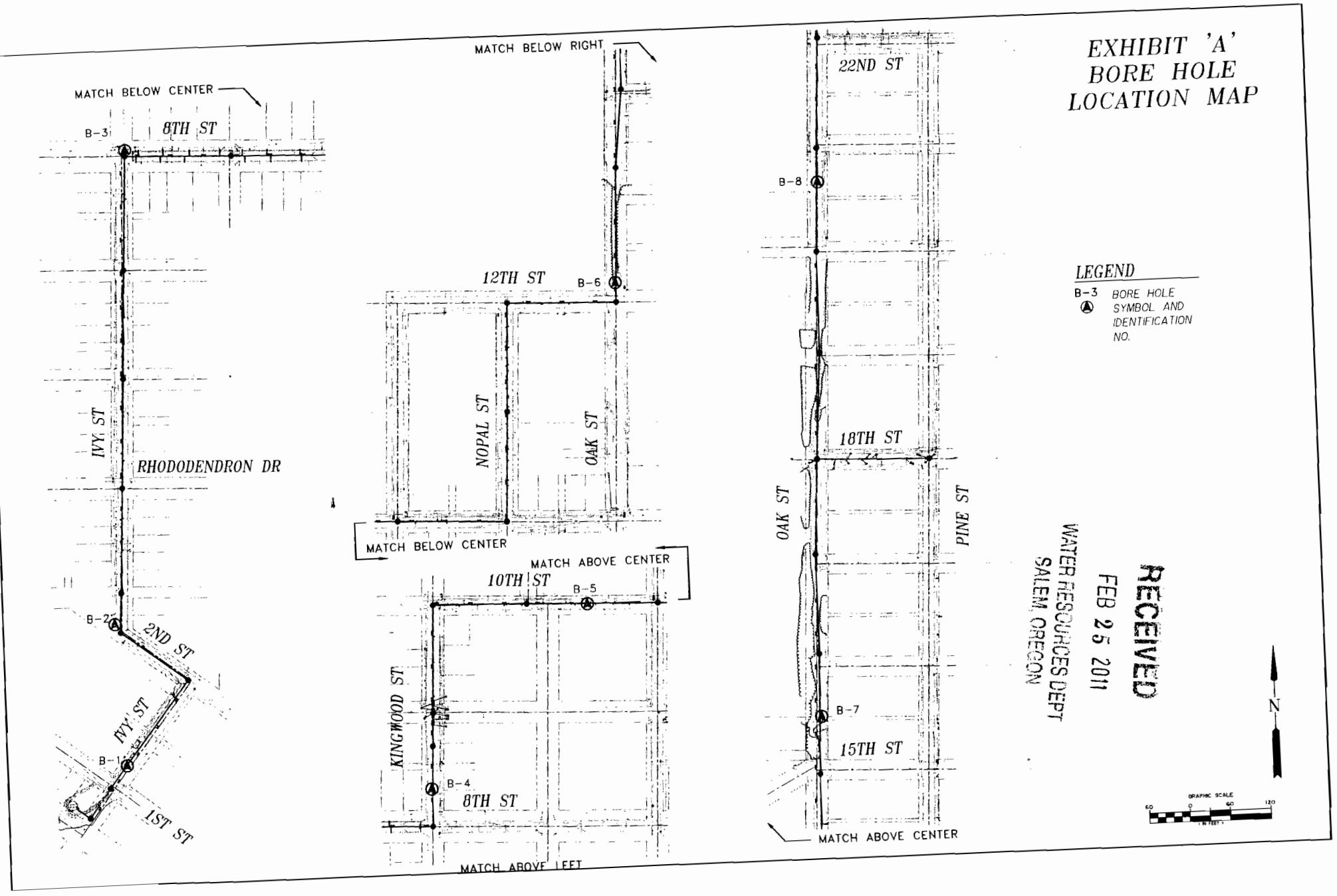


EXHIBIT 'A'
BORE HOLE
LOCATION MAP
LEGEND
B-3 BORE HOLE SYMBOL AND IDENTIFICATION NO.
MATCH BELOW CENTER
MATCH BELOW RIGHT
MATCH BELOW CENTER
MATCH ABOVE CENTER
MATCH ABOVE LEFT
MATCH ABOVE CENTER
8TH ST
12TH ST
10TH ST
8TH ST
22ND ST
18TH ST
15TH ST
2ND ST
1ST ST
IVY ST
IVY ST
RHODODENDRON DR
NOPAL ST
OAK ST
KINGWOOD ST
OAK ST
PINE ST
B-1
B-2
B-3
B-4
B-5
B-6
B-7
B-8
N
GRAPHIC SCALE
60 0 60 120
(IN FEET)
RECEIVED
FEB 25 2011
WATER RESOURCES DEPT
SALEM, OREGON

LANE 70972

LANE 70779

STATE OF OREGON
MONITORING WELL REPORT
(as required by ORS 537.765 & OAR 690-240-0395)

Amended

WELL LABEL # L 105956
START CARD # ~~1012526~~ 199632

(1) LAND OWNER

Owner Well I.D. B-6
First Name _____ Last Name _____
Company City of Florence
Address 250 Highway 101
City Florence State OR Zip 97439

(2) TYPE OF WORK

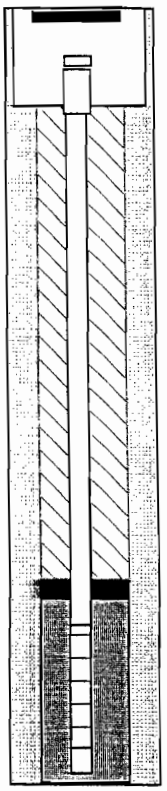
[X] New [ ] Deepening [ ] Conversion
[ ] Alteration (repair/recondition) [ ] Abandonment

(3) DRILL METHOD

[ ] Rotary Air [ ] Rotary Mud [ ] Cable [ ] Hollow Stem Auger [ ] Cable Mud
[ ] Reverse Rotary [X] Other Push Probe

(4) CONSTRUCTION

Piezometer Well [X]
Depth of Completed Well 20 ft. Special Standard [ ]



MONUMENT/VAULT Below Ground
From 0 To 1

BORE HOLE
Diameter 2 From 0 To 20

CASING
Dia. .75 From [X] 0 To 10
Gauge sch40 Wld [ ] Thrd [X]
Material (O) Steel (•) Plastic

LINER
Dia. _____ From [ ] _____ To _____
Gauge _____ Wld [ ] Thrd [ ]
Material (O) Steel (O) Plastic

SEAL
From 1 To 9
Material Bentonite Chips
Amount 10 P Grout weight _____

SCREEN
Casing/Liner Casing Material sch40
Diameter .75 From 10 To 20
Slot Size .02

FILTER
From 9 To 20 Material silica sand Size of pack 10/20

(5) WELL TESTS

(O) Pump (O) Bailer (O) Air (O) Flowing Artesian

Yield gal/min	Drawdown	Drill stem/Pump depth	Duration (hr)

Temperature _____ °F Lab analysis [ ] Yes By _____
Supervising Geologist/Engineer _____
Water quality concerns? [ ] Yes (describe below)

From	To	Description	Amount	Units

(6) LOCATION OF WELL (legal description)

County LANE Twp 18 S N/S Range 12 W E/W WM
Sec 27 NE 1/4 of the NE 1/4 Tax Lot city right of way
Tax Map Number _____ Lot _____
Lat _____ ° _____ ' _____ " or _____ DMS or DD
Long _____ ° _____ ' _____ " or _____ DMS or DD
(O) Street address of well (•) Nearest address

Corner of 12th St. and Oak St. Florence OR.

(7) STATIC WATER LEVEL

	Date	SWL(psi)	+	SWL(ft)
Existing Well / Predeepening			[ ]	
Completed Well	02-04-2010		[X]	17

Flowing Artesian? [ ] Dry Hole? [ ]
WATER BEARING ZONES Depth water was first found 17

SWL Date	From	To	Est Flow	SWL(psi)	+	SWL(ft)
02-04-2010	17	20			[X]	17
					[ ]	
					[ ]	
					[ ]	
					[ ]	

(8) WELL LOG

Ground Elevation _____

Material	From	To
Asphalt, gravel	0	1
Sand, loose, wet	1	7
Sand medium dense	7	20

RECEIVED
MAR 04 2011
WATER RESOURCES DEPT
SALEM, OREGON

Date Started 02-04-2010 Completed 02-04-2010

(unbonded) Monitor Well Constructor Certification

I certify that the work I performed on the construction, deepening, alteration, or abandonment of this well is in compliance with Oregon monitoring well construction standards. Materials used and information reported above are true to the best of my knowledge and belief.

License Number 10496 Date 2/23/11
Password : (if filing electronically)
Signed _____

(bonded) Monitor Well Constructor Certification

I accept responsibility for the construction, deepening, alteration, or abandonment work performed on this well during the construction dates reported above. All work performed during this time is in compliance with Oregon monitoring well construction standards. This report is true to the best of my knowledge and belief.

License Number 10288 Date 2-23-11
Password : (if filing electronically)
Signed _____
Contact Info (optional)

ORIGINAL - WATER RESOURCES DEPARTMENT
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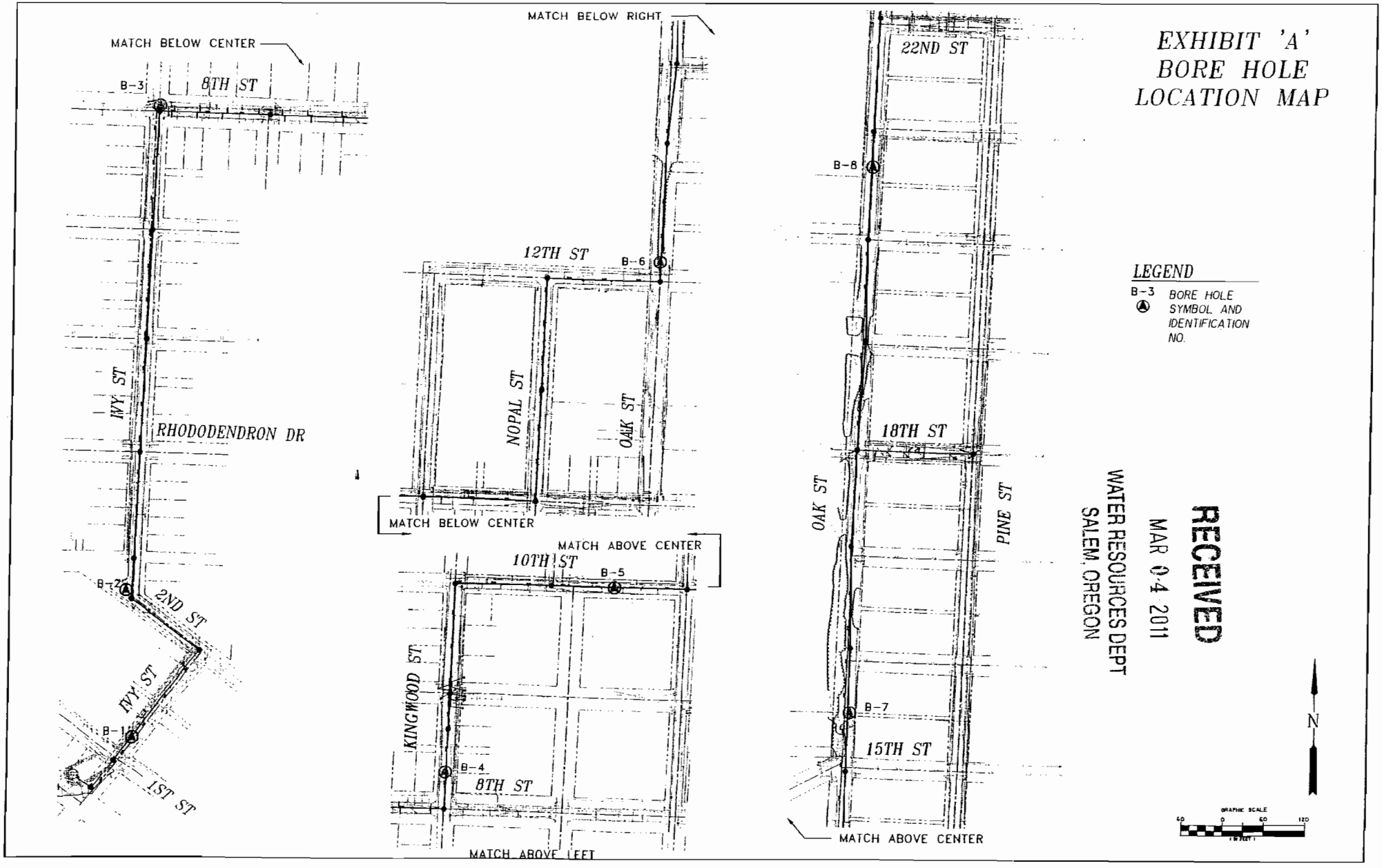


LANE 70779

LANE 70779

10-08-2010

STATE OF OREGON
GEOTECHNICAL HOLE REPORT
(as required by OAR 690-240-0035)

(1) OWNER/PROJECT

Hole Number B - 6

PROJECT NAME/NBR: LCC01OS.10P

First Name _____ Last Name _____

Company City of Florence

Address 250 Hwy 101

City Florence State OR Zip 97439

(2) TYPE OF WORK

☒ New ☐ Deepening ☒ Abandonment
☐ Alteration (repair/recondition)

(3) CONSTRUCTION

☐ Rotary Air ☐ Hand Auger ☐ Hollow stem auger
☐ Rotary Mud ☐ Cable ☒ Push Probe
☐ Other _____

(4) TYPE OF HOLE:

◯ Uncased Temporary ◉ Cased Permanent
◯ Uncased Permanent ◯ Slope Stablity
◯ Other
Other: _____

(5) USE OF HOLE

Piezometer well for observing depth to water.

(6) BORE HOLE CONSTRUCTION

Special Standard ☐ (Attach copy)

Depth of Completed Hole 20.00 ft.

BORE HOLE Dia	From	To	SEAL Material	From	To	Amt	sacks/ lbs
2	0	20	Concrete	0	1	10	P
			Bentonite Chips	1	20	15	P

Backfill placed from _____ ft. to _____ ft. Material _____
Filter pack from _____ ft. to _____ ft. Material _____ Size _____

(7) CASING/SCREEN

Casing	Screen	Dia	+	From	To	Gauge	Stl	Plstc	Wld	Thrd
◯	◉	.75	☒	15	20	40	◯	◉	☐	☒
◉	◯	.75	☒	0	15	40	◯	◉	☐	☒
◯	◯		☐				◯	◯	☐	☐
◯	◯		☐				◯	◯	☐	☐
◯	◯		☐				◯	◯	☐	☐

(8) WELL TESTS

◯ Pump ◯ Bailer ◯ Air ◯ Flowing Artesian

Yield gal/min	Drawdown	Drill stem/Pump depth	Duration(hr)

Temperature _____ °F Lab analysis ☐ Yes By _____

Supervising Geologist/Engineer _____

Water quality concerns? ☐ Yes (describe below)

From	To	Description	Amount	Units

(9) LOCATION OF HOLE (legal description)

County Lane Twp 18.00 S N/S Range 12.00 W E/W WM
Sec 27 NE 1/4 of the NE 1/4 Tax Lot no tax lot number
Tax Map Number _____ Lot _____
Lat ° 0 ' " or _____ DMS or DD
Long ° 0 ' " or _____ DMS or DD
◯ Street address of hole ◉ Nearest address

Corner of Oak St. and 12th St. Florence, OR.

(10) STATIC WATER LEVEL

	Date	SWL(psi)	+	SWL(ft)
Existing Well / Predeepening				
Completed Well				

Flowing Artesian? ☐

WATER BEARING ZONES

Depth water was first found 17.00

SWL Date	From	To	Est Flow	SWL(psi)	+	SWL(ft)
02-04-2010	17	20			☒	17
					☐	
					☐	
					☐	
					☐	

(11) SUBSURFACE LOG

Ground Elevation _____

Material	From	To
Sand	0	20

Date Started 02-04-2010 Completed 02-04-2010

(12) ABANDONMENT LOG:

Material	From	To	Amt	sacks/ lbs
Cement	0	20	15	P

Date Started 09-10-2010 Completed 09-10-2010

Professional Certification (to be signed by an Oregon licensed water or monitoring well constructor,Oregon registered geologist or professional engineer).

I accept responsibility for the construction, deepening, alteration, or abandonment work performed during the construction dates reported above. All work performed during this time is in compliance with Oregon geotechnical hole construction standards. This report is true to the best of my knowledge and belief.

License/Registration Number 10496 Date _____
Electronically Submitted
First Name Rod Last Name Johnson
Affiliation Pacific Northwest Drilling

ORIGINAL - WATER RESOURCES DEPARTMENT
THIS REPORT MUST BE SUBMITTED TO THE WATER RESOURCES DEPARTMENT WITHIN 30 DAYS OF COMPLETION OF WORK

Form Version: 0.95

LANE 70772

STATE OF OREGON MONITORING WELL REPORT

(as required by ORS 537.765 & OAR 690-240-0395)

10-06-2010

WELL LABEL # L 97147

START CARD # 1011658

(1) LAND OWNER

Owner Well I.D. B-8

First Name _____ Last Name _____

Company City of Florence

Address 250 Hwy. 101

City Florence State OR Zip 97439

(2) TYPE OF WORK

☒ New ☐ Deepening ☐ Conversion ☐ Alteration (repair/recondition) ☐ Abandonment

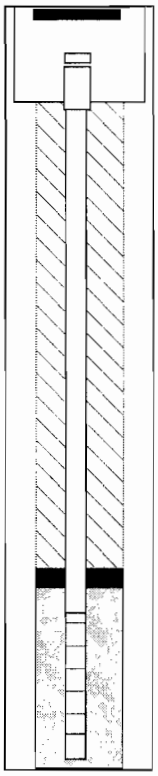
(3) DRILL METHOD

☐ Rotary Air ☐ Rotary Mud ☐ Cable ☐ Hollow Stem Auger ☐ Cable Mud ☐ Reverse Rotary ☒ Other Direct Push

(4) CONSTRUCTION

Piezometer Well ☐

Depth of Completed Well 15 ft. Special Standard ☐



MONUMENT/VAULT Below Ground From 0 To 1

BORE HOLE

Diameter 2.25 From 0 To 15

CASING

Dia. .75 From 0 To 5

Gauge Sch 40 Wld ☐ Thrd ☒

Material ○ Steel ◉ Plastic

LINER

Dia. _____ From _____ To _____

Gauge _____ Wld ☐ Thrd ☐

Material ○ Steel ○ Plastic

SEAL

From 1 To 4

Material Granular Bentonite

Amount 7.00 P Grout weight _____

SCREEN

Casing/Liner Casing Material Sch 40 Pre Pack

Diameter .75 From 5 To 15

Slot Size .010

FILTER

From 9 To 15 Material Silica Sand Size of pack 10/20

(5) WELL TESTS

○ Pump ○ Bailer ○ Air ○ Flowing Artesian

Yield gal/min	Drawdown	Drill stem/Pump depth	Duration (hr)

Temperature 56 °F Lab analysis ☐ Yes By _____

Supervising Geologist/Engineer _____

Water quality concerns? ☐ Yes (describe below)

From	To	Description	Amount	Units

(6) LOCATION OF WELL (legal description)

County Lane Twp 18.00 S N/S Range 12.00 W E/W WM

Sec 27 SE 1/4 of the NE 1/4 Tax Lot 100

Tax Map Number _____ Lot _____

Lat ° 0 ' " or _____ DMS or DD

Long ° 0 ' " or _____ DMS or DD

○ Street address of well ◉ Nearest address

1226 Airport Rd. Florence, OR 97439

(7) STATIC WATER LEVEL

	Date	SWL(psi)	+ SWL(ft)
Existing Well / Predeepening			
Completed Well	09-29-2010		8.2

Flowing Artesian? ☐ Dry Hole? ☐

WATER BEARING ZONES Depth water was first found 8.2

SWL Date	From	To	Est Flow	SWL(psi)	+ SWL(ft)

(8) WELL LOG

Ground Elevation _____

Material	From	To
Lt. Brown Fine Sand	0	15

RECEIVED
NOV 30 2010
WATER RESOURCES DEPT
SALEM, OREGON

Date Started 09-29-2010 Completed 09-29-2010

(unbonded) Monitor Well Constructor Certification

I certify that the work I performed on the construction, deepening, alteration, or abandonment of this well is in compliance with Oregon monitoring well construction standards. Materials used and information reported above are true to the best of my knowledge and belief.

License Number _____ Date _____

Electronically Submitted

Signed _____

(bonded) Monitor Well Constructor Certification

I accept responsibility for the construction, deepening, alteration, or abandonment work performed on this well during the construction dates reported above. All work performed during this time is in compliance with Oregon monitoring well construction standards. This report is true to the best of my knowledge and belief.

License Number 10582 Date 10-06-2010

Electronically Submitted

Signed COLIN WATSON (E-filed)

Contact Info (optional) Pacific Soil & Water LLC

ORIGINAL - WATER RESOURCES DEPARTMENT

THIS REPORT MUST BE SUBMITTED TO THE WATER RESOURCES DEPARTMENT WITHIN 30 DAYS OF COMPLETION OF WORK

Form Version: 0.95

LANE 70772

MONITORING WELL REPORT -
Map with location identified must be attached and shall include an approximate scale and north arrow

LANE 70772

10-06-2010

WELL I.D. # L 97147

START CARD # 1011658

Map of well

Singing Pines Park -
Airport Rd. & Kingwood St.
Florence, OR 97439

N

60'

INFILTRATION TESTING REPORT

BRANCH ENGINEERING INC.
310 5TH ST.
SPRINGFIELD, OREGON 97477

Project Name: Keener Place
Project Number: 18-493
Location: 1424 Airport Road, Florence OR
Date: 1-24-2019
Comments: Encased falling head tests performed in 6" auger borings

Infiltration Test No. 1 Depth: 42" Diameter: 6" Vol. of Presat. 2 gallons
Soil Description: 0-6" Grass, Gravel, Brown Organics; 6-42" Tan Moist Sand

Time Elapsed (min):	Depth to Water (in):	k (in/hr)	Notes:	
0.00	37.75		Trial #1	
1.00	38.75	60.0	k_{avg} =	58.2
2.00	39.75	60.0		
4.47	42.00	54.7		
0	38		Trial #2	
1	39	60.0	k_{avg} =	57.8
2	40	60.0		
4.25	42	53.3		
0	37		Trial #3	
1.25	38.5	72.0	k_{avg} =	60.8
2.5	39.5	48.0		
4.9	42	62.5		

Trial #1 Total k_{avg}= 58.9

Infiltration Test No. 2 Depth: 46" Diameter: 6" Vol. of Presat. 2 gallons
Soil Description: 0-6" Brown sandy gravel; 6-22" Dark Brown w/ some gravel; 12-18" firm moist fine grain sand; 18-30" Loose moist sand

Time Elapsed (min):	Depth to Water (in):	k (in/hr)	Notes:	
0.00	44.00		Trial #1	
1.00	45.25	75.0	k_{avg} =	52.3
2.52	46.00	29.6		
0	40.5		Trial #2	
1	41	30.0	k_{avg} =	38.9
2	42	60.0		
11.03	46	26.6		
0	41.75		Trial #3	
2.17	43	34.6	k_{avg} =	32.7
4	44.25	41.0		
8.63	46	22.7		

Trial #2 Total k_{avg}= 41.3

INFILTRATION TESTING REPORT

BRANCH ENGINEERING INC.
310 5TH ST.
SPRINGFIELD, OREGON 97477

Infiltration Test No. 3 Depth: 70" Diameter: 6" Vol. of Presat. 2 gallons
Soil Description: 0-12" Dark Brown Sandy Gravel; 12-42" Tan Firm Sand Moist

Time Elapsed (min):	Depth to Water (in):	k (in/hr)	Notes:	
0.00	63.50		Trial #1	
1.00	64.50	60.0	k_{avg} =	61.4
2.00	65.50	60.0		
3.00	66.50	60.0		
6.2	70	65.6		
0	64.5		Trial #2	
1	65.5	60.0	k_{avg} =	55.9
2	66.5	60.0		
3	67	30.0		
5.45	70	73.5		
0	64		Trial #3	
1	65.25	75.0	k_{avg} =	61.5
2	66	45.0		
3	67	60.0		
5.73	70	65.9		

Trial #3 Total k_{avg}= 59.6

Infiltration Test No. 4 Depth: 41" Diameter: 6" Vol. of Presat. 2 gallons
Soil Description: 0-4" Brown Organics; 4-16" Brown Firm Sand with Gravel; 16-42" Tan Moist Firm Sand

Time Elapsed (min):	Depth to Water (in):	k (in/hr)	Notes:	
0.00	37.50		Trial #1	
1.33	41.00	157.9	k_{avg} =	157.9
0	37.5		Trial #2	
0.5	38.75	150.0	k_{avg} =	126.1
1.82	41	102.3		
0	36.5		Trial #3	
1	39	150.0	k_{avg} =	123.0
2.25	41	96.0		

Trial #4 Total k_{avg}= 135.7

DEVNW AIRPORT RD. PUD
SITE IMPROVEMENTS
EROSION AND SEDIMENT CONTROL PLAN
FLORENCE, OREGON

EROSION AND SEDIMENT CONTROL NARRATIVE

PROPOSED CONSTRUCTION ACTIVITY

THE PROJECT ADDRESSED BY THIS EROSION AND SEDIMENT CONTROL PLAN CONSISTS OF CONSTRUCTING TWELVE SINGLE FAMILY DWELLINGS WITH DESIGNATED PARKING AREAS INTERSPERSED THROUGHOUT A PRIVATE DRIVE AISLE.

EXCAVATION AND FILL

ROUGH GRADING WILL BE NECESSARY TO ACHIEVE PROPOSED GRADES. ANY SUITABLE EXCAVATION MATERIAL WILL BE USED AS NON-STRUCTURAL FILL IN LOW AREAS.

SOIL TYPES

ACCORDING TO THE SOILS SURVEY OF FLORENCE, OREGON, BY THE NATURAL RESOURCE CONSERVATION SERVICE, THE SOILS AT THE SITE ARE MAPPED AS THE WALDPORT FINE SAND (MAP UNIT SYMBOL 131C AND 131E).

EXISTING CONDITIONS

MUCH OF THE EXISTING LANDSCAPING ON SITE IS SHRUBS AND TREES ON STEEP DUNES.

CONSTRUCTION SCHEDULE

MOBILIZATION & EROSION CONTROL MEASURES	2020
EARTHWORK	2020
CLEAN UP	2020
FINAL	2020

CUT/FILL QUANTITIES

(FINISH GRADE TO EXISTING GRADE)

CUT _____ **15712** C.Y.
FILL _____ **245** C.Y.
(CONTRACTOR TO VERIFY)

INSPECTION REQUIREMENTS

1. ALL EROSION AND SEDIMENT CONTROL MEASURES SHALL BE INSPECTED AT LEAST EVERY TWO WEEKS REGARDLESS OF WEATHER.
2. ALL EROSION AND SEDIMENT CONTROL MEASURES SHALL BE INSPECTED DAILY DURING PERIODS WHEN STORM WATER RUNOFF OR SNOW MELT RUNOFF OCCURS.
3. STORM WATER RUNOFF DISCHARGE POINT FOR THE SITE IS TO BE MONITORED FOR TURBIDITY, DAILY WHEN RAINING AND ANY TIME DISCHARGE ACTIVITIES ARE OCCURRING. IF SIGNIFICANT AMOUNTS OF SEDIMENT ARE LEAVING THE WORK AREA, CORRECTIVE ACTION SHALL BE TAKEN TO REDUCE THE DISCHARGE OF SEDIMENTS AND THE ESCP SHALL BE AMENDED ACCORDINGLY.

WRITTEN RECORDS

1. A WRITTEN RECORD OF INSPECTIONS FOR AN ACTIVE SITE SHALL BE KEPT ON SITE AND MADE AVAILABLE UPON REQUEST TO D.E.Q., ITS AGENT, OR LOCAL MUNICIPALITY.

MAINTENANCE OF EROSION CONTROL MEASURES

THE EROSION CONTROL MEASURES DESCRIBED ON THIS PLAN ARE MINIMUM REQUIREMENTS FOR ANTICIPATED SITE CONDITIONS. DURING THE CONSTRUCTION PERIOD, THESE MEASURES SHALL BE UPGRADED AS NEEDED TO 1.) ENSURE THAT SEDIMENT DOES NOT LEAVE THE SITE, AND 2.) ENSURE EXISTING VEGETATION ON SITE SHALL BE PRESERVED UNTIL ALL GRADING IS COMPLETE. THE INSTALLED MEASURES SHALL BE INSPECTED DAILY BY THE CONTRACTOR AND MAINTAINED, ENHANCED AND/OR UPGRADED AS NECESSARY TO ENSURE THEIR CONTINUED FUNCTIONING.

INSPECTION TABLE

SITE CONDITION	*MINIMUM FREQUENCY*
1. *ACTIVE PERIOD*	*DAILY WHEN STORMWATER RUNOFF, INCLUDING FROM SNOW MELT, IS OCCURRING.* *AT LEAST ONCE EVERY 14 DAYS, REGARDLESS OF WHETHER STORMWATER RUNOFF IS OCCURRING.*
2. *PRIOR TO THE SITE BECOMING INACTIVE OR IN ANTICIPATION OF SITE INACCESSIBILITY*	*ONCE TO ENSURE THAT EROSION AND SEDIMENT CONTROL MEASURES ARE IN WORKING ORDER. ANY NECESSARY MAINTENANCE AND REPAIR MUST BE MADE PRIOR TO LEAVING THE SITE.*
3. *INACTIVE PERIODS GREATER THAN FOURTEEN (14) CONSECUTIVE CALENDAR DAYS*	*ONCE EVERY MONTH.*
4. *PERIODS DURING WHICH THE SITE IS INACCESSIBLE DUE TO INCLEMENT WEATHER*	*IF PRACTICAL, INSPECTIONS MUST OCCUR DAILY AT A RELEVANT AND ACCESSIBLE DISCHARGE POINT OR DOWNSTREAM LOCATION.*
5. *PERIODS DURING WHICH DISCHARGE IS UNLIKELY DUE TO FROZEN CONDITIONS*	*MONTHLY, RESUME MONITORING IMMEDIATELY UPON MELT, OR WHEN WEATHER CONDITIONS MAKE DISCHARGE LIKELY.*

EROSION AND SEDIMENT CONTROL BMP IMPLEMENTATION:

1. *ALL BASE ESCP MEASURES (INLET PROTECTION, PERIMETER SEDIMENT CONTROL, GRAVEL CONSTRUCTION ENTRANCES, ETC.) MUST BE IN PLACE, FUNCTIONAL, AND APPROVED IN AN INITIAL INSPECTION, PRIOR TO COMMENCEMENT OF CONSTRUCTION ACTIVITIES AS REQUIRED.*
2. *PERIMETER CONTROL SEDIMENT BARRIERS TO BE INSTALLED PRIOR TO CONSTRUCTION. ADDITIONAL TEMPORARY SEDIMENT CONTROL MEASURES TO BE INSTALLED DURING AND AFTER CONSTRUCTION AS NEEDED. EROSION CONTROL MEASURES ARE TO BE INSTALLED IMMEDIATELY AFTER ESTABLISHMENT OF FINISHED GRADE.*
3. *FINAL SLOPE STABILIZATION MEASURES, INCLUDING EROSION CONTROL BLANKETS, SHALL BE INSTALLED IMMEDIATELY UPON ESTABLISHMENT OF FINISH GRADE.*
4. *THE STORM WATER FACILITY SHALL BE CONSTRUCTED AND VEGETATION FULLY ESTABLISHED PRIOR TO RECEIVING STORMWATER DISCHARGE FROM PAVED AREAS.*
5. *INLET PROTECTION SHALL BE IN-PLACE PRIOR TO PAVING ACTIVITIES.*

TEMPORARY AND PERMANENT VEGETATION SPECIFICATIONS:

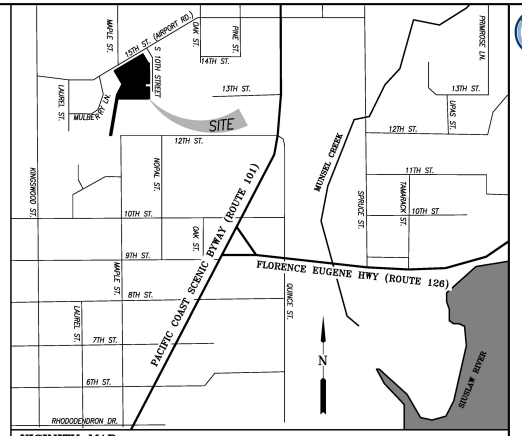
1. *FOR DISTURBED AREAS OPEN FOR SEVEN DAYS OR MORE, STRAW MULCH SHALL BE SPREAD OVER DISTURBED AREA.*
2. *SEEDED COMPOST SHALL BE USED TO STABILIZE DISTURBED AREAS USING THE PERMANENT SEEDING MIX; SPRING BARLEY.*
3. *SLOPES TO RECEIVE PERMANENT SEEDING SHALL HAVE THE SURFACE ROUGHENED BY MEANS OF TRACK-WALKING OR THE USE OF OTHER APPROVED IMPLEMENTS. SURFACE ROUGHENING IMPROVES SEED BEDDING AND REDUCES RUN-OFF VELOCITY. INCLUDE A TACKIFIER OR BONDING AGENT TO HYDROSEED.*
4. *ALL SLOPES GREATER THAN 3:1 SHALL BE COVERED WITH A MEDIUM-DENSITY GEO-JUTE MAT UNTIL VEGETATION IS ESTABLISHED.*

DEQ GENERAL NOTES

1. *HOLD A PRE-CONSTRUCTION MEETING OF PROJECT CONSTRUCTION PERSONNEL THAT INCLUDES THE INSPECTOR TO DISCUSS EROSION AND SEDIMENT CONTROL MEASURES AND CONSTRUCTION LIMITS. (SCHEDULE A.8.c.i.(3))*
2. *ALL INSPECTIONS MUST BE MADE IN ACCORDANCE WITH DEQ 1200-C PERMIT REQUIREMENTS. (SCHEDULE A.12.b AND SCHEDULE B.1)*
3. *INSPECTION LOGS MUST BE KEPT IN ACCORDANCE WITH DEQ'S 1200-C PERMIT REQUIREMENTS. (SCHEDULE B.1.c AND B.2)*
4. *RETAIN A COPY OF THE ESCP AND ALL REVISIONS ON SITE AND MAKE IT AVAILABLE ON REQUEST TO DEQ, AGENT, OR THE LOCAL MUNICIPALITY. DURING INACTIVE PERIODS OF GREATER THAN SEVEN (7) CONSECUTIVE CALENDAR DAYS, THE ABOVE RECORDS MUST BE RETAINED BY THE PERMIT REGISTRANT BUT DO NOT NEED TO BE AT THE CONSTRUCTION SITE. (SCHEDULE B.2.c)*
5. *ALL PERMIT REGISTRANTS MUST IMPLEMENT THE ESCP. FAILURE TO IMPLEMENT ANY OF THE CONTROL MEASURES OR PRACTICES DESCRIBED IN THE ESCP IS A VIOLATION OF THE PERMIT. (SCHECDULE A 8.a)*
6. *THE ESCP MUST BE ACCURATE AND REFLECT SITE CONDITIONS. (SCHEDULE A.12.c.i)*
7. *SUBMISSION OF ALL ESCP REVISIONS IS NOT REQUIRED. SUBMITTAL OF THE ESCP REVISIONS IS ONLY UNDER SPECIFIC CONDITIONS. SUBMIT ALL NECESSARY REVISIONS TO DEQ OR AGENT WITHIN 10 DAYS. (SCHEDULE A.12.c.iv. AND v)*
8. *PHASE CLEARING AND GRADING TO THE MAXIMUM EXTENT PRACTICAL TO PREVENT EXPOSED INACTIVE AREAS FROM BECOMING A SOURCE OF EROSION. (SCHEDULE A.7.a.iii)*
9. *IDENTIFY, MARK, AND PROTECT (BY CONSTRUCTION FENCING OR OTHER MEANS) CRITICAL RIPARIAN AREAS AND VEGETATION INCLUDING IMPORTANT TREES AND ASSOCIATED ROOTING ZONES, AND VEGETATION AREAS TO BE PRESERVED. IDENTIFY VEGETATIVE BUFFER ZONES BETWEEN THE SITE AND SENSITIVE AREAS (E.G., WETLANDS), AND OTHER AREAS TO BE PRESERVED, ESPECIALLY IN PERIMETER AREAS. (SCHEDULE A.8.c.i.(1) & (2))*
10. *PRESERVE EXISTING VEGETATION WHEN PRACTICAL AND RE-VEGETATE OPEN AREAS. RE-VEGETATE OPEN AREAS WHEN PRACTICAL BEFORE AND AFTER GRADING OR CONSTRUCTION. IDENTIFY THE TYPE OF VEGETATIVE SEED MIX USED. (SCHEDULE A.7.a.v)*
11. *MAINTAIN AND DELINEATE ANY EXISTING NATURAL BUFFER WITHIN 50-FEET OF WATERS OF THE STATE. (SCHEDULE A.7.b.i AND (2(a)(b))*
12. *INSTALL PERIMETER SEDIMENT CONTROL, INCLUDING STORM DRAIN INLET PROTECTION AS WELL AS ALL SEDIMENT BASINS, TRAPS, AND BARRIERS PRIOR TO LAND DISTURBANCE. (SCHEDULE A.8.c.i.(5))*
13. *CONTROL BOTH PEAK FLOW RATES AND TOTAL STORMWATER VOLUME, TO MINIMIZE EROSION AT OUTLETS AND DOWNSTREAM CHANNELS AND STREAMBANKS. (SCHEDULE A.7.c)*
14. *CONTROL SEDIMENT AS NEEDED ALONG THE SITE PERIMETER AND AT ALL OPERATIONAL INTERNAL STORM DRAIN INLETS AT ALL TIMES DURING CONSTRUCTION, BOTH INTERNALLY AND AT THE SITE BOUNDARY. (SCHEDULE A.7.d.i)*
15. *ESTABLISH CONCRETE TRUCK AND OTHER CONCRETE EQUIPMENT WASHOUT AREAS BEFORE BEGINNING CONCRETE WORK. (SCHEDULE A.8.c.i.(6))*
16. *APPLY TEMPORARY AND/OR PERMANENT SOIL STABILIZATION MEASURES IMMEDIATELY ON ALL DISTURBED AREAS AS GRADING PROGRESSES. TEMPORARY OR PERMANENT STABILIZATION MEASURES ARE NOT REQUIRED FOR AREAS THAT ARE INTENDED TO BE LEFT UNVEGETATED, SUCH AS DIRT ACCESS ROADS OR UTILITY POLE PADS. (SCHEDULE A.8.c.ii.(3))*
17. *ESTABLISH MATERIAL AND WASTE STORAGE AREAS, AND OTHER NON-STORMWATER CONTROLS. (SCHEDULE A.8.c.i.(7))*
18. *PREVENT TRACKING OF SEDIMENT ONTO PUBLIC OR PRIVATE ROADS USING BMPS SUCH AS: CONSTRUCTION ENTRANCE, GRAVELED (OR PAVED) EXITS AND PARKING AREAS, GRAVEL ALL UNPAVED ROADS LOCATED ONSITE, OR USE AN EXIT TIRE WASH. THESE BMPS MUST BE IN PLACE PRIOR TO LAND-DISTURBING ACTIVITIES. (SCHEDULE A 7.d.ii AND A.8.c.i(4))*
19. *WHEN TRUCKING SATURATED SOILS FROM THE SITE, EITHER USE WATER-TIGHT TRUCKS OR DRAIN LOADS ON SITE. (SCHEDULE A.7.d.ii.(5))*
20. *CONTROL PROHIBITED DISCHARGE FROM LEAVING THE CONSTRUCTION SITE, I.E., CONCRETE WASH-OUT, WASTEWATER FROM CLEANOUT OF STUCCO, PAINT AND CURING COMPOUNDS. (SCHEDULE A.6)*
21. *USE BMPS TO PREVENT OR MINIMIZE STORMWATER EXPOSURE TO POLLUTANTS FROM SPILLS; VEHICLE AND EQUIPMENT FUELING, MAINTENANCE, AND STORAGE; OTHER CLEANING AND MAINTENANCE ACTIVITIES; AND WASTE HANDLING ACTIVITIES. THESE POLLUTANTS INCLUDE FUEL, HYDRAULIC FLUID, AND OTHER OILS FROM VEHICLES AND MACHINERY, AS WELL AS DEBRIS, FERTILIZER, PESTICIDES, PAINTS, SOLVENTS, AND CURING COMPOUNDS AND ADHESIVES FROM CONSTRUCTION OPERATIONS. (SCHEDULE A.7.e.i.(2))*
22. *IMPLEMENT THE FOLLOWING BMPS WHEN APPLICABLE: WRITTEN SPILL PREVENTION AND RESPONSE PROCEDURES, EMPLOYEE TRAINING ON SPILL PREVENTION AND PROPER DISPOSAL PROCEDURES, SPILL KITS IN ALL VEHICLES, REGULAR MAINTENANCE SCHEDULE FOR VEHICLES AND MACHINERY, MATERIAL DELIVERY AND STORAGE CONTROLS, TRAINING AND SIGNAGE, AND COVERED STORAGE AREAS FOR WASTE AND SUPPLIES. (SCHEDULE A 7.e.iii.)*
23. *USE WATER, SOIL-BINDING AGENT OR OTHER DUST CONTROL TECHNIQUE AS NEEDED TO AVOID WIND-BLOWN SOIL. (SCHEDULE A 7.a.iv)*
24. *THE APPLICATION RATE OF FERTILIZERS USED TO REESTABLISH VEGETATION MUST FOLLOW MANUFACTURER'S RECOMMENDATIONS TO MINIMIZE NUTRIENT RELEASES TO SURFACE WATERS. EXERCISE CAUTION WHEN USING TIME-RELEASE FERTILIZERS WITHIN ANY WATERWAY RIPARIAN ZONE. (SCHEDULE A.9.b.iii)*
25. *IF AN ACTIVE TREATMENT SYSTEM (FOR EXAMPLE, ELECTRO-COAGULATION, FLOCCULATION, FILTRATION, ETC.) FOR SEDIMENT OR OTHER POLLUTANT REMOVAL IS EMPLOYED, SUBMIT AN OPERATION AND MAINTENANCE PLAN (INCLUDING SYSTEM SCHEMATIC, LOCATION OF SYSTEM, LOCATION OF INLET, LOCATION OF DISCHARGE, DISCHARGE DISPERSION DEVICE DESIGN, AND A SAMPLING PLAN AND FREQUENCY) BEFORE OPERATING THE TREATMENT SYSTEM. OBTAIN PLAN APPROVAL BEFORE OPERATING THE TREATMENT SYSTEM. OPERATE AND MAINTAIN THE TREATMENT SYSTEM ACCORDING TO MANUFACTURER'S SPECIFICATIONS. (SCHEDULE A.9.a)*
26. *TEMPORARILY STABILIZE SOILS AT THE END OF THE SHIFT BEFORE HOLIDAYS AND WEEKENDS, IF NEEDED. THE REGISTRANT IS RESPONSIBLE FOR ENSURING THAT SOILS ARE STABLE DURING RAIN EVENTS AT ALL TIMES OF THE YEAR. (SCHEDULE A 7.b)*
27. *AS NEEDED BASED ON WEATHER CONDITIONS, AT THE END OF EACH WORKDAY SOIL STOCKPILES MUST BE STABILIZED OR COVERED, OR OTHER BMPS MUST BE IMPLEMENTED TO PREVENT DISCHARGES TO SURFACE WATERS OR CONVEYANCE SYSTEMS LEADING TO SURFACE WATERS. (SCHEDULE A 7.e.ii.(2))*
28. *CONSTRUCTION ACTIVITIES MUST AVOID OR MINIMIZE EXCAVATION AND CREATION OF BARE GROUND DURING WET WEATHER. (SCHEDULE A.7.a.i)*
29. *SEDIMENT FENCE: REMOVE TRAPPED SEDIMENT BEFORE IT REACHES ONE THIRD OF THE ABOVE GROUND FENCE HEIGHT AND BEFORE FENCE REMOVAL. (SCHEDULE A.9.c.i)*
30. *OTHER SEDIMENT BARRIERS (SUCH AS BIOBAGS): REMOVE SEDIMENT BEFORE IT REACHES TWO INCHES DEPTH ABOVE GROUND HEIGHT. AND BEFORE BMP REMOVAL. (SCHEDULE A.9.c.i)*
31. *CATCH BASINS: CLEAN BEFORE RETENTION CAPACITY HAS BEEN REDUCED BY FIFTY PERCENT. SEDIMENT BASINS AND SEDIMENT TRAPS: REMOVE TRAPPED SEDIMENTS BEFORE DESIGN CAPACITY HAS BEEN REDUCED BY FIFTY PERCENT AND AT COMPLETION OF PROJECT. (SCHEDULE A.9.c.iii & iv)*
32. *WITHIN 24 HOURS, SIGNIFICANT SEDIMENT THAT HAS LEFT THE CONSTRUCTION SITE, MUST BE REMEDIATED. INVESTIGATE THE CAUSE OF THE SEDIMENT RELEASE AND IMPLEMENT STEPS TO PREVENT A RECURRENCE OF THE DISCHARGE WITHIN THE SAME 24 HOURS. ANY IN-STREAM CLEAN UP OF SEDIMENT SHALL BE PERFORMED ACCORDING TO THE OREGON DIVISION OF STATE LANDS REQUIRED TIMEFRAME. (SCHEDULE A.9.b.i)*
33. *THE INTENTIONAL WASHING OF SEDIMENT INTO STORM SEWERS OR DRAINAGE WAYS MUST NOT OCCUR. VACUUMING OR DRY SWEEPING AND MATERIAL PICKUP MUST BE USED TO CLEANUP RELEASED SEDIMENTS. (SCHEDULE A.9.b.ii)*
34. *THE ENTIRE SITE MUST BE TEMPORARILY STABILIZED USING VEGETATION OR A HEAVY MULCH LAYER, TEMPORARY SEEDING, OR OTHER METHOD SHOULD ALL CONSTRUCTION ACTIVITIES CEASE FOR 30 DAYS OR MORE. (SCHEDULE A.7.f.i)*
35. *PROVIDE TEMPORARY STABILIZATION FOR THAT PORTION OF THE SITE WHERE CONSTRUCTION ACTIVITIES CEASE FOR 14 DAYS OR MORE WITH A COVERING OF BLOWN STRAW AND A TACKIFIER, LOOSE STRAW, OR AN ADEQUATE COVERING OF COMPOST MULCH UNTIL WORK RESUMES ON THAT PORTION OF THE SITE. (SCHEDULE A.7.f.ii)*
36. *DO NOT REMOVE TEMPORARY SEDIMENT CONTROL PRACTICES UNTIL PERMANENT VEGETATION OR OTHER COVER OF EXPOSED AREAS IS ESTABLISHED. ONCE CONSTRUCTION IS COMPLETE AND THE SITE IS STABILIZED, ALL TEMPORARY EROSION CONTROLS AND RETAINED SOILS MUST BE REMOVED AND DISPOSED OF PROPERLY, UNLESS DOING SO CONFLICTS WITH LOCAL REQUIREMENTS. (SCHEDULE A.8.c.iii(1) AND D.3.c.ii AND iii)*

GRADING, STREET AND UTILITY EROSION CONTROL CONSTRUCTION NOTES

1. *SEED USED FOR PERMANENT SEEDING SHALL BE NATIVE SEED MIX APPROVED BY OWNER.*
2. *SLOPE TO RECEIVE PERMANENT SEEDED COMPOST SHALL HAVE THE SURFACE ROUGHENED BY MEANS OF TRACK-WALKING OR THE USE OF OTHER APPROVED IMPLEMENTS. SURFACE ROUGHENING IMPROVES SEED BEDDING AND REDUCED RUN-OFF VELOCITY.*
3. *LONG TERM SLOPE STABILIZATION MEASURES SHALL INCLUDE THE ESTABLISHMENT OF PERMANENT VEGETATIVE COVER VIA SEEDING WITH APPROVED MIX AND APPLICATION RATE.*
4. *TEMPORARY SLOPE STABILIZATION MEASURES SHALL INCLUDE: COVERING EXPOSED SOIL WITH PLASTIC SHEETING, STRAW MULCHING, OR OTHER APPROVED MEASURES.*
5. *STOCKPILED SOIL OR STRIPPING SHALL BE PLACED IN A STABLE LOCATION AND CONFIGURATION. DURING "WET WEATHER" PERIODS, STOCKPILES SHALL BE COVERED WITH PLASTIC SHEETING. SEDIMENT FENCE IS REQUIRED AROUND THE PERIMETER OF THE STOCKPILE.*
6. *EXPOSED CUT OR FILL AREAS SHALL BE STABILIZED THOUGH THE USE OF TEMPORARY SEEDING AND MULCHING. SLOPES EXCEEDING 25% MAY REQUIRE ADDITIONAL EROSION CONTROL MEASURES.*
7. *AREAS SUBJECT TO WIND EROSION SHALL USE APPROPRIATE DUST CONTROL MEASURES INCLUDING THE APPLICATION OF A FINE SPRAY OF WATER, STRAW MULCHING, OR OTHER APPROVED MEASURES.*
8. *CONSTRUCTION ENTRANCES SHALL BE INSTALLED AT THE BEGINNING OF CONSTRUCTION AND MAINTAINED FOR THE DURATION OF THE PROJECT. ADDITIONAL MEASURES INCLUDING, BUT NOT LIMITED TO, STREET SWEEPING, AND VACUUMING MAY BE REQUIRED TO ENSURE THAT ALL PAVED AREAS ARE KEPT CLEAN FOR THE DURATION OF THE PROJECT.*
9. *ACTIVE INLETS TO STORM WATER SYSTEMS SHALL BE PROTECTED THROUGH THE USE OF APPROVED INLET PROTECTION MEASURES. ALL INLET PROTECTION MEASURES ARE TO BE REGULARLY INSPECTED AND MAINTAINED.*
10. *SATURATED MATERIALS THAT ARE HAULED OFF-SITE MUST BE TRANSPORTED IN WATER-TIGHT TRUCKS TO ELIMINATE SPILLAGE OF SEDIMENT AND SEDIMENT-LADEN WATER.*
11. *AN AREA SHALL BE PROVIDED FOR THE WASHING OUT OF CONCRETE TRUCKS IN A LOCATION THAT DOES NOT PROVIDE RUN-OFF THAT CAN ENTER THE STORM WATER SYSTEM (MINIMUM 50 FEET AWAY FROM STORM FACILITY, NATURAL RESOURCE PROTECTION AREA OR STORM WATER DISCHARGE POINT. IF THE CONCRETE WASH-OUT AREA CAN NOT BE CONSTRUCTED GREATER THAN 50' FROM ANY DISCHARGE POINT, SECONDARY MEASURES SUCH AS BERMS OR TEMPORARY SETTLING PITS MAY BE REQUIRED. THE WASH-OUT SHALL BE LOCATED WITHIN SIX FEET OF TRUCK ACCESS AND BE CLEANED WHEN IT REACHES 50% OF THE CAPACITY.*
12. *SWEEPINGS FROM EXPOSED AGGREGATE CONCRETE SHALL NOT BE TRANSFERRED TO THE STORM WATER SYSTEM. SWEEPINGS SHALL BE PICKED UP AND DISPOSED IN THE TRASH.*
13. *AVOID PAVING IN WET WEATHER WHEN PAVING CHEMICALS CAN RUN-OFF IN TO THE STORM WATER SYSTEM.*
14. *COVER CATCH BASINS, MANHOLES, AND OTHER DISCHARGE POINTS WHEN APPLYING SEAL COAT, TACK COAT, ETC. TO PREVENT INTRODUCING THESE MATERIALS TO THE STORM WATER SYSTEM.*



VICINITY MAP
SCALE 1" = 500'

EROSION & SEDIMENT CONTROL PLAN (ESCP) NOTES

1. *PRIOR TO ANY GROUND DISTURBANCE ON THE SITE ONE INSPECTION WITH DEQ STAFF IS REQUIRED. ISSUANCE OF THIS PLAN DOES NOT RELIEVE THE PERMIT HOLDER AND/OR THE CONTRACTOR FROM ALL OTHER PERMITTING REQUIREMENTS. PRIOR TO BEGINNING CONSTRUCTION ACTIVITIES, ALL OTHER NECESSARY APPROVALS SHALL BE OBTAINED.*
2. *THE EROSION AND SEDIMENT CONTROL MEASURES SHOWN ON THE PLAN ARE THE MINIMUM REQUIREMENTS FOR ANTICIPATED SITE CONDITIONS. DURING THE CONSTRUCTION PERIOD, THESE MEASURES SHALL BE UPGRADED AS NEEDED FOR UNEXPECTED STORM EVENTS AND TO ENSURE THAT SEDIMENT AND SEDIMENT-LADEN WATER DOES NOT LEAVE THE SITE.*
3. *THE IMPLEMENTATION OF THE ESCP AND THE CONSTRUCTION, MAINTENANCE, REPLACEMENT, AND UPGRADING OF THE EROSION AND SEDIMENT CONTROL MEASURES IS THE RESPONSIBILITY OF THE PERMIT HOLDER AND/OR THE CONTRACTOR UNTIL ALL CONSTRUCTION IS COMPLETED AND ACCEPTED AND VEGETATION/LANDSCAPING IS ESTABLISHED.*
4. *THE BOUNDARIES OF THE CLEARING LIMITS SHOWN ON THIS PLAN SHALL BE CLEARLY FLAGGED IN THE FIELD BY THE ENGINEER PRIOR TO CONSTRUCTION. DURING THE CONSTRUCTION PERIOD, NO DISTURBANCE BEYOND THE FLAGGED CLEARING LIMITS SHALL BE PERMITTED. THE FLAGGING SHALL BE MAINTAINED BY THE PERMIT HOLDER AND/OR THE CONTRACTOR FOR THE DURATION OF CONSTRUCTION.*
5. *THE EROSION AND SEDIMENT CONTROL MEASURES ON ACTIVE SITES SHALL BE INSPECTED AND MAINTAINED DAILY AND WITHIN THE 24 HOURS AFTER ANY STORM EVENT OF GREATER THAN 0.5 INCHES OF RAIN PER 24 HOUR PERIOD. MEASURES SHALL BE INSPECTED BY THE PERMIT HOLDER AND/OR THE CONTRACTOR AFTER EACH RAINFALL AND AT LEAST DAILY DURING PROLONGED RAINFALL. ANY REQUIRED REPAIRS OR ADJUSTMENTS SHALL BE MADE IMMEDIATELY. THE EROSION AND SEDIMENT CONTROL MEASURES ON INACTIVE SITES SHALL BE INSPECTED A MINIMUM OF ONCE EVERY TWO (2) WEEKS OR WITHIN 48 HOURS FOLLOWING A STORM EVENT.*
6. *ALL EROSION AND SEDIMENT CONTROL MEASURES SHALL BE PROTECTED FROM DAMAGE AT ALL TIMES. CONTROL MEASURES SHALL REMAIN IN PLACE UNTIL PERMANENT RE-VEGETATION HAS BEEN STABILIZED. ANY MEASURE THAT IS DAMAGED OR DESTROYED SHALL BE REPAIRED OR REPLACED IMMEDIATELY.*
7. *ANY AREAS OF EXPOSED SOILS, INCLUDING ROADWAY EMBANKMENTS, THAT WILL NOT BE DISTURBED FOR TWO DAYS DURING THE WET SEASON (OCTOBER 1 TO APRIL 30) OR SEVEN DAYS DURING THE DRY SEASON (MAY 1 TO SEPTEMBER 30) SHALL BE IMMEDIATELY STABILIZED WITH AN APPROVED ESC METHOD (SEEDING & MULCHING WITH STRAW, BARK, COMPOST, OR PLASTIC COVERING, ETC.).*
8. *STREET SWEEPING SHALL BE PERFORMED AS NEEDED OR WHEN DIRECTED BY THE CITY INSPECTOR TO ENSURE PUBLIC RIGHTS-OF-WAY ARE KEPT CLEAN AND FREE OF DEBRIS. STREET FLUSHING IS PROHIBITED.*
9. *WHEN TRUCKING SATURATED SOILS FROM THE SITE, EITHER WATER-TIGHT TRUCKS SHALL BE USED OR LOADS SHALL BE DRAINED ON SITE UNTIL DRIPPING HAS BEEN REDUCED TO NO MORE THAN ONE GALLON PER HOUR. SEDIMENT LADEN WATER WILL NOT BE ALLOWED TO ENTER THE STORM WATER SYSTEM.*
10. *EXTRACTED GROUND WATER FROM EXCAVATED TRENCHES SHALL BE DISPOSED OF IN A SUITABLE MANNER WITHOUT DAMAGE TO ADJACENT PROPERTY, CITY'S STORM WATER SYSTEM, WATER FEATURES, AND RELATED NATURAL RESOURCES. APPROVAL OF A DEWATERING SYSTEM DOES NOT GUARANTEE THAT IT WILL MEET COMPLIANCE OR BE ACCEPTABLE FOR USE IN ALL SITUATIONS. MODIFICATIONS TO THE DEWATERING SYSTEM WILL BE REQUIRED IF COMPLIANCE CAN NOT BE MET. AT NO TIME WILL SEDIMENT LADEN WATER BE ALLOWED TO LEAVE THE CONSTRUCTION SITE.*
11. *A SUPPLY OF MATERIALS NECESSARY TO MEET COMPLIANCE AND IMPLEMENT THE ESCP OR OTHER BEST MANAGEMENT EROSION PRACTICES UNDER ALL WEATHER CONDITIONS SHALL BE MAINTAINED AT ALL TIMES ON THE CONSTRUCTION SITE.*
12. *NO HAZARDOUS SUBSTANCES, SUCH AS PAINT, THINNERS, FUELS, AND OTHER CHEMICALS SHALL BE RELEASED ONTO THE SITE, ADJACENT PROPERTIES, OR INTO WATER FEATURES, THE CITY'S STORM WATER SYSTEM, OR RELATED RESOURCES.*
13. *THE ESC FACILITIES SHALL BE INSPECTED DAILY BY THE CONTRACTOR AND MAINTAINED TO ENSURE CONTINUED PROPER FUNCTIONING. WRITTEN RECORDS SHALL BE KEPT OF WEEKLY REVIEWS OF THE ESC FACILITIES DURING THE WET SEASON (OCTOBER 1 TO APRIL 30) AND OF MONTHLY REVIEWS DURING THE DRY SEASON (MAY 1 TO SEPTEMBER 30).*

SITE DATA

PROPERTY DESCRIPTION

TAX MAP: 18-12-27-1
TAX LOT: 15400

PROJECT LOCATION

1424 15TH STREET (AIRPORT ROAD)
FLORENCE, OREGON
LATITUDE = 43° 58' 42.6" N
LONGITUDE = 124° 06' 21.4" W

SITE TABULATIONS

PROJECT SITE = 1.94 ACRES
TOTAL AREA OF DISTURBANCE = 1.55 ACRES

DESIGN TEAM

OWNER/APPLICANT

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SHEET INDEX

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REGISTERED PROFESSIONAL ENGINEER #69162PE
DIGITALLY SIGNED
OREGON
JANUARY 15, 2008
RENEE CLOUGH
EXPIRES: DECEMBER 30, 2021

project title:

DEVNW AIRPORT RD. PUD
EROSION & SEDIMENT CONTROL PLAN
TAX MAP: 18-12-27-1, TAX LOT: 15400
FLORENCE, OREGON
97439

revisions:

date:	JAN. 24, 2020
drawn by:	AWMS
designer:	RC
project no:	18-493

EROSION CONTROL: NOTES

sheet: **EC1**

SOIL TYPES:

ACCORDING TO THE USDA NATURAL RESOURCES CONSERVATION SERVICES WEB SOIL SURVEY, THE SITE SOIL IS MAPPED AS WALDPORT FINE SAND (MAP UNIT SYMBOLS 131C AND 131E).

LEGEND

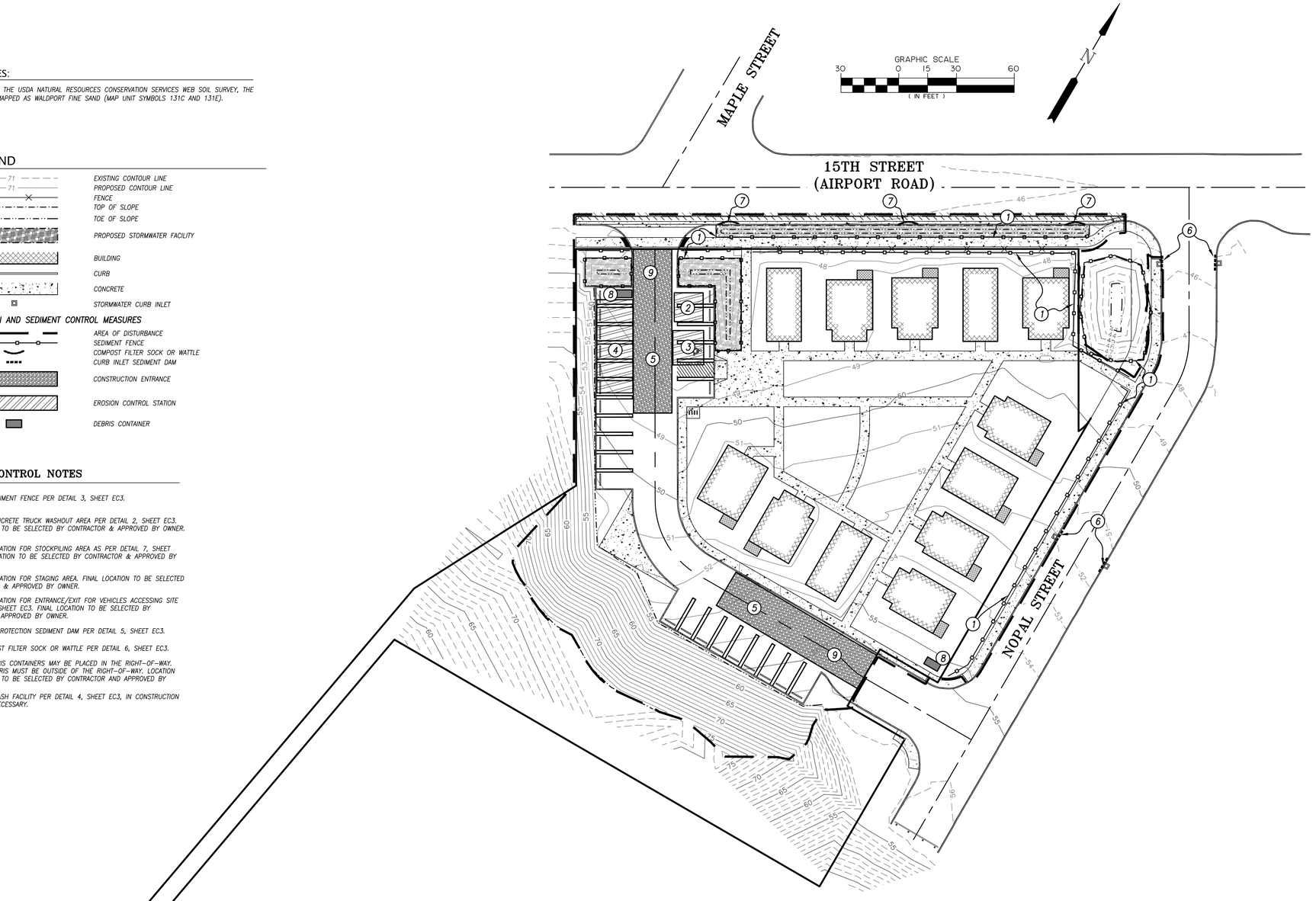
- EXISTING CONTOUR LINE
- PROPOSED CONTOUR LINE
- FENCE
- TOP OF SLOPE
- TOE OF SLOPE
- PROPOSED STORMWATER FACILITY
- BUILDING
- CURB
- CONCRETE
- STORMWATER CURB INLET

EROSION AND SEDIMENT CONTROL MEASURES

- AREA OF DISTURBANCE
- SEDIMENT FENCE
- COMPOST FILTER SOCK OR WATTLE
- CURB INLET SEDIMENT DAM
- CONSTRUCTION ENTRANCE
- EROSION CONTROL STATION
- DEBRIS CONTAINER

EROSION CONTROL NOTES

1. CONSTRUCT SEDIMENT FENCE PER DETAIL 3, SHEET EC3.
2. CONSTRUCT CONCRETE TRUCK WASHOUT AREA PER DETAIL 2, SHEET EC3. FINAL LOCATION TO BE SELECTED BY CONTRACTOR & APPROVED BY OWNER.
3. SUGGESTED LOCATION FOR STOCKPILING AREA AS PER DETAIL 7, SHEET EC3. FINAL LOCATION TO BE SELECTED BY CONTRACTOR & APPROVED BY OWNER.
4. SUGGESTED LOCATION FOR STAGING AREA. FINAL LOCATION TO BE SELECTED BY CONTRACTOR & APPROVED BY OWNER.
5. SUGGESTED LOCATION FOR ENTRANCE/EXIT FOR VEHICLES ACCESSING SITE PER DETAIL 1, SHEET EC3. FINAL LOCATION TO BE SELECTED BY CONTRACTOR & APPROVED BY OWNER.
6. INSTALL INLET PROTECTION SEDIMENT DAM PER DETAIL 5, SHEET EC3.
7. INSTALL COMPOST FILTER SOCK OR WATTLE PER DETAIL 6, SHEET EC3.
8. ENCLOSED DEBRIS CONTAINERS MAY BE PLACED IN THE RIGHT-OF-WAY. ALL LOOSE DEBRIS MUST BE OUTSIDE OF THE RIGHT-OF-WAY. LOCATION OF CONTAINERS TO BE SELECTED BY CONTRACTOR AND APPROVED BY OWNER.
9. INSTALL TIRE WASH FACILITY PER DETAIL 4, SHEET EC3, IN CONSTRUCTION ENTRANCE IF NECESSARY.



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REGISTERED PROFESSIONAL ENGINEER #69162PE DIGITALLY SIGNED OREGON JANUARY 10, 2006 RENEE CLOUGH

EXPIRES: DECEMBER 30, 2021

project title:

DEVNW AIRPORT RD. PUD
EROSION & SEDIMENT CONTROL PLAN

TAX MAP: 18-12-27-1, TAX LOT: 15400
FLORENCE, OREGON
97439

revisions:

date:	JAN. 24, 2020
drawn by:	AWMS
designer:	RC
project no:	18-493

EROSION CONTROL: SITE MAP AND PLAN

sheet:

EC2

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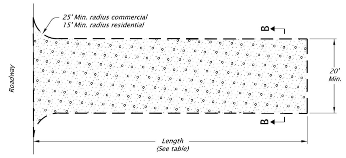
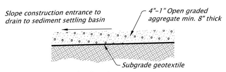


CONSTRUCTION ENTRANCE - TYPE 1

Notes:

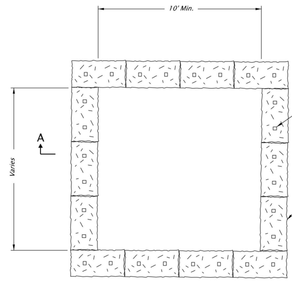
1. The type 1 entrance is a simple entrance without a diversion ridge or settling basin.
2. The wooden ramp may be used on either type 1 or type 2 entrances in situations where there is curb and the curb is not removed for the construction entrance.



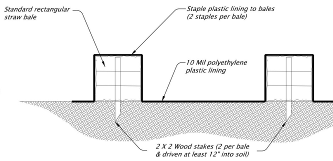
SECTION B-B

CONSTRUCTION ENTRANCE TABLE MINIMUM LENGTH	
Length (FT)	Area Of Exposed Soil (Acre)
20	0.25
50	0.25 < A < 1.0
100	A > 1.0

1 CONSTRUCTION ENTRANCE
NOT TO SCALE

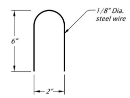


PLAN



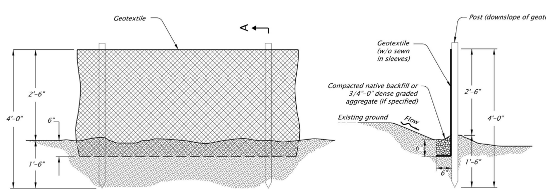
SECTION A-A

CONCRETE TRUCK WASH OUT FACILITY



STAPLE DETAIL

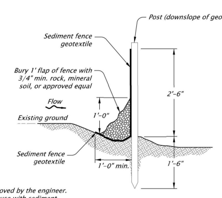
2 CONCRETE TRUCK WASHOUT
NOT TO SCALE



FRONT VIEW

SECTION A-A

SEDIMENT FENCE AND GEOTEXTILE BURY DETAIL - TYPE 1



NOTES:

1. Use must be approved by the engineer.
2. Not approved for use with sediment fencing with sewn-in post sleeves.

ALTERNATE SEDIMENT FENCE W/O TRENCHING - TYPE 2

NOTES:

1. Use 2" X 2" wood fence posts.
2. Posts to be installed on downhill side of sediment fence geotextile. Position posts to prevent separation from geotextile.
3. Compact filter fabric trench backfill and soil on uphill side of fence.
4. Locate fence no closer than three feet to the toe of a slope.
5. Wing spacing shall comply with table 1.

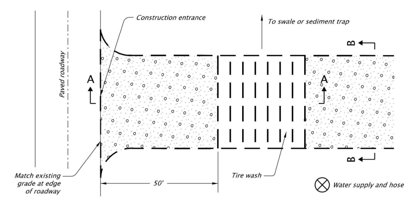
TABLE 1
FENCE SPACING
FOR GENERAL APPLICATION

INSTALL PARALLEL ALONG CONTOURS AS FOLLOWS	
GRADE	MAXIMUM SPACING ON GRADE
Grade < 10%	300'
10% ≤ Grade < 15%	150'
15% ≤ Grade < 20%	100'
20% ≤ Grade < 30%	50'
30% ≤ Grade	25'

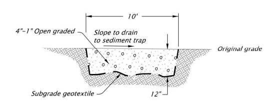
TABLE 2

POST SPACING	
6'	Sediment Fence with Geotextile elongation less than 50%
4'	Sediment Fence with Geotextile elongation 50% or more

3 SEDIMENT FENCE
NOT TO SCALE

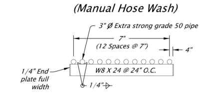


PLAN

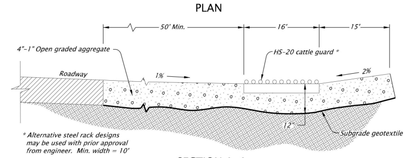


SECTION B-B

TIRE WASH - TYPE 1
(Manual Hose Wash)



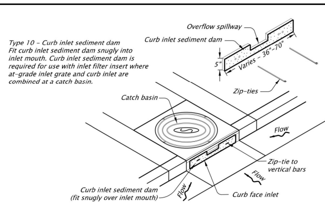
HS-20 CATTLE GUARD



* Alternative steel rack designs may be used with prior approval from engineer. Min. width = 10'

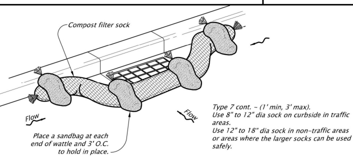
SECTION A-A

4 TIRE WASH FACILITY
NOT TO SCALE



CURB INLET SEDIMENT DAM - TYPE 10

5 CURB INLET SEDIMENT DAM
NOT TO SCALE

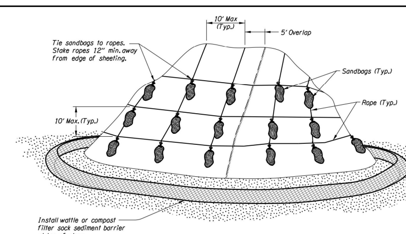


CURB INLET PERSPECTIVE VIEW

COMPOST FILTER SOCK OR WATTLE - TYPE 7

* Use sandbags to hold wattles in place. Sandbags are not necessary for compost filter socks

6 COMPOST FILTER SOCK OR WATTLE
NOT TO SCALE



NOTES:

1. Install plastic sheeting vertically down slope.
2. Install plastic sheeting so edges overlap and are shingled away from prevailing winds.

STOCKPILE

7 STOCKPILE PLASTIC SHEETING
NOT TO SCALE

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EROSION CONTROL: DETAILS

sheet: **EC3**

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State of Oregon
Department of
Environmental
Quality

GENERAL PERMIT
NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM
STORMWATER DISCHARGE PERMIT

Oregon Department of Environmental Quality
811 SW Sixth Avenue, Portland OR 97204
Telephone: (503) 229-5279 or 1-800-452-4011 (toll free in Oregon)

Issued pursuant to ORS 468B.050 and Section 402 of the Federal Clean Water Act

REGISTERED TO: File No: 126728
Permit No: 33493
Stonewood Construction
935 Oak St
Eugene, OR 97401-3165

Date: February 7, 2020
Lane County
EPA: ORR10G020
LLID: 1241338440157
River Mile: 4.1200000000000001

Location: DEVNW Airport Road PUD, 1424 15th Street, Florence

SOURCES COVERED BY THIS PERMIT:

The *legally authorized representative* (see Definitions) for construction activities (as defined below) that may discharge to surface waters or conveyance systems leading to surface waters of the state must register for coverage under this permit with DEQ before any land disturbance occurs, unless the construction activities are automatically covered as described in the 1200-CN permit.

- Construction activities including clearing, grading, excavation, materials or equipment staging and stockpiling that will disturb one or more acres and may discharge to surface waters or conveyance systems leading to surface waters of the state.
- Construction activities including clearing, grading, excavation, materials or equipment staging and stockpiling that will disturb less than one acre that are part of a common plan of development or sale if the larger common plan of development or sale will ultimately disturb one acre or more and may discharge to surface waters or conveyance systems leading to surface waters of the state.
- This permit also authorizes discharges from any other construction activity (including construction activity that disturbs less than one acre and is not part of a common plan of development or sale) designated by DEQ, where DEQ makes that designation based on the potential for contribution to an excursion of a water quality standard or for significant contribution of pollutants to waters of the state.

This permit does not authorize the following:

- In-water or riparian work, which is regulated by other programs and agencies including the Federal Clean Water Act Section 404 permit program, the Oregon Department of State Lands, the Oregon Department of Fish and Wildlife, the U.S. Fish and Wildlife Service, the U.S. Army Corp of Engineers, the National Marine Fisheries Service, and the Department of Environmental Quality Section 401 certification program.
- Post-construction stormwater discharges that originate from the site after completion of construction activities and final stabilization.
- Discharges to underground injection control (UIC) systems.

Lydia Emer, Operations Administrator

Effective: December 15, 2015
Expiration Date: December 14, 2020

Exhibit I

PERMITTED ACTIVITIES

Until this permit expires, is modified or revoked, the permit registrant is authorized to construct, install, modify, or operate erosion and sediment control measures and stormwater treatment and control facilities, and to discharge stormwater and certain specified non-stormwater discharges to surface waters of the state or conveyance systems leading to surface waters of the state only in conformance with all the requirements, limitations, and conditions set forth in the permit including attached schedules as follows:

Unless specifically authorized by this permit, by regulation issued by EPA, by another NPDES permit, or by Oregon Administrative Rule, any other direct or indirect discharge to waters of the state is prohibited, including discharges to an underground injection control system.

Table of Contents

SCHEDULE A
CONTROLS AND LIMITATIONS

CONSTRUCTION ACTIVITIES REQUIRED TO REGISTER FOR PERMIT

1. Registering New Construction Activities

a. Applicants seeking registration for coverage under this permit for construction activities that will disturb one or more acres must submit a complete application to DEQ or Agent at least thirty (30) calendar days before the planned land disturbance, unless otherwise approved by DEQ or Agent (see Schedule **D** for description of Agent). The application must include:

i. One paper copy and one electronic copy of the following:

(1) A complete DEQ-approved application form;

(2) An Erosion and Sediment Control Plan (ESCP);

(3) A Land Use Compatibility Statement (LUCS) indicating that the proposed activities are compatible with the local government's acknowledged comprehensive plan; and

ii. Applicable permit fees.

b. Applicants seeking registration for coverage under this permit for construction activities that will disturb less than one acre that are part of a larger common plan of development or sale must, at least thirty (30) calendar days before the planned land disturbance, submit to DEQ or Agent:

i. A complete DEQ-approved application form;

ii. One copy of an ESCP that covers the individual lot(s); and

iii. Applicable permit fees.

c. Applicants seeking registration for coverage under this permit for construction activities that disturb or are likely to disturb five (5) or more acres over the life of the project, are subject to a 14-calendar day public review period before permit registration is granted. The public review period will not begin if the application form or ESCP are incomplete.

d. DEQ or Agent will notify the applicant in writing if registration is approved or denied. Permit coverage does not begin until the applicant receives written notice that the registration is approved. If registration is denied or the applicant does not wish to be regulated by this permit, the applicant may apply for an individual permit in accordance with OAR 340-045-0030.

e. Until termination has been approved by DEQ or Agent, permit registrants for permitted activities that disturb one acre or more must pay an annual fee.

f. Permitted activities for projects that disturb less than one acre and utilize the small lot fee structure are covered under the permit for 2 (two) years. To continue coverage beyond 2 years, the permit registrant must submit a DEQ-approved application form and (if needed) an updated ESCP; and pay the applicable permit fee.

2. Renewal Application for Permit Coverage

a. An owner or operator of construction activities registered under the 1200-C permit that expires in 2015 must submit to DEQ or Agent a complete renewal application, using a DEQ-approved renewal application form before expiration of the 1200-C permit to ensure uninterrupted permit coverage for construction stormwater discharges.

b. If renewal is denied or the applicant does not wish to be regulated by this permit, the registrant may apply for an individual permit in accordance with OAR 340-045-0030.

3. Transfer of Permit Registration

a. To transfer permit registration, the new owner or permit registrant must submit a DEQ-approved transfer form and applicable fees prior to permit expiration and within thirty (30) calendar days of the planned transfer.
b. If ownership changes (through sale, foreclosure or other means) and the previous owner cannot be found:
    i. The new owner must register for coverage under the permit (Schedule A, Paragraph 1) if the site is not stabilized.
    ii. The new owner must register for coverage under the permit (Schedule A, Paragraph 1) prior to any additional land disturbance.
    iii. The new owner does not need to register for coverage under the permit if the site meets the conditions for termination (see Schedule B) and there is no ongoing or additional land disturbance planned.
    iv. DEQ will attempt to contact the previous owner at the address on record. If there is no response, after sixty (60) calendar days DEQ may terminate the previous owner's permit coverage.

4. Authorized Stormwater Discharges

Subject to compliance with the terms and conditions of this permit, and provided that all necessary controls are implemented to minimize sediment transport, the following stormwater discharges from construction sites are authorized (unless otherwise prohibited by local ordinances):

a. Stormwater associated with construction activity described in the "Sources Covered" section of the permit.
b. Stormwater from support activities at the construction site (for example, concrete or asphalt operations, equipment staging yards, material storage areas, excavated material disposal areas and borrow areas) provided:
    i. The support activity is directly related to the construction site covered by this NPDES permit;
    ii. The support activity is not a commercial operation serving multiple unrelated construction projects by different permit registrants;
    iii. The support activity does not operate beyond the completion of the construction activity at the last construction project it supports; and
    iv. Appropriate control measures are used to ensure compliance with discharge and water quality requirements.

5. Authorized Non-Stormwater Discharges

If the terms and conditions of this permit are met, all necessary controls are implemented to minimize sediment transport, the discharge is not contaminated, and the discharge is not prohibited by local ordinance, the following non-stormwater discharges from construction sites are authorized:

a. Water from emergency firefighting activities;
b. Fire hydrant flushings;
c. Potable water including water line flushing;
d. Vehicle washing and external building washing that does not use solvents, detergents or hot water;
e. Pavement wash waters where stockpiled material, spills or leaks of toxic or hazardous materials have not occurred (unless all stockpiled and spilled material has been removed) and where solvents, detergents or hot water are not used. Directing pavement wash waters into any surface water, storm drain inlet, or stormwater conveyance is prohibited, unless the conveyance is connected to a sediment basin, sediment trap, or similarly effective control;
f. Water used to control dust;

g. Air conditioning or compressor condensate;
h. Construction dewatering activities (including groundwater dewatering and well drilling discharge associated with the registered construction activity), provided that:
   i. The water is land applied in a way that results in complete infiltration with no potential to discharge to a surface water of the state, or
   ii. Best Management Practices (BMPs) or a treatment system approved by DEQ or Agent is used to ensure compliance with discharge and water quality requirements (see 9.d);
i. Foundation or footing drains where flows are not contaminated with process materials such as solvents; and
j. Landscape irrigation.

For other non-stormwater discharges, a separate permit may be needed. The disposal of wastes to surface waters or on-site is not authorized by this permit.

6. Prohibited Discharges

Discharges of the following are not authorized by this permit:
a. Wastewater from washout and cleanout of stucco, paint, form release oils, curing compounds and other construction materials;
b. Fuels, oils, or other pollutants used in vehicle and equipment operation and maintenance;
c. Soaps or solvents used in vehicle and equipment washing.
d. Concrete truck wash-out, hydro-demolition water, and saw-cutting slurry.

7. Control Measures

It is the responsibility of the permit registrant to implement BMPs as needed for weather conditions.
a. Erosion Prevention
   The permit registrant must control stormwater volume and velocity within the site to minimize soil erosion. The permit registrant must prevent or minimize the disturbance of sediment.
   i. Avoid or minimize excavation and bare ground activities during wet weather.
   ii. Temporarily stabilize soils at the end of the shift before holidays and weekends, if needed. It is the permit registrant's responsibility to ensure that soils are stable during rain events at all times of the year.
   iii. Clearing and Grading.
      Phase clearing and grading to the maximum extent practical to prevent exposed inactive areas from becoming sources of erosion. Minimize the disturbance of steep slopes. Minimize erosion during and after soil disturbance using BMPs such as temporary seeding and planting, final vegetative cover, mulches, compost blankets, erosion control blankets and mats, and soil tackifiers.
   iv. Wind Erosion/Dust Control. Water or use a soil-binding agent or other dust control technique as needed to avoid wind-blown soil.
   v. Vegetative Erosion Control.
      (1) Preserve existing vegetation and re-vegetate open areas when practical.
      (2) Do not remove temporary sediment control practices until final vegetative cover or permanent stabilization measures are established.
      (3) Identify the type of seed mix (percentages of the various seeds of annuals, perennials and clover) and other plantings used to establish temporary or final vegetative cover.

b. Natural Buffer Zone
   i. If a water of the state is within the project site or within 50 feet of the project boundary, and a natural buffer exists within 50 feet of the water of the state,
      (1) The permit registrant must:
         (a) Maintain any existing natural buffer within the 50-foot zone for the duration of permit coverage; or
         (b) Maintain less than the entire existing natural buffer, and provide additional erosion and sediment controls (beyond those required in other sections of this general permit). In addition to other applicable requirements of this permit, the permit registrant must implement one or more of the BMPs listed below to control and treat sediment and turbidity. The selected BMP(s) must be identified in the ESCP as addressing this condition of the permit, and the rationale for choosing the selected BMP(s) must also be provided.
            (i) Compost berms, compost blankets, or compost socks;
            (ii) Erosion control mats;
            (iii) Tackifiers used in combination with perimeter sediment control BMPs;
            (iv) Water treatment by electro-coagulation, flocculation, or filtration; and/or
            (v) Other substantially equivalent sediment or turbidity BMP approved by DEQ or Agent.
      (2) In addition, the permit registrant must:
         (a) Ensure that all discharges from covered activities to the water of the state are treated by the site's erosion and sediment controls before entering the natural buffer. Use velocity dissipation devices if necessary to prevent erosion in the natural buffer.
         (b) Delineate and clearly mark off (with flags, tape or similar marking devices) all natural buffer zones.
   ii. Stormwater control features (for example, stormwater conveyance channels, storm drain inlets, and sediment basins) are not "waters of the state" for the purposes of triggering this requirement.
   iii. Areas that the permit registrant does not own or that are otherwise outside the permit registrant's operational control may be considered areas of undisturbed natural buffer for purposes of this requirement. However, the permit registrant is only required to retain and protect from construction activities the portion of the buffer area that is under the permit registrant's control.
   iv. The Natural Buffer Zone requirements do not apply if:
      (1) No natural buffer exists due to development that occurred prior to the initiation of planning for the current project; or
      (2) There is no discharge of stormwater to the water of the state through the area between the disturbed portions of the site and the surface water located within the project site or within 50 feet of the site. This includes situations where the permit registrant has implemented control measures, such as a berm or other barrier, that will prevent such discharges; or
      (3) There is a CWA Section 404 permit and 401 WQC issued for the project; or
      (4) Construction is for a water-dependent structure or water access areas (for example, pier, boat ramp, or trail).
   v. Pre-existing conditions
      (1) The permit registrant is not required to enhance the quality of the vegetation that already exists in the buffer, or provide vegetation if none exists.
      (2) Any preexisting structures or impervious surfaces are allowed in the natural buffer provided the permit registrant retains and protects from disturbance any natural buffer area outside the preexisting disturbance.

c. Runoff Control
The permit registrant must control stormwater discharges, including both peak flow rates and total stormwater volume, to minimize erosion at outlets and to minimize downstream channel and streambank erosion. The permit registrant must minimize sediment discharges from the site. The permit registrant must prevent or minimize scouring by means such as diverting, collecting, conveying or controlling flow. BMPs used for these purposes include diversion of run-on; trench drains, slope drains, french drains and subsurface drains; temporary diversion dikes; earthen berms; grass-lined or armored channels (such as turf reinforcement mats); drainage swales; energy dissipaters; rock outlet protection; drop inlets; and check dams. Note that any underground injection must comply with OAR Chapter 340, Division 44.

d. Sediment Control
The permit registrant must prevent or minimize sediment transport by means such as filtration and settling.
   i. Control sediment as needed along the site perimeter and at all operational internal storm drain inlets at all times during construction, both internally and at the site boundary by using BMPs such as sediment fences, buffer zones, sediment traps, rock filters, compost berms/compost socks, fiber wattles, storm drain inlet protection, and temporary or permanent sedimentation basins; and, when discharging from basins and impoundments, by utilizing outlet structures that withdraw water from the surface, unless infeasible.
   ii. Sediment Tracking and Transport Control.
   The permit registrant must prevent or minimize tracking of sediment onto public or private roads using BMPs such as:
      (1) Establish graveled (or paved) exits and parking areas prior to any land disturbing activities.
      (2) Gravel all unpaved roads located onsite.
      (3) Use an exit tire wash.
      (4) Cover all sediment loads leaving the site.
      (5) When trucking saturated soils from the site, either use water-tight trucks or drain loads on site.

e. Pollution Prevention and Control.
   i. Pollution Prevention.
   The permit registrant must design, implement, and maintain pollution prevention measures to minimize the exposure of building materials, building products, construction wastes, trash, landscape materials, fertilizers, pesticides, herbicides, detergents, sanitary waste and other materials present on the site to precipitation and to stormwater.
      (1) Use BMPs to prevent or minimize pollution of stormwater or to treat flow from dewatering, ponded water, paving, and temporary bridges.
      (2) Use BMPs to prevent or minimize stormwater from being exposed to pollutants from spills; vehicle and equipment fueling, maintenance, and storage; other cleaning and maintenance activities; and waste handling activities. These pollutants include fuel, hydraulic fluid and other oils from vehicles and machinery; as well as debris, fertilizer, pesticides and herbicides, paints, solvents, curing compounds and adhesives.
   ii. Stockpile Erosion and Sediment Control Practices.
      (1) Both on-site stockpiles and stockpiles located away from the construction activity but still under the control of the permit registrant must be protected to prevent significant amounts of sediment or turbid water from discharging to surface waters or conveyance systems leading to surface waters.
      (2) As needed based on weather conditions, at the end of each workday soil stockpiles must be stabilized or covered, or other BMPs must be implemented to prevent discharges to surface waters or conveyance systems leading to surface waters.

(3) In developing these practices, at a minimum the following must be considered: diversion of uncontaminated flows around stockpiles, use of cover over stockpiles, and installation of sediment fences (or other barriers that will prevent the discharge of sediment or turbidity) around stockpiles.

iii. Solid Waste and Hazardous Materials Management.
Implement the following BMPs when applicable: written spill prevention and response procedures, employee training on spill prevention and proper disposal procedures, spill kits available on site, regular maintenance schedule for vehicles and machinery, material delivery and storage controls, training and signage, and covered storage areas for waste and supplies.

f. Additional BMP Requirements During Inactive Periods.
   i. If all construction activities cease at the site for thirty (30) calendar days or more, the entire site must be stabilized using temporary seeding, vegetation, a heavy mulch layer, or another method.
   ii. On any significant portion of the site, if construction activities cease for fourteen (14) calendar days or more, install temporary covering such as blown straw and a tackifier, loose straw, compost mulch, temporary vegetative cover, crushed rock or gravel base.

8. Implementation of Control Measures

a. Permit registrants must implement the ESCP (Paragraph A.12). Failure to implement any of the control measures or practices described in the ESCP is a violation of the permit.
b. Permit registrants must prevent the discharge of significant amounts of sediment to surface waters or conveyance systems leading to surface waters. The following conditions indicate that a significant amount of sediment has left or is likely to leave the site, and are prohibited:
   i. Earth slides or mud flows;
   ii. Concentrated flows of stormwater such as rills, rivulets or channels that cause erosion when such flows are not filtered, settled or otherwise treated to remove sediment;
   iii. Sediment laden or turbid flows of stormwater that are not filtered or settled to remove sediments and turbidity;
   iv. Deposits of sediment at the construction site in areas that drain to unprotected stormwater inlets or to catch basins that discharge to surface waters. Inlets and catch basins with failing sediment controls due to lack of maintenance or inadequate design are considered unprotected;
   v. Deposits of sediment from the construction site on any property (including public and private streets) outside of the construction activity covered by this permit.
c. Permit registrants must ensure the control measures or practices described in the ESCP are implemented according to the following sequence:
   i. Before Construction.
      (1) Identify, mark, and protect (with construction fencing or other means) critical riparian areas and vegetation including important trees and associated rooting zones and vegetation areas to be preserved.
      (2) Identify, mark and protect vegetative buffer zones between the site and sensitive areas (for example, wetlands), and other areas to be preserved, especially in perimeter areas.
      (3) Hold a pre-construction meeting of project construction personnel that includes the inspector required by condition A.12.b.iii to discuss erosion and sediment control measures and construction limits.
      (4) Stabilize site entrances and access roads including, but not limited to construction entrances, roadways and equipment parking areas.
      (5) Install perimeter sediment control, including storm drain inlet protection as well as all sediment basins, traps, and barriers.

(6) For projects involving concrete, permit registrants must establish concrete truck and other concrete equipment washout areas before beginning concrete work.
(7) Establish material and waste storage areas, and other non-stormwater controls.
(8) Stabilize stream banks and construct the primary runoff control measures to protect areas from concentrated flows.

ii. During Construction.

(1) Land Clearing, Grading and Roadways. Permit registrants must:
(a) Begin land clearing, excavation, trenching, cutting or grading only after installing applicable sediment and runoff control measures.
(b) Provide appropriate erosion and sediment control BMPs for all roadways including gravel roadways.
(c) Install additional control measures as work progresses as needed.
(d) Phase clearing and grading to the maximum extent practical to prevent exposed inactive areas from becoming a source of erosion.

(2) For projects involving concrete, permit registrants must:
(a) Wash concrete trucks and equipment off site (in an appropriately protected area) or in designated concrete washout areas only.
(b) Direct all wash water into a pit or leak-proof container. The pit does not need to be lined or leak-proof, but the pit or container must be designed so that no overflows can occur due to inadequate sizing or precipitation. Concrete wash water must not adversely affect groundwater.
(c) Handle (for example, through disposal, reuse or recycling) wash water as waste. Do not dispose of concrete wash water or wash out concrete trucks onto the ground, or into storm drains, open ditches, streets, or streams.
(d) Do not dump excess concrete on site, except in designated concrete washout areas.
(e) Handle (for example, through disposal, reuse or recycling) hardened concrete waste consistent with handling of other construction wastes.
(f) Concrete spillage or concrete discharge to surface waters of the state is prohibited.

(3) Surface Stabilization. Permit registrants must:
Apply temporary stabilization measures (for example, mulching or temporary seeding), final vegetative cover, or permanent stabilization measures immediately on all disturbed areas as work is completed. Stabilization of disturbed areas must be initiated immediately whenever any earth disturbing activities have permanently ceased on any portion of the site. However, temporary or permanent stabilization measures are not required for areas that are intended to be left unvegetated or unstabilized following construction (such as dirt access roads, utility pole pads, areas being used for storage of vehicles, equipment, or materials), provided that measures are in place to eliminate or minimize erosion.

iii. Termination. Before termination of permit coverage, permit registrants must:

(1) Provide final vegetative cover or permanent stabilization measures on all exposed areas (see Section D.3).
(2) Immediately after seeding or planting the area to be vegetatively stabilized, the permit registrant must select, design, and install non-vegetative erosion controls (such as mulch or rolled erosion control products) that provide cover to the area while vegetation is becoming established, to the extent necessary to prevent erosion of the seeded or planted area.
(3) Remove and properly dispose of construction materials and waste, including sediment retained by temporary BMPs.
(4) Remove all temporary control measures as areas are stabilized, unless doing so conflicts with local requirements.

9. BMP Maintenance

a. The permit registrant must establish and promptly implement procedures for maintenance and repair of erosion and sediment control measures.
b. General Site Maintenance.
   i. Significant amounts of sediment that leave the site must be cleaned up within 24 hours, placed back on the site and stabilized, or disposed of properly. In addition, the source(s) of the sediment must be controlled to prevent continued discharge within 24 hours. Any in-stream cleanup of sediment must be performed according to requirements and timelines set by the Oregon Department of State Lands.
   ii. Sediment must not be intentionally washed into storm sewers or drainage ways. Methods such as vacuuming, dry mechanical sweeping, or manual sweeping must be used to cleanup released sediments.
   iii. Fertilizer application rates must follow manufacturer's guidelines and the application must be done in such a way to minimize discharge of nutrients to surface waters.
c. Maintenance of Erosion and Sediment Controls. Permit registrants must:
   i. Sediment fence: remove trapped sediment before it reaches one third of the above ground fence height.
   ii. Other sediment barriers (such as biobags): remove sediment before it reaches two inches depth above ground height.
   iii. Catch basins: clean before sediment retention capacity has been reduced by fifty percent.
   iv. Sediment basins: remove trapped sediments before design capacity has been reduced by fifty percent.
d. Treatment Systems.
   If an active treatment system (for example, electro-coagulation, flocculation, filtration, etc.) for sediment or other pollutant removal is employed, the permit registrant must submit an operation and maintenance plan (including system schematic, location of system, location of inlet, location of discharge, discharge dispersion device design, and a sampling plan and frequency) to DEQ or Agent before operating the treatment system. The plan must be approved by DEQ or Agent before operating the treatment system. If approved, the treatment system must be operated and maintained according to manufacturer’s specifications.

10. In-stream Water Quality Standards

a. The permit registrant must not cause or contribute to a violation of in-stream water quality standards.
b. In the absence of information demonstrating otherwise, DEQ expects that compliance with the conditions in this permit will result in stormwater discharges being controlled as necessary to meet applicable water quality standards. If at any time the permit registrant becomes aware, or DEQ determines, that a discharge from the permitted activity is not being controlled as necessary to meet applicable water quality standards, the permit registrant must take corrective actions, and document the corrective actions as required in A.13.

11. Water Quality Requirements for TMDL and 303(d) Listed Waterbodies

In addition to other applicable requirements of this permit, if a permit registrant’s construction project has the potential to discharge to a portion of a waterbody that is listed as impaired and requiring a TMDL for turbidity or sedimentation on the most recently EPA-approved Oregon 303(d) list or that has an established Total Maximum Daily Load (TMDL) for sedimentation or turbidity (available at www.deq.state.or.us/WQ/assessment/assessment.htm), the permit registrant must implement one or more of the BMPs listed below to control and treat sediment and turbidity. The selected BMP(s) must

be identified in the ESCP as addressing this condition of the permit, and the rationale for choosing the selected BMP(s) must also be provided.

a. Compost berms, compost blankets, or compost socks;
b. Erosion control mats;
c. Tackifiers used in combination with perimeter sediment control BMPs;
d. Established vegetated buffers sized at 50 feet (horizontally) plus an additional 25 feet (horizontally) per 5 degrees of slope;
e. Water treatment by electro-coagulation, flocculation, or filtration; and/or
f. Other substantially equivalent sediment or turbidity BMP approved by DEQ or Agent.

12. Erosion and Sediment Control Plan (ESCP)

a. Preparation.
   i. The permit registrant must ensure that an ESCP is prepared and revised as necessary to reflect site conditions for the construction activity regulated by this permit, and submit revisions to DEQ or Agent in accordance with requirements of this permit. The design, installation, and maintenance of erosion and sediment controls must be adequate to address factors such as the amount, frequency, intensity, and duration of precipitation, the nature of resulting stormwater runoff, and soil characteristics, including the range of soil particle sizes expected to be present on the site.
   ii. Qualifications to Prepare ESCP.
      (1) For construction activities disturbing 20 or more acres, the ESCP must be prepared and stamped by a Certified Professional in Erosion and Sediment Control, Certified Professional in Storm Water Quality, Oregon Registered Professional Engineer, Oregon Registered Landscape Architect, or Oregon Certified Engineering Geologist.
      (2) If engineered facilities such as sedimentation basins or diversion structures for erosion and sediment control are required, the ESCP must be prepared and stamped by an Oregon Registered Professional Engineer.
b. The ESCP must include the following elements:
   i. Name of the site.
   ii. Local Government Requirements. Include any procedures necessary to meet applicable local government erosion and sediment control or stormwater management requirements.
   iii. Erosion and Sediment Control Inspector.
      (1) Inspections must be conducted by a person knowledgeable in the principles and practice of erosion and sediment controls who possesses the skills to assess conditions at the construction site that could impact stormwater quality, is knowledgeable in the correct installation of the erosion and sediment controls, and is able to assess the effectiveness of any sediment and erosion control measures selected to control the quality of stormwater discharges from the construction activity.
      (2) Beginning January 1, 2017, for projects that are five or more acres, inspections must be conducted by a person certified in an erosion and sediment control program that has been approved by DEQ. DEQ has approved the following programs:
         (a) Certified Professional in Erosion and Sediment Control,
         (b) Certified Professional in Storm Water Quality,
         (c) Washington State Certified Erosion and Sediment Control Lead, or
         (d) Rogue Valley Sewer Services Erosion and Sediment Control Certification.

(3) Inspections must be conducted by the Erosion and Sediment Control Inspector identified in the ESCP.
(4) Provide the following for all personnel that will conduct inspections:
(a) Name and title;
(b) Contact phone number and, if available, e-mail address; and
(c) Description of experience and training.

iv. Narrative Site Description.
(1) Description of the construction activity;
(2) Proposed timetable indicating when each erosion and sediment control BMP is to be installed and the duration that it is to remain in place;
(3) Estimates of the total area of the permitted site and the area of the site that is expected to undergo clearing, grading or excavation;
(4) Nature of the fill material to be used, and of the site soils prior to disturbance;
(5) Names of the receiving water(s) for stormwater runoff;
(6) The types of pollutants that could be found in stormwater and their likely sources;
(7) Any authorized non-stormwater discharges; and
(8) If a surface water of the state is within 50 feet of the permitted activities,
(a) Description of area within 50 feet of project site (including any natural buffer), and
(b) Description of approach to manage the natural buffer zone, if any (for example, maintain natural buffer, reduce natural buffer and increase BMPs, or eliminate flow through natural buffer).

v. Site Map and Drawings.
(1) The site map and drawings must be kept on site and must represent the actual BMP controls being used onsite;
(2) The site map must show sufficient roads and features for DEQ or Agent to locate and access the site;
(3) The site map and drawings must include (but is not limited to) the following features (as applicable):
(a) Total property boundary including surface area of the development;
(b) Areas of soil disturbance (including, but not limited to, showing cut and fill areas and pre- and post-development elevation contours);
(c) Drainage patterns before and after finish grading;
(d) Discharge points;
(e) Areas used for the storage of soils or wastes;
(f) Areas where vegetative practices are to be implemented;
(g) All erosion and sediment control measures or structures;
(h) Impervious structures after construction is completed (including buildings, roads, parking lots and outdoor storage areas);
(i) Springs, wetlands and other surface waters on site or adjacent to the site;
(j) Temporary and permanent stormwater conveyance systems;
(k) Onsite water disposal locations (for example, for dewatering);
(l) Storm drain catch basins depicting inlet protection, and a description of the type of catch basins used (for example, field inlet, curb inlet, grated drain and combination);
(m) Septic drain fields;
(n) Existing or proposed drywells or other UICs;
(o) Drinking water wells on site or adjacent to the site;
(p) Planters;
(q) Sediment and erosion controls including installation techniques;

(r) Natural buffer zones and any associated BMPs for all areas within 50 feet of a water of the state; and
(s) Detention ponds, storm drain piping, inflow and outflow details.

c. ESCP Revisions
   i. The ESCP must be accurate and reflect site conditions. Update the ESCP as needed to represent actual BMPs being used onsite.
   ii. ESCP revisions must:
      (1) Clearly identify any changes (such as type or design) to the BMPs identified in the ESCP, their location, maintenance required, and any other revisions necessary to prevent and control erosion and sediment runoff.
      (2) Include contact information and any applicable certification, training and experience for changes in Erosion and Sediment Control Inspector.
   iii. Approval of the revisions by DEQ or Agent prior to implementation is not required.
   iv. Submission of all ESCP revisions is not required. ESCP revisions must be submitted only if they are made for any of the following reasons:
      (1) Part of a Corrective Action (A.13).
      (2) Change in address of the permit registrant. Registrant must keep their address current with DEQ or Agent. Failure to do so may be used as grounds for termination of coverage.
      (3) Change (increase or decrease) in the size of the project.
      (4) Change (increase or decrease) in the size or location of disturbed areas.
      (5) Change to BMPs (for example, type, design or location).
      (6) Change in erosion and sediment control inspector.
   v. If submission of ESCP revisions is required, submit one paper copy and one electronic PDF to DEQ or Agent within 10 calendar days of the revision. These revisions should be submitted as revised pages of the ESCP or drawings only; it is not necessary to submit the entire ESCP. If the permit registrant does not receive a response to the revisions from DEQ or Agent within 10 calendar days of receipt, the proposed revisions are deemed accepted.
   vi. DEQ or Agent may require the permit registrant to revise the ESCP at any time. The permit registrant must submit the revisions according to the timeframe specified by DEQ or Agent.

13. Corrective Actions

a. The permit registrant must take corrective actions if any of the following occur:
   i. Significant amounts of sediment or turbidity (as described in A.8.b) are visible downstream of the permitted activities in:
      (1) A conveyance system leading to surface waters;
      (2) Surface waters 50 feet or more downstream of the discharge point; or
      (3) Surface waters at any location where more than one-half of the width of the receiving surface waters is affected.
   ii. The construction activity causes or contributes to a violation of in-stream water quality standards (A.10.a).
   iii. DEQ or the Agent requires the permit registrant to take corrective actions to prevent or control the discharge of significant amounts of sediment or turbidity to surface waters or to conveyance systems that discharge to surface waters.

b. If corrective actions are required, the permit registrant must do all of the following:
   i. Source(s) of sediment must be controlled within 24 hours to prevent continued or additional discharges. Immediately, but no later than 24 hours after initial detection, take corrective actions or implement additional effective BMPs until the significant amounts of sediment or turbidity are no longer visually detectable and to ensure that the requirements of Conditions A.8.b and A.10.a are met;

ii. Document in the inspection records the corrective actions taken; and
iii. Evaluate the control measures and practices to determine the cause of the noncompliance. Submit a written report to DEQ or Agent within 10 calendar days of identifying the need to take corrective action as required in condition 13.a above. This report must include:
    (1) The site common name and DEQ file number.
    (2) Identification of outfalls that were out of compliance.
    (3) Names of personnel conducting inspections.
    (4) A description of the noncompliance and its cause.
    (5) The period of noncompliance.
    (6) Steps taken or planned to reduce, eliminate, and prevent reoccurrence of the noncompliance (such as specific BMPs that will be implemented or increased inspection frequency).
    (7) ESCP revisions, if revisions were required to prevent and control erosion and sediment discharges.

SCHEDULE B
MINIMUM MONITORING AND RECORDKEEPING REQUIREMENTS

1. Visual Monitoring

a. The following must be monitored visually by a designated Erosion and Sediment Control Inspector:
   i. All areas of the site disturbed by construction activity to ensure that BMPs are in proper working order.
   ii. Discharge point(s) identified in the ESCP for evidence of or the potential for the discharge of pollutants (including sediment and turbidity), and to ascertain whether erosion and sediment control measures are effective in preventing significant impacts to surface waters. Where discharge points are inaccessible, nearby downstream locations must be inspected to the extent that such inspections are practical.
   iii. BMPs identified in the current ESCP to assess whether they are functioning properly.
   iv. Locations where vehicles enter or exit the site for evidence of off-site sediment tracking.
   v. Areas used for storage of materials that are exposed to precipitation for evidence of spillage or other potential to contaminate stormwater runoff.

b. All ESCP controls and practices must be monitored visually according to the following schedule:

Site Condition	Minimum Frequency
1. Active period	Daily when stormwater runoff, including runoff from snow melt, is occurring. At least once every fourteen (14) calendar days, regardless of whether stormwater runoff is occurring.
2. Prior to the site becoming inactive or in anticipation of site inaccessibility	Once to ensure that erosion and sediment control measure are in working order. Any necessary maintenance and repair must be made prior to leaving the site.
3. Inactive periods greater than fourteen (14) consecutive calendar days	Once every month.
4. Periods during which the site is inaccessible due to inclement weather	If practical, inspections must occur daily at a relevant and accessible discharge point or downstream location.
5. Periods during which discharge is unlikely due to frozen conditions.	Monthly. Resume monitoring immediately upon melt, or when weather conditions make discharges likely.

c. Documentation of visual monitoring.
All visual monitoring must document the following:
i. Visual monitoring date and inspector's name.
ii. The construction site name as it appears on the registrant's permit.
iii. The file or site number.
iv. Weather conditions during the inspection, the approximate amount of precipitation since the last inspection, and approximate amount of precipitation during the last 24 hours.
v. Observations for each discharge location. If a discharge location is inaccessible due to safety hazard, document the hazard and record the inspections noted at a relevant discharge point or downstream location if practical.
(1) For each discharge point, make observations:
(a) At the discharge location if the discharge is to a conveyance system leading to surface waters;
(b) From the discharge point to 50 feet downstream if the discharge is to surface waters; and
(c) At any location where more than one-half of the width of the receiving surface water is affected.
(2) For each area observed, document the following:
(a) For turbidity and color, describe any apparent color and the clarity of the discharge, and any apparent difference in comparison with the surface waters.
(b) Describe any sheen or floating material, or record that it is absent. If present, it could indicate concern about a possible spill or leakage from vehicles or materials storage.
vi. Location(s) of BMPs in need of maintenance, inspections of all BMPs, including erosion and sediment controls, chemical and waste controls, locations where vehicles enter and exit the site, status of areas that are under temporary or final stabilization, soil stockpile areas, and non-stormwater pollution (for example, paints, oils, fuels, or adhesives) controls.
vii. Location(s) of BMPs that failed to operate as designed or proved inadequate for a particular location;
viii. Location(s) where additional BMPs are needed that did not exist at the time of inspection; and
ix. Corrective action required and implementation dates.
x. All revisions and documentation of reasons for changes or modifications to the ESCP and other corrective measures.

2. Recordkeeping

a. The permit registrant must keep the ESCP, all revisions to the ESCP, and all visual monitoring records on site.
b. Upon request, the permit registrant must deliver the above records to DEQ, Agent, or the local municipality within three (3) working days of the request.
c. During inactive periods of greater than seven (7) consecutive calendar days, the above records must be retained by the permit registrant but do not need to be at the construction site.
d. The permit registrant must retain all visual monitoring records for at least three (3) years after termination of permit coverage.

SCHEDULE D
SPECIAL CONDITIONS

1. Schedule Precedence

Schedule F contains General Conditions that are included in all general permits issued by DEQ. In the event of any inconsistency between Schedule F and any other schedule of the permit, the requirements in Schedules A through D take precedence.

2. Other Requirements

Registration under this permit does not relieve the permit registrant from all other permitting and licensing requirements. Prior to beginning construction activities, the permit registrant must obtain all other necessary approvals.

3. Termination of Permit Registration

a. To terminate permit coverage, project registrants must
   i. Complete and submit a Notice of Termination form to DEQ or Agent.
   ii. Resolve all outstanding compliance issues.
   iii. Pay all outstanding permit fees.

b. If the project never started (there were no permitted activities and no soil disturbance), there are no additional requirements. For all previously-active projects, permit registrants must also:
   i. Ensure that all final stabilization criteria are met.
   ii. Submit photo-documentation that depicts site stabilization, unless the site has been inspected by DEQ or Agent.
   iii. If portions of the property shown in the original ESCP have been sold, the permit registrant must submit an update of the ESCP depicting new site boundaries.
   iv. For a common plan of development or sale, all portions of the original common plan of development or sale that have been sold must either meet final stabilization criteria (D.3.c) or be covered by the 1200-C or 1200-CN.

c. Final stabilization is determined by satisfying the following criteria:
   i. There is no reasonable potential for discharge of a significant amount of construction related sediment or turbidity to surface waters.
   ii. Construction materials and waste have been removed and disposed of properly. This includes any sediment that was being retained by the temporary erosion and sediment controls.
   iii. All temporary erosion and sediment controls have been removed and disposed of properly, unless doing so conflicts with local requirements.
   iv. All soil disturbance activities have stopped and all stormwater discharges from construction activities that are authorized by this permit have ceased.
   v. All disturbed or exposed areas of the site are covered by either final vegetative stabilization or permanent stabilization measures. However, temporary or permanent stabilization measures are not required for areas that are intended to be left unvegetated or unstabilized following construction (such as dirt access roads, utility pole pads, areas being used for storage of vehicles, equipment, or materials), provided that measures are in place to eliminate or minimize erosion.

d. Permanent stabilization measures are erosion prevention materials designed to provide long-term protection to underlying soils. This may include but is not limited to buildings, paving, riprap, gabions, or geotextiles.

e. Final vegetative stabilization means established and uniform (evenly distributed without large bare areas) perennial vegetation, which provides 70 percent or more coverage, with the following exceptions:
   i. DEQ or Agent may approve less than 70 percent coverage if vegetation is expected to expand, and suitable interim measures (such as mulch or bark) are in place.
   ii. For sites on which it is difficult to establish 70 percent density (for example, in arid, semiarid, and drought-stricken areas), the registrant must cover planted or seeded area with bio or photo degradable erosion controls designed to prevent erosion without active maintenance.
   iii. Sites located on land that is currently employed for farm use as defined in ORS 308A.056 (for example, pipelines across crop or range land, or staging areas for highway construction) that are restored to their preconstruction farm use are not subject to these final vegetative stabilization criteria. Areas disturbed that were not previously employed for farm use, and areas that are not being returned to preconstruction farm use, must meet the conditions for final vegetative stabilization.

4. Local Public Agencies Acting as DEQ's Agent

DEQ authorizes local public agencies to act as its Agent in implementing this permit if they entered into a Memorandum of Agreement (MOA). The Agent may be authorized to conduct the following activities, including but not limited to: application and ESCP review, inspections, monitoring data review, stormwater monitoring and enforcement.

5. Permit-Specific Definitions

a. *Agent* means a governmental entity that has an agreement with DEQ to administer this general permit within their jurisdictional boundaries.
b. *Agricultural Land* means cropland, grassland, rangeland, pasture, and other land on which agricultural or forest-related products or livestock are produced. Agricultural lands include cropped woodland, marshes, incidental areas included in the agricultural operation, and other types of land used for the production of livestock.
c. *Best Management Practices or BMPs* means schedules of activities, prohibitions of practices, maintenance procedures, and other physical, structural or managerial practices to prevent or reduce the pollution of waters of the state. BMPs include treatment systems, erosion and sediment control, source control, and operating procedures and practices to control site runoff, spillage or leaks, and waste disposal.
d. *Borrow Area* means the area from which material is excavated to be used as fill material in another area.
e. *Clean Water Act or CWA* means the Federal Water Pollution Control Act enacted by Public Law 92-500, as amended by Public Laws 95-217, 95-576, 96-483, and 97-117; USC 1251 et seq.
f. *Conveyance System* means, for the purposes of this permit, a sewer, ditch, pipe, channel, swale or similar component that is designed to carry water; or any combination of such components.
g. *DEQ* means the Oregon Department of Environmental Quality.
h. *Detention* means the temporary storage of stormwater to improve quality or reduce the volumetric flow rate of discharge or both.
i. *Dewatering* means the removal and disposal of surface water or groundwater during site construction.
j. *Discharge Point* means the location where stormwater leaves the site. It includes the location where stormwater is discharged to surface water or a stormwater conveyance system.
k. *Erosion* means the movement of soil particles or rock fragments by water or wind.
l. *Erosion and Sediment Control BMPs* means BMPs that are intended to prevent erosion and sedimentation, such as preserving natural vegetation, seeding, mulching and matting, plastic

covering, sediment fences, and sediment traps and ponds. Erosion and sediment control BMPs are synonymous with stabilization and structural BMPs.

m. *Hazardous Materials* means the materials defined in 40 CFR part 302 Designation, Reportable Quantities, and Notification.

n. *Legally Authorized Representative* means the following (please see 40 CFR §122.22 for more detail, if needed):
   - For a corporation - president, secretary, treasurer, vice-president, or any person who performs principal business functions; or a manager of one or more facilities that is authorized in accordance to corporate procedure to sign such documents.
   - For a partnership - general partner.
   - For a sole proprietorship - Owner(s) [each owner must sign the application].
   - For a city, county, state, federal, or other public facility - principal executive officer or ranking elected official.
   - For a Limited Liability Company - Member [articles of organization].
   - For trusts – Acting trustee.

o. *Local Government* means any county, city, town, or service district.

p. *National Pollutant Discharge Elimination System or NPDES* means the national program under Section 402 of the Clean Water Act for regulation of point source discharges of pollutants to waters of the United States.

q. *Natural Buffer* means, for the purposes of this permit, an area of undisturbed natural cover surrounding surface waters within which construction activities are restricted. Natural cover includes the natural vegetation, exposed rock, and barren ground that existed prior to commencement of earth-disturbing activities.

r. *Natural Vegetation* means vegetation that occurs spontaneously without regular management, maintenance, or species introductions or removals. For purposes of this permit, this includes invasive species.

s. *Non-Stormwater Pollution Controls* means general site and materials management measures that directly or indirectly aid in minimizing the discharge of sediment and other construction related pollutants from the construction site.

t. *Owner or operator* means the owner or operator of any ‘‘facility or activity’’ subject to regulation under the NPDES program. Owners or operators may be individuals or other legal entities.
   i. Operator for the purposes of this permit, means any person associated with a construction project that meets either of the following two criteria:
      (1) The person has operational control over construction plans and specifications, including the authority to make modifications to those plans and specifications; or
      (2) The person has day-to-day operational control of those activities at a project which are necessary to ensure compliance with a ESCP for the site or other permit conditions (for example, they are authorized to direct workers at a site to carry out activities required by the ESCP or comply with other permit conditions).
   ii. Owner for the purposes of this permit means any person with a legal interest in the permitted activities or the property on which the permitted activities occur.

u. *Permit Registrant* means the owner or operator of the construction activity regulated by this permit that has submitted an application and received notice of registration under this general permit by DEQ or Agent.

v. *Person* means not only individuals, but also includes, corporations, associations, firms, partnerships, joint stock companies, public and municipal corporations, political subdivisions, the state and any agencies thereof, and the federal government and any agencies thereof.

w. *Pollutant* as defined in 40 CFR §122.2 means dredged spoil, solid waste, incinerator residue, filter backwash, sewage, garbage, domestic sewage sludge (biosolids), munitions, chemical

wastes, biological materials, radioactive materials, heat, wrecked or discarded equipment, rock, sand, soil, cellar dirt and industrial, municipal, and agricultural waste discharge into water. It does not mean sewage from vessels within the meaning of section 312 of the FWPCA, nor does it include dredged or fill material discharged in accordance with a permit issued under section 404 of the FWPCA.

x. *Pollution or Water Pollution* as defined by ORS 468B.005(3) means such alteration of the physical, chemical or biological properties of any waters of the state, including change in temperature, taste, color, turbidity, silt or odor of the waters, or such discharge of any liquid, gaseous, solid, radioactive or other substance into any waters of the state, which will or tends to, either by itself or in connection with any other substance, create a public nuisance or which will or tends to render such waters harmful, detrimental or injurious to public health, safety or welfare, or to domestic, commercial, industrial, agricultural, recreational or other legitimate beneficial uses or to livestock, wildlife, fish or other aquatic life or the habitat thereof.
y. *Runoff Controls* means BMPs that are designed to control the peak volume and flow rate or to prevent scour due to concentrated flows.
z. *Sediment* means mineral or organic matter, typically deposited by water, air, or ice.
aa. *Site* means the area where the construction activity is physically located or conducted.
bb. *Stormwater Conveyance* means a sewer, ditch, or swale that is designed to carry stormwater; a stormwater conveyance may also be referred to as a storm drain or storm sewer.
cc. *Stormwater as defined by 40 CFR §122.26(b)(13)* means stormwater runoff, snow melt runoff, and surface runoff and drainage.
dd. *Surface Runoff* means that portion of stormwater that does not infiltrate into the ground or evaporate, but instead flows onto adjacent land or watercourses or is routed to stormwater conveyance systems.
ee. *Surface Water* means all water naturally open to the atmosphere (for example, rivers, lakes, reservoirs, ponds, streams, impoundments, oceans, estuaries, springs, etc.).
ff. *Total Maximum Daily Load or TMDL* means a calculation of the maximum amount of a pollutant that a waterbody can receive and still meet state water quality standards. It is the sum of the allowable loads of a single pollutant from all contributing point and nonpoint sources. Percentages of the TMDL are allocated by DEQ to the various pollutant sources.
gg. *Turbidity* means the optical condition of waters caused by suspended or dissolved particles or colloids that scatter and absorb light rays instead of transmitting light in straight lines through the water column. Turbidity may be expressed as nephelometric turbidity units (NTUs) measured with a calibrated turbidity meter.
hh. *Underground Injection Control* means any system, structure, or activity that is created to place fluid below the ground or sub-surface (for example, sumps, infiltration galleries, drywells, trench drains, drill holes, etc.)
ii. *Water or Waters of the State as defined by ORS 468B.005(8)* means lakes, bays, ponds, impounding reservoirs, springs, wells, rivers, streams, creeks, estuaries, marshes, inlets, canals, the Pacific Ocean within the territorial limits of the State of Oregon and all other bodies of surface or underground waters, natural or artificial, inland or coastal, fresh or salt, public or private (except those private waters which do not combine or effect a junction with natural surface or underground waters), which are wholly or partially within or bordering the state or within its jurisdiction.

SCHEDULE F
NPDES GENERAL CONDITIONS – INDUSTRIAL FACILITIES
October 1, 2015 Version

SECTION A. STANDARD CONDITIONS

A1. Duty to Comply with Permit

The permittee must comply with all conditions of this permit. Failure to comply with any permit condition is a violation of Oregon Revised Statutes (ORS) 468B.025 and the federal Clean Water Act and is grounds for an enforcement action. Failure to comply is also grounds for DEQ to terminate, modify and reissue, revoke, or deny renewal of a permit.

A2. Penalties for Water Pollution and Permit Condition Violations

The permit is enforceable by DEQ or EPA, and in some circumstances also by third-parties under the citizen suit provisions of 33 USC § 1365. DEQ enforcement is generally based on provisions of state statutes and Environmental Quality Commission (EQC) rules, and EPA enforcement is generally based on provisions of federal statutes and EPA regulations.

ORS 468.140 allows DEQ to impose civil penalties up to $25,000 per day for violation of a term, condition, or requirement of a permit. The federal Clean Water Act provides for civil penalties not to exceed $37,500 and administrative penalties not to exceed $16,000 per day for each violation of any condition or limitation of this permit.

Under ORS 468.943, unlawful water pollution in the second degree, is a Class A misdemeanor and is punishable by a fine of up to $25,000, imprisonment for not more than one year, or both. Each day on which a violation occurs or continues is a separately punishable offense. The federal Clean Water Act provides for criminal penalties of not more than $50,000 per day of violation, or imprisonment of not more than 2 years, or both for second or subsequent negligent violations of this permit.

Under ORS 468.946, unlawful water pollution in the first degree is a Class B felony and is punishable by a fine up to $250,000, imprisonment for not more than 10 years or both. The federal Clean Water Act provides for criminal penalties of $5,000 to $50,000 per day of violation, or imprisonment of not more than 3 years, or both for knowing violations of the permit. In the case of a second or subsequent conviction for knowing violation, a person is subject to criminal penalties of not more than $100,000 per day of violation, or imprisonment of not more than 6 years, or both.

A3. Duty to Mitigate

The permittee must take all reasonable steps to minimize or prevent any discharge or sludge use or disposal in violation of this permit. In addition, upon request of DEQ, the permittee must correct any adverse impact on the environment or human health resulting from noncompliance with this permit, including such accelerated or additional monitoring as necessary to determine the nature and impact of the noncomplying discharge.

A4. Duty to Reapply

If the permittee wishes to continue an activity regulated by this permit after the expiration date of this permit, the permittee must apply for and have the permit renewed. The application must be submitted at least 180 days before the expiration date of this permit.

DEQ may grant permission to submit an application less than 180 days in advance but no later than the permit expiration date.

A5. Permit Actions

This permit may be modified, revoked and reissued, or terminated for cause including, but not limited to, the following:

a. Violation of any term, condition, or requirement of this permit, a rule, or a statute.
b. Obtaining this permit by misrepresentation or failure to disclose fully all material facts.
c. A change in any condition that requires either a temporary or permanent reduction or elimination of the authorized discharge.
d. The permittee is identified as a Designated Management Agency or allocated a wasteload under a total maximum daily load (TMDL).
e. New information or regulations.
f. Modification of compliance schedules.
g. Requirements of permit reopener conditions.
h. Correction of technical mistakes made in determining permit conditions.
i. Determination that the permitted activity endangers human health or the environment.
j. Other causes as specified in 40 CFR §§ 122.62, 122.64, and 124.5.

The filing of a request by the permittee for a permit modification, revocation or reissuance, termination, or a notification of planned changes or anticipated noncompliance does not stay any permit condition.

A6. Toxic Pollutants

The permittee must comply with any applicable effluent standards or prohibitions established under Oregon Administrative Rules (OAR) 340-041-0033 and 307(a) of the federal Clean Water Act for toxic pollutants and with standards for sewage sludge use or disposal established under section 405(d) of the federal Clean Water Act within the time provided in the regulations that establish those standards or prohibitions, even if the permit has not yet been modified to incorporate the requirement.

A7. Property Rights and Other Legal Requirements

The issuance of this permit does not convey any property rights of any sort, or any exclusive privilege, or authorize any injury to persons or property or invasion of any other private rights, or any infringement of federal, tribal, state, or local laws or regulations.

A8. Permit References

Except for effluent standards or prohibitions established under section 307(a) of the federal Clean Water Act and OAR 340-041-0033 for toxic pollutants, and standards for sewage sludge use or disposal established under section 405(d) of the federal Clean Water Act, all rules and statutes referred to in this permit are those in effect on the date this permit is issued.

A9. Permit Fees

The permittee must pay the fees required by OAR.

SECTION B. OPERATION AND MAINTENANCE OF POLLUTION CONTROLS

B1. Proper Operation and Maintenance

The permittee must at all times properly operate and maintain all facilities and systems of treatment and control (and related appurtenances) that are installed or used by the permittee to achieve compliance with the conditions of this permit. Proper operation and maintenance also includes adequate laboratory controls and appropriate quality assurance procedures. This provision requires

the operation of back-up or auxiliary facilities or similar systems that are installed by a permittee only when the operation is necessary to achieve compliance with the conditions of the permit.

B2. Need to Halt or Reduce Activity Not a Defense

For industrial or commercial facilities, upon reduction, loss, or failure of the treatment facility, the permittee must, to the extent necessary to maintain compliance with its permit, control production or all discharges or both until the facility is restored or an alternative method of treatment is provided. This requirement applies, for example, when the primary source of power of the treatment facility fails or is reduced or lost. It is not a defense for a permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of this permit.

B3. Bypass of Treatment Facilities

a. Definitions
   (1) "Bypass" means intentional diversion of waste streams from any portion of the treatment facility. The permittee may allow any bypass to occur which does not cause effluent limitations to be exceeded, provided the diversion is to allow essential maintenance to assure efficient operation. These bypasses are not subject to the provisions of paragraphs b and c of this section.
   (2) "Severe property damage" means substantial physical damage to property, damage to the treatment facilities which causes them to become inoperable, or substantial and permanent loss of natural resources that can reasonably be expected to occur in the absence of a bypass. Severe property damage does not mean economic loss caused by delays in production.

b. Prohibition of bypass.
   (1) Bypass is prohibited and DEQ may take enforcement action against a permittee for bypass unless:
      i. Bypass was unavoidable to prevent loss of life, personal injury, or severe property damage;
      ii. There were no feasible alternatives to the bypass, such as the use of auxiliary treatment facilities, retention of untreated wastes, or maintenance during normal periods of equipment downtime. This condition is not satisfied if adequate backup equipment should have been installed in the exercise of reasonable engineering judgment to prevent a bypass that occurred during normal periods of equipment downtime or preventative maintenance; and
      iii. The permittee submitted notices and requests as required under General Condition B3.c.
   (2) DEQ may approve an anticipated bypass, after considering its adverse effects and any alternatives to bypassing, when DEQ determines that it will meet the three conditions listed above in General Condition B3.b(1).

c. Notice and request for bypass.
   (1) Anticipated bypass. If the permittee knows in advance of the need for a bypass, a written notice must be submitted to DEQ at least ten days before the date of the bypass.
   (2) Unanticipated bypass. The permittee must submit notice of an unanticipated bypass as required in General Condition D5.

B4. Upset

a. Definition. "Upset" means an exceptional incident in which there is unintentional and temporary noncompliance with technology based permit effluent limitations because of factors beyond the reasonable control of the permittee. An upset does not include noncompliance to the extent

caused by operation error, improperly designed treatment facilities, inadequate treatment facilities, lack of preventative maintenance, or careless or improper operation.

b. Effect of an upset. An upset constitutes an affirmative defense to an action brought for noncompliance with such technology-based permit effluent limitations if the requirements of General Condition B4.c are met. No determination made during administrative review of claims that noncompliance was caused by upset, and before an action for noncompliance, is final administrative action subject to judicial review.

c. Conditions necessary for a demonstration of upset. A permittee who wishes to establish the affirmative defense of upset must demonstrate, through properly signed, contemporaneous operating logs, or other relevant evidence that:
   (1) An upset occurred and that the permittee can identify the causes(s) of the upset;
   (2) The permitted facility was at the time being properly operated;
   (3) The permittee submitted notice of the upset as required in General Condition D5, hereof (24-hour notice); and
   (4) The permittee complied with any remedial measures required under General Condition A3 hereof.

d. Burden of proof. In any enforcement proceeding the permittee seeking to establish the occurrence of an upset has the burden of proof.

B5. Treatment of Single Operational Upset

For purposes of this permit, a single operational upset that leads to simultaneous violations of more than one pollutant parameter will be treated as a single violation. A single operational upset is an exceptional incident that causes simultaneous, unintentional, unknowing (not the result of a knowing act or omission), temporary noncompliance with more than one federal Clean Water Act effluent discharge pollutant parameter. A single operational upset does not include federal Clean Water Act violations involving discharge without a NPDES permit or noncompliance to the extent caused by improperly designed or inadequate treatment facilities. Each day of a single operational upset is a violation.

B6. Public Notification of Effluent Violation

If effluent limitations specified in this permit are exceeded or an overflow occurs that threatens public health, the permittee must take such steps as are necessary to alert the public, health agencies and other affected entities (for example, public water systems) about the extent and nature of the discharge in accordance with the notification procedures developed under General Condition B7. Such steps may include, but are not limited to, posting of the river at access points and other places, news releases, and paid announcements on radio and television.

B7. Emergency Response and Public Notification Plan

The permittee must develop and implement an emergency response and public notification plan that identifies measures to protect public health from bypasses or upsets that may endanger public health. At a minimum the plan must include mechanisms to:

a. Ensure that the permittee is aware (to the greatest extent possible) of such events;
b. Ensure notification of appropriate personnel and ensure that they are immediately dispatched for investigation and response;
c. Ensure immediate notification to the public, health agencies, and other affected entities (including public water systems). The response plan must identify the public health and other officials who will receive immediate notification;
d. Ensure that appropriate personnel are aware of and follow the plan and are appropriately trained;
e. Provide emergency operations; and

f. Ensure that DEQ is notified of the public notification steps taken.

B8. Removed Substances
Solids, sludges, filter backwash, or other pollutants removed in the course of treatment or control of wastewaters must be disposed of in such a manner as to prevent any pollutant from such materials from entering waters of the state, causing nuisance conditions, or creating a public health hazard.

SECTION C. MONITORING AND RECORDS

C1. Representative Sampling
Sampling and measurements taken as required herein must be representative of the volume and nature of the monitored discharge. All samples must be taken at the monitoring points specified in this permit, and must be taken, unless otherwise specified, before the effluent joins or is diluted by any other waste stream, body of water, or substance. Monitoring points must not be changed without notification to and the approval of DEQ. Samples must be collected in accordance with requirements in 40 CFR part 122.21 and 40 CFR part 403 Appendix E.

C2. Flow Measurements
Appropriate flow measurement devices and methods consistent with accepted scientific practices must be selected and used to ensure the accuracy and reliability of measurements of the volume of monitored discharges. The devices must be installed, calibrated and maintained to insure that the accuracy of the measurements is consistent with the accepted capability of that type of device. Devices selected must be capable of measuring flows with a maximum deviation of less than ± 10 percent from true discharge rates throughout the range of expected discharge volumes.

C3. Monitoring Procedures
Monitoring must be conducted according to test procedures approved under 40 CFR part 136 or, in the case of sludge (biosolids) use and disposal, approved under 40 CFR part 503 unless other test procedures have been specified in this permit.

For monitoring of recycled water with no discharge to waters of the state, monitoring must be conducted according to test procedures approved under 40 CFR part 136 or as specified in the most recent edition of Standard Methods for the Examination of Water and Wastewater unless other test procedures have been specified in this permit or approved in writing by DEQ.

C4. Penalties for Tampering
The federal Clean Water Act provides that any person who falsifies, tampers with, or knowingly renders inaccurate any monitoring device or method required to be maintained under this permit may, upon conviction, be punished by a fine of not more than $10,000 per violation, imprisonment for not more than two years, or both. If a conviction of a person is for a violation committed after a first conviction of such person, punishment is a fine not more than $20,000 per day of violation, or by imprisonment of not more than four years, or both.

C5. Reporting of Monitoring Results
Monitoring results must be summarized each month on a discharge monitoring report form approved by DEQ. The reports must be submitted monthly and are to be mailed, delivered or otherwise transmitted by the 15th day of the following month unless specifically approved otherwise in Schedule B of this permit.

C6. Additional Monitoring by the Permittee

If the permittee monitors any pollutant more frequently than required by this permit, using test procedures approved under 40 CFR part 136 or, in the case of sludge (biosolids) use and disposal, approved under 40 CFR part 503 or as specified in this permit, the results of this monitoring must be included in the calculation and reporting of the data submitted in the discharge monitoring report. Such increased frequency must also be indicated. For a pollutant parameter that may be sampled more than once per day (for example, total residual chlorine), only the average daily value must be recorded unless otherwise specified in this permit.

C7. Averaging of Measurements

Calculations for all limitations that require averaging of measurements must utilize an arithmetic mean, except for bacteria which must be averaged as specified in this permit.

C8. Retention of Records

Records of monitoring information required by this permit related to the permittee's sewage sludge use and disposal activities must be retained for a period of at least 5 years (or longer as required by 40 CFR part 503). Records of all monitoring information including all calibration and maintenance records, all original strip chart recordings for continuous monitoring instrumentation, copies of all reports required by this permit and records of all data used to complete the application for this permit must be retained for a period of at least 3 years from the date of the sample, measurement, report, or application. This period may be extended by request of DEQ at any time.

C9. Records Contents

Records of monitoring information must include:

a. The date, exact place, time, and methods of sampling or measurements;
b. The individual(s) who performed the sampling or measurements;
c. The date(s) analyses were performed;
d. The individual(s) who performed the analyses;
e. The analytical techniques or methods used; and
f. The results of such analyses.

C10. Inspection and Entry

The permittee must allow DEQ or EPA upon the presentation of credentials to:

a. Enter upon the permittee's premises where a regulated facility or activity is located or conducted, or where records must be kept under the conditions of this permit;
b. Have access to and copy, at reasonable times, any records that must be kept under the conditions of this permit;
c. Inspect at reasonable times any facilities, equipment (including monitoring and control equipment), practices, or operations regulated or required under this permit; and
d. Sample or monitor at reasonable times, for the purpose of assuring permit compliance or as otherwise authorized by state law, any substances or parameters at any location.

C11. Confidentiality of Information

Any information relating to this permit that is submitted to or obtained by DEQ is available to the public unless classified as confidential by the Director of DEQ under ORS 468.095. The permittee may request that information be classified as confidential if it is a trade secret as defined by that statute. The name and address of the permittee, permit applications, permits, effluent data, and information required by NPDES application forms under 40 CFR § 122.21 are not classified as confidential [40 CFR § 122.7(b)].

SECTION D. REPORTING REQUIREMENTS

D1. Planned Changes

The permittee must comply with OAR 340-052, "Review of Plans and Specifications" and 40 CFR § 122.41(l)(1). Except where exempted under OAR 340-052, no construction, installation, or modification involving disposal systems, treatment works, sewerage systems, or common sewers may be commenced until the plans and specifications are submitted to and approved by DEQ. The permittee must give notice to DEQ as soon as possible of any planned physical alternations or additions to the permitted facility.

D2. Anticipated Noncompliance

The permittee must give advance notice to DEQ of any planned changes in the permitted facility or activity that may result in noncompliance with permit requirements.

D3. Transfers

This permit may be transferred to a new permittee provided the transferee acquires a property interest in the permitted activity and agrees in writing to fully comply with all the terms and conditions of the permit and EQC rules. No permit may be transferred to a third party without prior written approval from DEQ. DEQ may require modification or revocation and reissuance of the permit to change the name of the permittee and incorporate such other requirements as may be necessary under 40 CFR § 122.61. The permittee must notify DEQ when a transfer of property interest takes place.

D4. Compliance Schedule

Reports of compliance or noncompliance with, or any progress reports on interim and final requirements contained in any compliance schedule of this permit must be submitted no later than 14 days following each schedule date. Any reports of noncompliance must include the cause of noncompliance, any remedial actions taken, and the probability of meeting the next scheduled requirements.

D5. Twenty-Four Hour Reporting

The permittee must report any noncompliance that may endanger health or the environment. Any information must be provided orally (by telephone) within 24 hours from the time the permittee becomes aware of the circumstances, unless a shorter time is specified in the permit. During normal business hours, the DEQ regional office must be called. Outside of normal business hours, DEQ must be contacted at 1-800-452-0311 (Oregon Emergency Response System).

The following must be included as information that must be reported within 24 hours under this paragraph:

a. Any unanticipated bypass that exceeds any effluent limitation in this permit;
b. Any upset that exceeds any effluent limitation in this permit;
c. Violation of maximum daily discharge limitation for any of the pollutants listed by DEQ in this permit; and
d. Any noncompliance that may endanger human health or the environment.

A written submission must also be provided within 5 days of the time the permittee becomes aware of the circumstances. The written submission must contain:

e. A description of noncompliance and its cause;
f. The period of noncompliance, including exact dates and times;
g. The estimated time noncompliance is expected to continue if it has not been corrected;

h. Steps taken or planned to reduce, eliminate and prevent reoccurrence of the noncompliance; and
i. Public notification steps taken, pursuant to General Condition B7.

DEQ may waive the written report on a case-by-case basis if the oral report has been received within 24 hours.

D6. Other Noncompliance
The permittee must report all instances of noncompliance not reported under General Condition D4 or D5, at the time monitoring reports are submitted. The reports must contain:
a. A description of the noncompliance and its cause;
b. The period of noncompliance, including exact dates and times;
c. The estimated time noncompliance is expected to continue if it has not been corrected; and
d. Steps taken or planned to reduce, eliminate, and prevent reoccurrence of the noncompliance.

D7. Duty to Provide Information
The permittee must furnish to DEQ within a reasonable time any information that DEQ may request to determine compliance with the permit or to determine whether cause exists for modifying, revoking and reissuing, or terminating this permit. The permittee must also furnish to DEQ, upon request, copies of records required to be kept by this permit.

Other Information: When the permittee becomes aware that it has failed to submit any relevant facts or has submitted incorrect information in a permit application or any report to DEQ, it must promptly submit such facts or information.

D8. Signatory Requirements
All applications, reports or information submitted to DEQ must be signed and certified in accordance with 40 CFR § 122.22.

D9. Falsification of Information
Under ORS 468.953, any person who knowingly makes any false statement, representation, or certification in any record or other document submitted or required to be maintained under this permit, including monitoring reports or reports of compliance or noncompliance, is subject to a Class C felony punishable by a fine not to exceed $125,000 per violation and up to 5 years in prison per ORS chapter 161. Additionally, according to 40 CFR § 122.41(k)(2), any person who knowingly makes any false statement, representation, or certification in any record or other document submitted or required to be maintained under this permit including monitoring reports or reports of compliance or non-compliance will, upon conviction, be punished by a federal civil penalty not to exceed $10,000 per violation, or by imprisonment for not more than 6 months per violation, or by both.

D10. Changes to Discharges of Toxic Pollutant
The permittee must notify DEQ as soon as it knows or has reason to believe the following:
a. That any activity has occurred or will occur that would result in the discharge, on a routine or frequent basis, of any toxic pollutant that is not limited in the permit, if that discharge will exceed the highest of the following "notification levels:
   (1) One hundred micrograms per liter (100 µg/l);
   (2) Two hundred micrograms per liter (200 µg/l) for acrolein and acrylonitrile; five hundred micrograms per liter (500 µg/l) for 2,4-dinitrophenol and for 2-methyl-4,6-dinitrophenol; and one milligram per liter (1 mg/l) for antimony;
   (3) Five (5) times the maximum concentration value reported for that pollutant in the permit application in accordance with 40 CFR § 122.21(g)(7); or

(4) The level established by DEQ in accordance with 40 CFR § 122.44(f).

b. That any activity has occurred or will occur that would result in any discharge, on a non-routine or infrequent basis, of a toxic pollutant that is not limited in the permit, if that discharge will exceed the highest of the following "notification levels":
   (1) Five hundred micrograms per liter (500 µg/l);
   (2) One milligram per liter (1 mg/l) for antimony;
   (3) Ten (10) times the maximum concentration value reported for that pollutant in the permit application in accordance with 40 CFR § 122.21(g)(7); or
   (4) The level established by DEQ in accordance with 40 CFR § 122.44(f).

SECTION E. DEFINITIONS

E1. *BOD or BOD_5* means five-day biochemical oxygen demand.
E2. *CBOD or $CBOD_5$* means five-day carbonaceous biochemical oxygen demand.
E3. *TSS* means total suspended solids.
E4. *Bacteria* means but is not limited to fecal coliform bacteria, total coliform bacteria, *Escherichia coli* (*E. coli*) bacteria, and *Enterococcus* bacteria.
E5. *FC* means fecal coliform bacteria.
E6. *Total residual chlorine* means combined chlorine forms plus free residual chlorine
E7. *Technology based permit effluent limitations* means technology-based treatment requirements as defined in 40 CFR § 125.3, and concentration and mass load effluent limitations that are based on minimum design criteria specified in OAR 340-041.
E8. *mg/l* means milligrams per liter.
E9. *µg/l* means microgram per liter.
E10. *kg* means kilograms.
E11. *m^3/d* means cubic meters per day.
E12. *MGD* means million gallons per day.
E13. *Average monthly effluent limitation* as defined at 40 CFR § 122.2 means the highest allowable average of daily discharges over a calendar month, calculated as the sum of all daily discharges measured during a calendar month divided by the number of daily discharges measured during that month.
E14. *Average weekly effluent limitation* as defined at 40 CFR § 122.2 means the highest allowable average of daily discharges over a calendar week, calculated as the sum of all daily discharges measured during a calendar week divided by the number of daily discharges measured during that week.
E15. *Daily discharge* as defined at 40 CFR § 122.2 means the discharge of a pollutant measured during a calendar day or any 24-hour period that reasonably represents the calendar day for purposes of sampling. For pollutants with limitations expressed in units of mass, the daily discharge must be calculated as the total mass of the pollutant discharged over the day. For pollutants with limitations expressed in other units of measurement, the daily discharge must be calculated as the average measurement of the pollutant over the day.
E16. *24-hour composite sample* means a sample formed by collecting and mixing discrete samples taken periodically and based on time or flow.
E17. *Grab sample* means an individual discrete sample collected over a period of time not to exceed 15 minutes.
E18. *Quarter* means January through March, April through June, July through September, or October through December.
E19. *Month* means calendar month.
E20. *Week* means a calendar week of Sunday through Saturday.

Oregon

Kate Brown, Governor

Department of Environmental Quality
Western Region Eugene Office
165 East 7th Avenue, Suite 100
Eugene, OR 97401
Phone (541) 686-7838
Fax (541) 686-7551
TTY 711

February 7, 2020

Josh Shafer
Stonewood Construction
935 Oak St
Eugene, OR 97401-3165

Re: 1200-C National Pollutant Discharge Elimination System (NPDES) Registration
DEQ File No. 126728/EPA No. ORR10G020/DEQ Permit No. 33493
Project Location: DEVNW Airport Road PUD, 1424 15th Street, Florence, Lane County

Dear Mr. Shafer:

The Oregon Department of Environmental Quality (DEQ) has reviewed your application and approved your registration for coverage under the NPDES Construction Stormwater Discharge Permit 1200-C (permit). As the registrant, you are legally responsible for compliance with all permit conditions. See this link http://www.oregon.gov/deq/wq/wqpermits/Pages/Stormwater-Construction.aspx for a copy of the permit, technical assistance, and all relevant permit forms.

Registrant Obligations

- Comply with all permit conditions. DEQ strongly recommends that you read the permit.
- Fully implement your Erosion and Sediment Control Plan (ESCP). You may need to modify site control measures as site conditions change.
- Ensure that all appropriate contractors hired by you to implement the permit on your behalf have a copy of the ESCP and the permit.
- Notify DEQ of significant projects changes, including ESCP revisions, inspectors, or project ownership changes.
- Perform & document visual monitoring according to Schedule B of the permit.
- Terminate coverage at the end of the project. You will be charged an annual registration fee until registration is terminated.

The permit does not authorize excavation or fill in state waterways, including wetlands, and does not replace the requirement for receiving authorization to do this type of work under Section 404 of the Clean Water Act. If the authorized activity involves earthmoving in a known or suspected wetland condition you must contact the Department of State Lands at 503-986-5200 if you are west of the Cascades, or 541-388-6112 if you are east of the Cascades, and request a wetland determination prior to earth moving.

If you have any questions about this permit, contact the Stormwater Permit Coordinator at 541-686-7930.

Respectfully,

Deborah Kimball
Western Region Permit Coordinator – Eugene Office
kimball.deborah@deq.state.or.us
Enclosures: Notice of Termination form and Permit

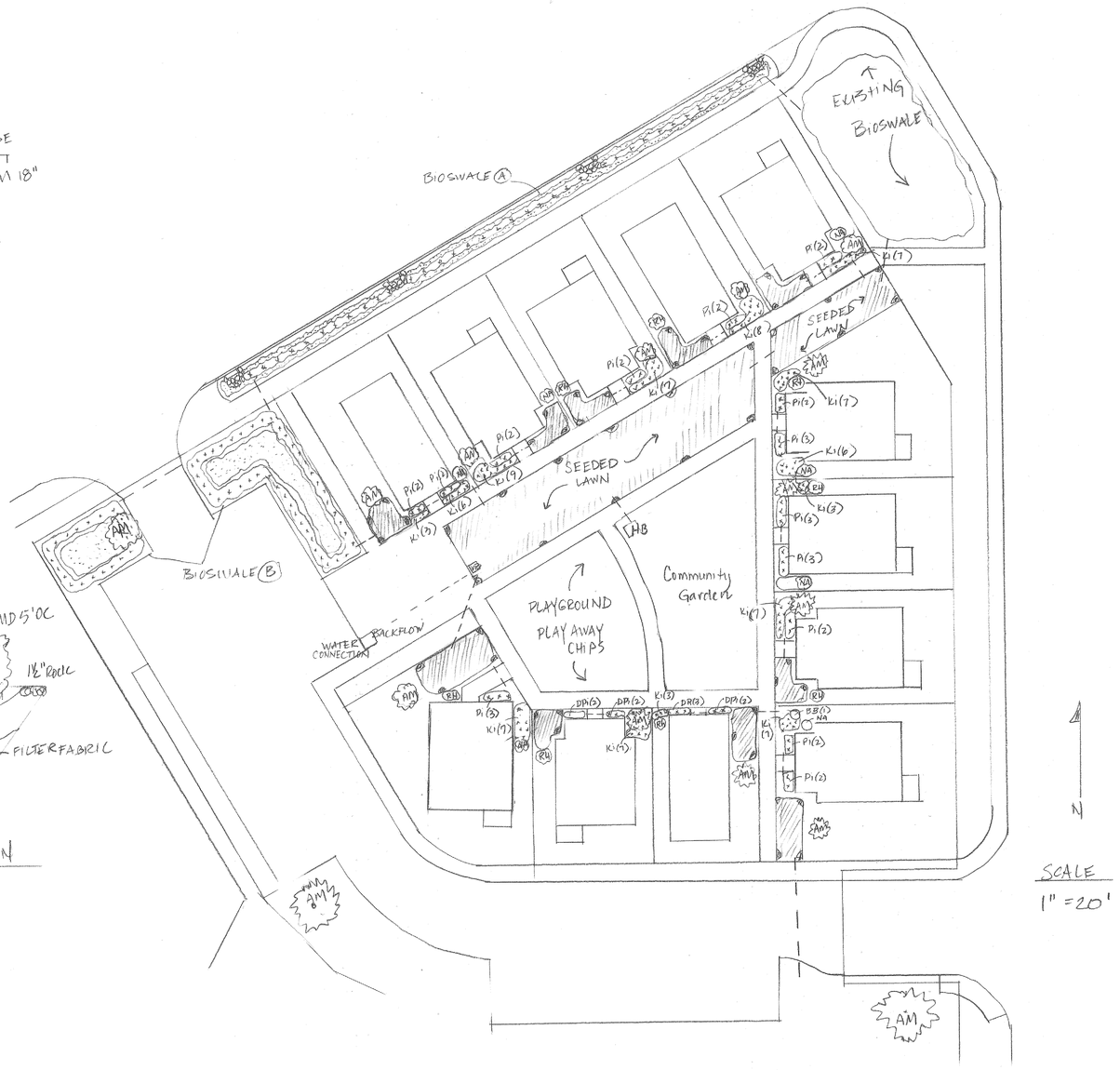
Exhibit J

LANDSCAPE DESIGN
DEV/NW AIRPORT PUD

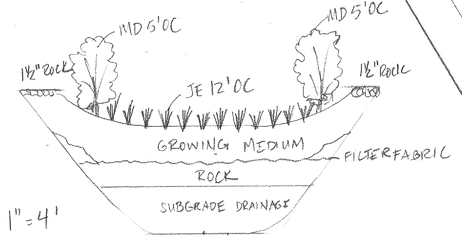
DESIGN BY LISA WALTER · SEEDLACER
LAUREL BAY GARDENS LCB# 6718

1"=4'

BIOSWALE (A) CROSS SECTION
PLANTING SCHEMATIC



SCALE
1" = 20'



1"=4'

BIOSWALE (B) CROSS SECTION
PLANTING SCHEMATIC

PLANT LIST

3	AM	15G	ACER X AUTUMN BLAZE MAPLE
12	AM	7G	ACER X AUTUMN BLAZE MAPLE
7	NA	5G	NANDINA 'MOYERS RED'
8	RH	5G	RHODODENDRON 'TAURUS'
32	Pi	2G	PIERIS 'MOUNTAIN FIRE'
7	DPi	2G	PIERIS 'DWARF CAVATINE'
87	Ki	1G	ARCTOSTAPHYLOS 'VANCOUVER JADE KINNIKINNICK'

BIOSWALE PLANT SCHEDULE

AW	1G	SALIX 'ARTIC WILLOW'	5'OC
MD	1G	CORNUS X. 'MIDWINTER FIRE DOGWOOD'	5'OC
JE	4"	JUNCUS EFFUSUS	12" OC

SPECIFICATIONS

- LAWN AREAS SEEDED WITH FESCUE BLEND SEED SOIL/COMPOST BLEND MINIMUM 6"
- ALL PLANTS INSTALLED WITH SOIL/COMPOST BLEND
- NEW PLANTINGS FERTILIZED WITH FERTILIZER W/MYCORRHIZAE
- LARGE TREES STAKED WITH DUAL STAKING SYSTEM
- SMALL TREES STAKED WITH SINGLE STAKE
- ALL LAWNS WATERED WITH AUTOMATIC OVERHEAD WATER
- ALL TREES & SHRUBS WATERED WITH DRIP SYSTEM
- BIOSWALE PLANTINGS WATERED WITH LAZER DRIP LINE

ADDITIONAL NOTES

- ALL IRRIGATION PIPE SCHEDULE 40
--- DENOTES SLEEVING
HB COMMUNITY GARDEN HOSE BIB ACCESS
● DENOTES IRRIGATION HEAD
▨ SEEDED LAWN AREAS

Exhibit K

OFFICE USE ONLY
PERMIT NO. _____

CITY OF FLORENCE PUBLIC WORKS
RIGHT OF WAY EXCAVATION WORK PERMIT

Applicant (City Approved Contractor) STONEWOOD CONSTRUCTION, INC.

Applicant's Address 975 OAK ST. EUGENE, OR 97401 Phone 541 485-6638

Purpose of Excavation: ☒ Sewer ☒ Water ☒ Driveway ☒ Curb Cut ☒ Sidewalk ☐ Other _____

Attention: Oregon law requires you to follow rules adopted by the Oregon Utility Notification Center. Those rules are set forth in OAR 952-001-0010 through OAR 952-001-0090. You may obtain copies of the rules by calling the center. **(Note: the Telephone number for the Oregon Utility Notification Center is (503) 232-1987. For locates, call 1-800-332-2344.)**

One-Call Center Identification No. (for this project): _____ Planning #: PC 2005 CUP 01

Description of Work: DEVELOP PUD FOR 12 SFDs

Project Address	Start Date	Completion Date	Surface Type	Total ROW Work
TAX MAP 18 12 27 10 15400	4/20/20	8/1/20		

** Asphalt to be patched to grade the same day per Inspector's Instructions.*

***Street Cuts on Arterials & Collectors will be hot patched the day of the cut.*

I agree to comply with all provisions of City of Florence FCC Title 8 Chapter 2 Standards & Specifications for excavating and restoring any Public Improvement, holding the City of Florence harmless from any liability of any kind resulting from or in connection with my/our activities in excavating and restoring any Public Improvement.

X Signed: _____ Date: 4/10/20

☐ Insurance Certificate on file, $1,000,000.00 blanket coverage endorsed for completed operations through the fast permanent restoration of City Streets.

☒ Plans ~~Attached~~ SENT ☐ W & S Fees Paid **Copies To:** ☐ Permitee ☐ Public Works ☐ Address File

OFFICE USE ONLY *INSPECTOR APPROVAL*

Basic Permit Fee	$42.55
Lineal foot charge ($1.60/LF) ALL Right of Way Work	$
Inspection Fee $77 Water/Sewer Line	$
Inspection Fee $87/hr Street/Curb/Sidewalk 1 Hour Minimum	$
TOTAL DUE:	$

Comments: _____

Inspection Date _____ Inspector _____

Remarks _____

Approval: _____ Date: _____

Exhibit L

CITY OF FLORENCE
CONSTRUCTION PERMIT IN PUBLIC RIGHT OF WAY
Per ordinance no. 14, series 2007

Applicant: Ray Wells, Inc. Engineer/Contractor: Branch Engineering

Address: PO Box 3467; Florence, OR 97439 Address: Springfield, OR

Phone: 997-2054 Phone: 746-0637

Signature of person with authority to bind applicant: _____

Applicant's registered agent in the State of Oregon: _____

CONSTRUCTION SITE

Assessor's Map: 18-12-27-10

Location: Keener Place-Florence Tax Lot No. 15400

TYPE OF CONSTRUCTION

X Opening Paved Street – DEPOSIT REQUIRED

_____ Opening Unpaved Street – DEPOSIT REQUIRED

X Curb Cuts 2 Number of Cuts Frontage of Lot 261 feet

X Private Construction within right of way

X Sewer Connection/Tap

X Driveway

X Sidewalk Construction

_____ Other (Describe the nature of work and intended purpose) _____

Planned Unit Development

PERMIT REQUIREMENTS

_____ Application approved by appropriate department – (attach construction plans)

_____ Deposit $_____

_____ Fee $_____

Total Paid $_____

Contractor Shall Provide

Contractor's License Number and Expiration Date: CCB 91052 8-4-2021

Contractor's Insurance Company and Policy Number: Ward Insurance

Amount of Insurance carried by Contractor: 5 million

Amount of Insurance required by City: _____

Amount of Bonding required by the City – if applicable: _____

Emergency Contact Information: Norm Wells 997-2054

*Contractor must furnish proof of the above before this permit is issued.

Contractor Will Give

1. Notification to Public Work Department of start date of the project.
2. Notification of project inspection during construction.
3. Notification of project completion date.
4. Notification for final inspection and approval.
5. Notification of approval of the project by the City applicant. This information will be sent by the City Recorder, and any deposits will be returned upon satisfactory completion of the project.
6. A set of as-built plans will be given to the City, if applicable.
7. Engineered drawings showing detailed plans for all facilities.
8. Map(s) showing location of all facilities.

THIS PERMIT IS NOT TRANSFERABLE

INSURANCE WAIVER:

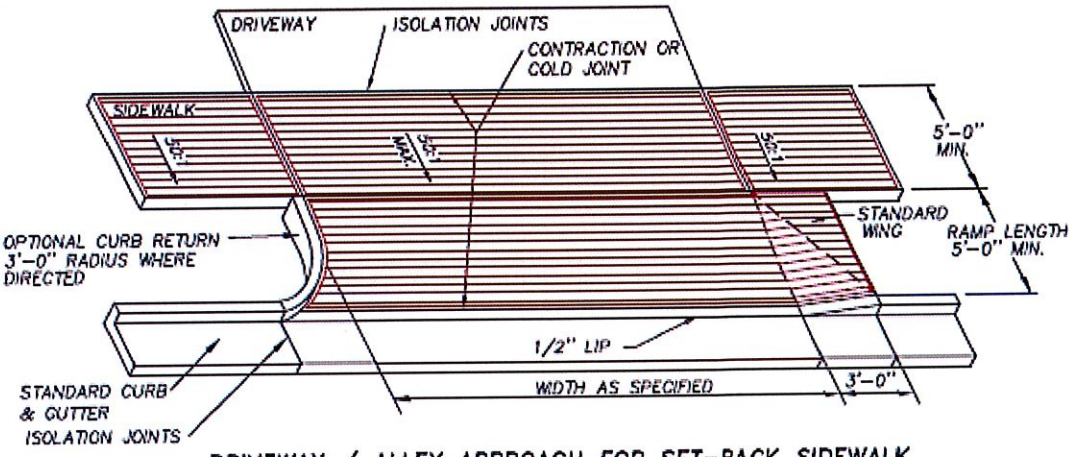
I, _____, agree to save the City, its officials, employees, and agents harmless from any and all costs, damages and liabilities which may accrue or be claimed from any and all costs, damages and liabilities which may accrue or be claimed to accrue by reason of any work performed under this permit. I am also aware of all requirements of Ordinance No. 14, Series 2007.

PENALTIES: On conviction of failure to comply with Ordinance No. 14, Series 2007, a fine not to exceed $200 for each day violation continues to persist after due notice has been given.

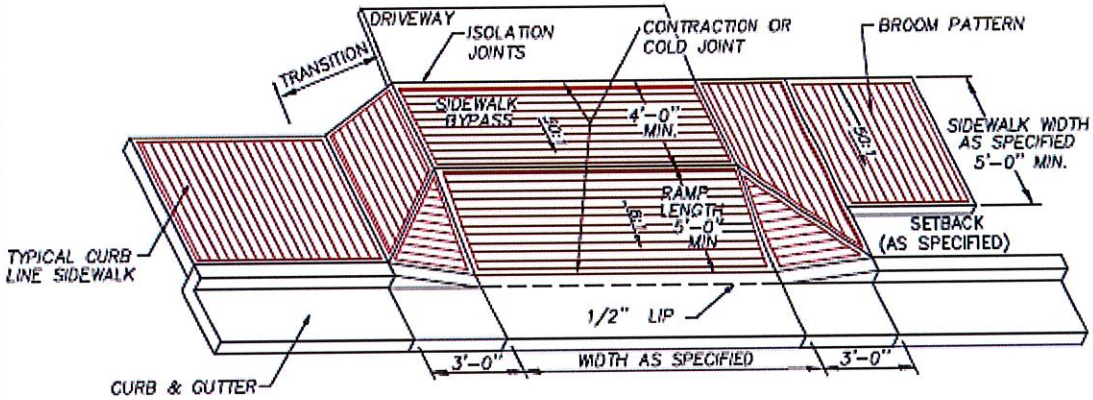
APPROVED BY:

_____ _____

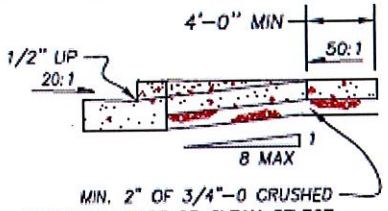
Public Works Director Date:



DRIVEWAY / ALLEY APPROACH FOR SET-BACK SIDEWALK



DRIVEWAY / ALLEY APPROACH FOR CURBSIDE & PARTIALLY SET-BACK SIDEWALKS



TYPICAL SECTION THROUGH RAMP

NOTES:

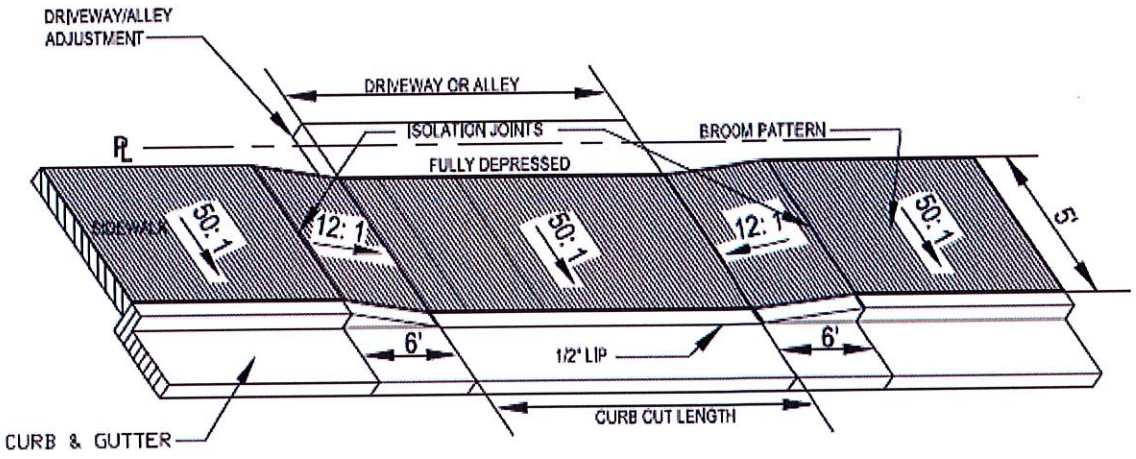
1) RESIDENTIAL DRIVEWAYS AND SIDEWALK SECTIONS THROUGH DRIVEWAYS SHALL HAVE A MINIMUM NORMAL THICKNESS OF 6". CONCRETE STRENGTH SHALL BE 3300 PSI.
2) CONCRETE FOR COMMERCIAL USE AND ALLEY APPROACHES SHALL HAVE A MINIMUM NOMINAL THICKNESS OF 8". CONCRETE STRENGTH SHALL BE 3300 PSI.
3) CURB TRANSITIONS FOR COMMERCIAL USE AND ALLEY APPROACHES SHALL BE 5 FT.
4) CONSTRUCT CONTRACTION JOINT IN CENTER OF DRIVEWAY WHEN DRIVEWAY WIDTH EXCEEDS 15'.
5) NO LIP AT GUTTER IF USED AS SIDEWALK ACCESS RAMP.
6) SEE SIDEWALK DETAILS FOR RESTRICTIONS AND SPECIFCATIONS NOT SHOWN.
7) THE 50:1 CROSS-SLOPE OF SIDEWALK IS MEASURED FROM HORIZONTAL. THE 12:1 SLOPE OF SIDEWALK TRANSITION TO DRIVEWAY/ALLEY IS RELATIVE TO THE RUNNING SLOPE OF THE SIDEWALK. THE SLOPE OF THE APRON IS MEASURED RELATIVE TO HORIZONTAL.

CITY OF FLORENCE STANDARD DRAWING

DRIVEWAY AND ALLEY APPROACHES FOR SETBACK OR BYPASS SIDEWALK

DATE:	DRAWING NO.
MARCH 2007	F-208A

FILENAME: F-208a.DWG



CURBSIDE - SIDEWALK APRON FOR 5' WALKS

SLOPE:

50: 1 (2%)
12: 1 (8%)

NOTES:

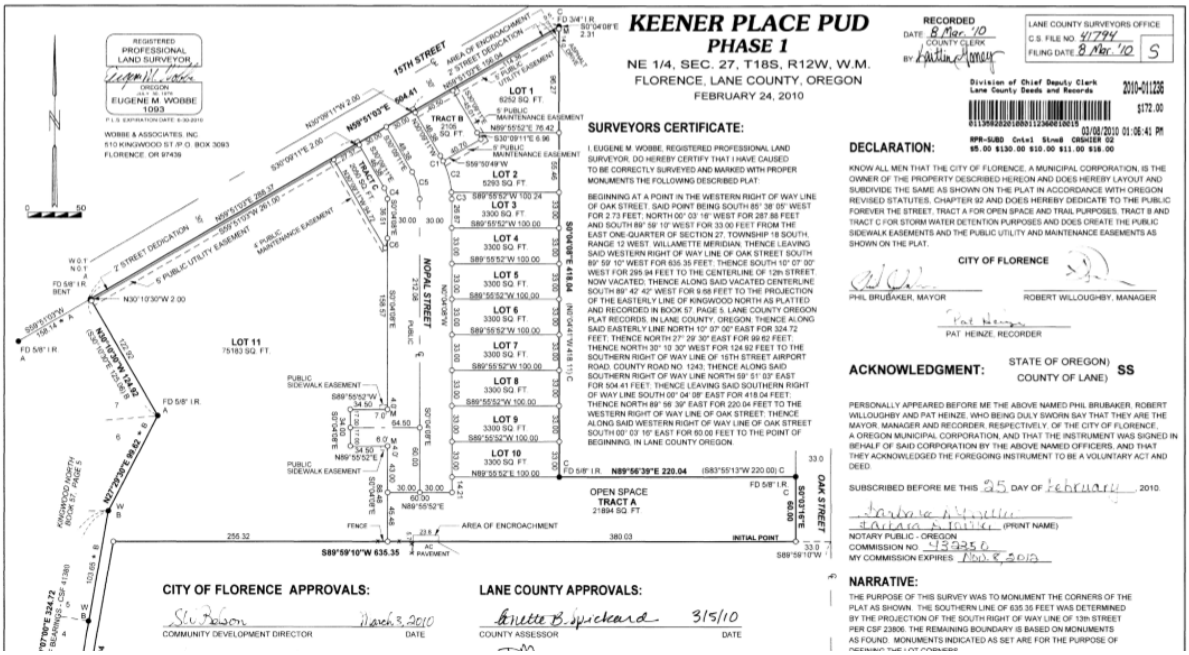
1. ALL CONCRETE SHALL BE 6" INCH MINIMUM THICKNESS OF 3,000 psi. FIELD STRENGTH
2. ADD JOINT IN CENTER OF APRON AND CURB & GUTTER WHEN APRON WIDTH EXCEEDS 20' FT.
3. ALL SLOPES ARE RELATIVE TO HORIZONTAL.
4. IF THE APRON WILL ALSO SERVE AS A SIDEWALK ACCESS RAMP IN PLACE OF A STANDARD RAMP, THE APRON SLOPE FROM THE GUTTER TO THE SHALL BE 12: 1 OR LESS WITH NO LIP.

CITY OF FLORENCE STANDARD DRAWING

DRIVEWAY AND ALLEY APRON 5' CURBSIDE SIDEWALK

DATE:	DRAWING NO.
9-22-11	F-208B

Image of Keener Place PUD Phase 1



KEENER PLACE PUD
PHASE 1

NE 1/4, SEC. 27, T18S, R12W, W.M.
FLORENCE, LANE COUNTY, OREGON
FEBRUARY 24, 2010

RECORDED
DATE 8 Mar. 10
COUNTY CLERK
BY Kathlin Kinney

LANE COUNTY SURVEYORS OFFICE
C.S. FILE NO. 41794
FILING DATE 8 Mar. 10 S

Division of Chief Deputy Clerk
Lane County Deeds and Records
2010-011236
$172.00
03/08/2010 01:08:41 PM
RPR-SUBD Cnt=1 Stn=8 CASHIER 02
$5.00 $130.00 $10.00 $11.00 $16.00

REGISTERED PROFESSIONAL LAND SURVEYOR
OREGON
JULY 30, 1974
EUGENE M. WOBBE
1093
R.E.S. EXPIRATION DATE: 6-30-2010

WOBBE & ASSOCIATES, INC.
510 KINGWOOD ST./P.O. BOX 3093
FLORENCE, OR 97439

SURVEYORS CERTIFICATE:

I, EUGENE M. WOBBE, REGISTERED PROFESSIONAL LAND SURVEYOR, DO HEREBY CERTIFY THAT I HAVE CAUSED TO BE CORRECTLY SURVEYED AND MARKED WITH PROPER MONUMENTS THE FOLLOWING DESCRIBED PLAT:

BEGINNING AT A POINT IN THE WESTERN RIGHT OF WAY LINE OF OAK STREET, SAID POINT BEING SOUTH 85° 38' 05" WEST FOR 2.73 FEET; NORTH 00° 03' 16" WEST FOR 287.86 FEET AND SOUTH 89° 59' 10" WEST FOR 33.00 FEET FROM THE EAST ONE-QUARTER OF SECTION 27, TOWNSHIP 18 SOUTH, RANGE 12 WEST, WILLAMETTE MERIDIAN; THENCE LEAVING SAID WESTERN RIGHT OF WAY LINE OF OAK STREET SOUTH 89° 59' 10" WEST FOR 635.35 FEET; THENCE SOUTH 10° 07' 00" WEST FOR 295.94 FEET TO THE CENTERLINE OF 12th STREET, NOW VACATED; THENCE ALONG SAID VACATED CENTERLINE SOUTH 89° 42' 45" WEST FOR 9.58 FEET TO THE PROJECTION OF THE EASTERLY LINE OF KINGWOOD NORTH AS PLATTED AND RECORDED IN BOOK 57, PAGE 5, LANE COUNTY OREGON PLAT RECORDS, IN LANE COUNTY, OREGON; THENCE ALONG SAID EASTERLY LINE NORTH 10° 07' 00" EAST FOR 324.72 FEET; THENCE NORTH 27° 29' 30" EAST FOR 99.62 FEET; THENCE NORTH 30° 10' 30" WEST FOR 124.92 FEET TO THE SOUTHERN RIGHT OF WAY LINE OF 15TH STREET AIRPORT ROAD, COUNTY ROAD NO. 1243; THENCE ALONG SAID SOUTHERN RIGHT OF WAY LINE NORTH 59° 51' 03" EAST FOR 504.41 FEET; THENCE LEAVING SAID SOUTHERN RIGHT OF WAY LINE SOUTH 00° 04' 08" EAST FOR 418.04 FEET; THENCE NORTH 89° 56' 39" EAST FOR 220.04 FEET TO THE WESTERN RIGHT OF WAY LINE OF OAK STREET; THENCE ALONG SAID WESTERN RIGHT OF WAY LINE OF OAK STREET SOUTH 00° 03' 16" EAST FOR 60.00 FEET TO THE POINT OF BEGINNING, IN LANE COUNTY OREGON.

DECLARATION:

KNOW ALL MEN THAT THE CITY OF FLORENCE, A MUNICIPAL CORPORATION, IS THE OWNER OF THE PROPERTY DESCRIBED HEREON AND DOES HEREBY LAYOUT AND SUBDIVIDE THE SAME AS SHOWN ON THE PLAT IN ACCORDANCE WITH OREGON REVISED STATUTES, CHAPTER 92 AND DOES HEREBY DEDICATE TO THE PUBLIC FOREVER THE STREET, TRACT A FOR OPEN SPACE AND TRAIL PURPOSES, TRACT B AND TRACT C FOR STORM WATER DETENTION PURPOSES AND DOES CREATE THE PUBLIC SIDEWALK EASEMENTS AND THE PUBLIC UTILITY AND MAINTENANCE EASEMENTS AS SHOWN ON THE PLAT.

CITY OF FLORENCE

PHIL BRUBAKER, MAYOR — ROBERT WILLOUGHBY, MANAGER

PAT HEINZE, RECORDER

ACKNOWLEDGMENT:

STATE OF OREGON)
COUNTY OF LANE) SS

PERSONALLY APPEARED BEFORE ME THE ABOVE NAMED PHIL BRUBAKER, ROBERT WILLOUGHBY AND PAT HEINZE, WHO BEING DULY SWORN SAY THAT THEY ARE THE MAYOR, MANAGER AND RECORDER, RESPECTIVELY, OF THE CITY OF FLORENCE, A OREGON MUNICIPAL CORPORATION, AND THAT THE INSTRUMENT WAS SIGNED IN BEHALF OF SAID CORPORATION BY THE ABOVE NAMED OFFICERS, AND THAT THEY ACKNOWLEDGED THE FOREGOING INSTRUMENT TO BE A VOLUNTARY ACT AND DEED.

SUBSCRIBED BEFORE ME THIS 25 DAY OF February 2010.

Barbara A Mittelli
Barbara A Mittelli (PRINT NAME)
NOTARY PUBLIC - OREGON
COMMISSION NO. 439256
MY COMMISSION EXPIRES Nov. 8, 2013

CITY OF FLORENCE APPROVALS:

Scott Tolson — March 3, 2010
COMMUNITY DEVELOPMENT DIRECTOR — DATE

LANE COUNTY APPROVALS:

Annette B. Spickard — 3/5/10
COUNTY ASSESSOR — DATE

NARRATIVE:

THE PURPOSE OF THIS SURVEY WAS TO MONUMENT THE CORNERS OF THE PLAT AS SHOWN. THE SOUTHERN LINE OF 635.35 FEET WAS DETERMINED BY THE PROJECTION OF THE SOUTH RIGHT OF WAY LINE OF 13th STREET PER CSF 23806. THE REMAINING BOUNDARY IS BASED ON MONUMENTS AS FOUND. MONUMENTS INDICATED AS SET ARE FOR THE PURPOSE OF

Exhibit M

CITY OF FLORENCE
PLANNING COMMISSION

RESOLUTION PC 19 22 PUD 03
RESOLUTION PC 19 23 SUB 04
RESOLUTION PC 19 25 CUP 08

A REQUEST FOR PRELIMINARY PLANNED UNIT DEVELOPMENT PLAN, TENTATIVE SUBDIVISION PLAT, AND CONDITIONAL USE PERMIT FOR A PROPOSED DEVELOPMENT OF 12 AFFORDABLE, SINGLE-FAMILY, DETACHED DWELLINGS, ON THE CORNER OF 15TH AND NOPAL STREET.

WHEREAS, application was made by Willamette Neighborhood Housing Services, Owner, for approval of a Preliminary PUD Plan, Tentative Subdivision Plan, and Conditional Use Permit for DevNW Airport Road, as required by FCC 10-1-1-4, FCC 10-1-1-6-3, FCC 10-23, FCC 10-4, and FCC 11-3; and

WHEREAS, the Planning Commission met in a duly-advertised public hearing on November 26, 2019, as outlined in Florence City Code 10-1-1-6-3, to consider the application, evidence in the record, and testimony received; and

WHEREAS, the Planning Commission of the City of Florence, per FCC 10-1-1-4, FCC 10-1-1-6-3, FCC 10-23, FCC 10-4, and FCC 11-3, finds, based on the Findings of Fact, application, staff recommendation, evidence and testimony presented to them, that the application meets the applicable criteria through compliance with certain Conditions of Approval.

NOW THEREFORE BE IT RESOLVED that the Planning Commission of the City of Florence finds, based on the Findings of Fact and the evidence in record that:

The request for a Preliminary PUD Plan, Tentative Subdivision Plan, and Conditional Use Permit for 12 affordable, single family detached dwellings on the corner of 15th and Nopal Streets meets the applicable criteria in Florence City Code and the Florence Realization 2020 Comprehensive Plan with the conditions of approval as listed below.

Informational:

Informational 1: The private stormwater facilities proposed – the rain garden and detention pond – are located adjacent to the 15th Street right-of-way. No easements on the rain garden or detention pond are proposed, although an easement may be required as a condition of approval of the final plat.

Informational 2: Information in the record calls to question whether vegetation and/or property on neighboring lots may be harmed by the proposed grading and landscaping of the southern/southwestern slope. This application does not authorize the harming of off-site vegetation and/or property. If, during construction, conditions are found that suggests off-site vegetation and/or property may be harmed, the applicant should take actions to avert harm.

Conditions of Approval:

Exhibit N

The application, as presented, meets or can meet applicable City codes and requirements, provided that the following conditions of approval are met.

Approval shall be shown on conditions of approval as supported by the following record:

"A"	Findings of Fact
"B"	Prelim. PUD and Tent. Subdivision Plan Application
"C"	Conditional Use Permit Application
"D"	Site Plan
"E"	Tentative Subdivision Plat
"F"	Utility & Stormwater Plan
"G"	Survey
"H"	Landscape Plan
"I"	Elevations for Lot 1
"J"	Elevations for Lots 2, 3, 5, 6, 8, 9
"K"	Elevations for Lots 4, 10
"L"	Elevations for Lots 7, 12
"M"	Stormwater Report
"N"	Phase 1 Site Investigation Report
"O"	Florence Stormwater Management Plan Map
"P"	Applicant's Written Statement
"Q"	Applicant's Completeness Review Response
"R"	Testimony: Chuck Trent, Boys & Girls Club
"R2"	Testimony: Jonathan Hornung, 1370 Mulberry Ln
"S"	Referral 1: Public Works
"T"	Referral 2: Public Works

Findings of Fact attached as Exhibit "A" are incorporated by reference and adopted in support of this decision.

1. Any modifications to the approved plans or changes of use, except those changes relating to Building Codes, will require approval by the Community Development Director or Planning Commission/Design Review Board.

2. Regardless of the content of material presented, including application text and exhibits, staff reports, testimony and/or discussions, the applicant agrees to comply with all regulations and requirements of the Florence City Code which are current on this date, EXCEPT where variance or deviation from such regulations and requirements has been specifically approved by formal Planning Commission action as documented by the records of this decision and/or the associated Conditions of Approval. The applicant shall submit to the Community Development Department a signed "Agreement of Acceptance" of all conditions of approval prior to issuance of a building permit.

3. Upon encountering any cultural or historic resources during construction, the applicant shall immediately contact the State Historic Preservation Office and the Confederated Tribes of Coos, Lower Umpqua, and Siuslaw Indians.

Construction shall cease immediately and shall not continue until permitted by either a SHPO or CTCLUSI representative.

Title 10, Chapter 4, Conditional Uses

4. The applicant shall be required to construct a fence spanning from the northwestern corner of Lot 1, along the 15th Street frontage, ending at the northeastern corner of Lot 5. The proposed design of the fence shall meet the requirements of 10-34-5, the details of which shall be included on the site plan or another document submitted to the Florence Planning Department prior to approval of the final PUD.

Title 10, Chapter 7, Special Development Standards

5. The applicant shall be required to submit a Phase 2 Site Evaluation Report, a geotechnical report, and a detailed bank stabilization plan prior to receiving any relevant building permit.

Title 10, Chapter 13, Multi-Family Residential District

6. The applicant shall maintain a 10-foot vegetated buffer along the south-western perimeter of the development (from the trash enclosure to the 15th Street entrance).

7. The minimum vision clearance at the proposed driveway entrances shall be 10 feet.

8. There are currently no parking signs proposed along the 15th Street frontage. Should a parking lane be installed along 15th Street, the applicant shall remove those signs.

Title 10, Chapter 23, Planned Unit Developments

9. The applicant shall be required to submit a copy of the Covenants, Conditions and Restrictions for the development prior to the issuance of any relevant building permits. The developer shall be responsible for the maintenance of the common space areas.

10. The applicant shall submit a development schedule that meets the criteria of 10-23-10-5, prior to the approval of the final PUD and subdivision plat.

11. By November 26, 2020, the applicant shall file with the Planning Commission a final development plan containing in final form the information required in the preliminary plan, or a request for extension.

Title 10, Chapter 34, Landscaping

12. The applicant shall update their landscaping plan to include the species, sizes and locations throughout the development, including in the proposed rain gardens and parking areas.

13. Specifications for soil at time of planting, irrigation and anticipated planting schedule shall be furnished by the applicant prior to any site disturbance, final PUD, final plat, and/or with each associated building permit.

14. An irrigation plan is required prior to final PUD approval.

15. The landscaping plan shall detail the location and species of each of the three trees required throughout the parking lot: 1 at the 15th Street entrance, 1 near the trash enclosure, and 1 along the Nopal entrance.

Title 10, Chapter 35, Access and Circulation

16. The applicant shall be required to obtain a Construction Permit in Right-of-Way prior to their construction of their access to and improvements of 15th Street.

17. The applicant shall include an easement for joint use of the proposed driveway and parking lot on the Tentative Subdivision Plat.

18. Driveway approaches shall receive a Right of Way Excavation Work Permit prior to construction.

19. The applicant shall widen the proposed driveway to 23 feet in areas adjoining parking stalls.

20. The applicant shall obtain a Right of Way Excavation Work Permit prior to sidewalk construction.

Title 10, Chapter 36, Public Facilities

21. In conjunction with the approval of the final plat, the Planning Commission shall determine whether the applicant shall either: (1) enter into a non-remonstrance agreement, consenting to financial participation and granting of easements as needed for future improvements to the section of 15th Street adjacent to DevNW Airport Road, (2) complete a half-street improvement of the same section of 15th Street, widening it 2 feet 2 inches (to meet the criteria of a Collector, No Parking), or (3) complete a half-street improvement of the same section of 15th Street, widening 4 feet 2 inches and installing a parking strip pullout (to meet the criteria of Collector, On Street Parking).

22. Should a parking lane be installed along 15th Street, the applicant shall update the site plan and signage plan accordingly.

23. The applicant shall submit a plan for mail boxes, approved by the United States Postal Service, prior to the issuance of any building permits for residential structures.

24. The sanitary sewer manhole located within the 15 foot public sewer easement must be accessible, for the City to maintain and service the system (the City must be able to drive up to the manhole, set up its combination sewer cleaner over the manhole, and set up its TVI equipment). The applicant shall relocate the manhole as far to the west of its proposed location as grade and cover standards will allow, while simultaneously providing for sufficient access.

25. The applicant shall increase the width of the proposed public sewer easement from 15 to 20 feet, except where adjacent to the house on Lot 6, and center the public sanitary sewer line in the easement.

26. There appears to be an irrigation water meter located in a concrete pad location north west of Lot 12 (just outside of the parking area).

27. The applicant shall relocate the irrigation water meter to the east of the bicycle parking area.

28. The water meter shall be located in a landscaped area, not in hardscape areas.

29. On Nopal Street towards the existing fire turn around (the future street stub that the proposed development will be utilizing) there is an existing water service. The applicant shall verify the location of the water service, and utilize it for one of the proposed homes if possible.

30. On 15th Street, there are two existing water services. If they cannot be utilized for the project, the applicant shall properly abandon them.

31. The proposed connection to the existing water main on 15th Street, to loop the water system, shall be a cut-in connection complete with three water valves in a 'T' configuration. The existing water main in 15th Street is a 6-inch water main, so the connection will need to allow for an 8-inch water main connection and the new 8-inch extending to the south of the proposed fire hydrant, then reduce to 6-inch to continue the water system to the south with connection to the existing water main that is stubbed from Nopal Street.

32. Locate and cap the two existing sanitary sewer laterals that serviced the former Senior Center and the undeveloped area to the east.

33. A grading plan and erosion control plan shall be submitted prior to site disturbance or construction in the right-of-way. It shall meet the standards of the Portland Erosion and Sediment Control Manual.

34. The applicant shall grant a 20-foot waterline easement along the driveway/parking lot, from Nopal Street to 15th Street, for the 6-inch water main.

Title 10, Chapter 37, Lighting

35. Locations for general site lighting are shown on the landscape and site plans. A photometric plan shall be submitted and approved prior to the issuance of any relevant building permit(s), and parking lot construction.

Title 11, Chapter 3, Major Partition, Tentative Plan Procedure

36. The applicant shall revise their subdivision plat to include existing and proposed easements, including their exact locations and dimensions, prior to approval of the final plat.

37. Lot A shall be renamed on the plat as "Tract A;" it is not a legal lot.

38. Tract A shall be divided into multiple tracts on the plat, to delineate the areas which are common ownership and the areas which are open space.

Title 11, Chapter 5, Platting and Mapping Standards

39. Final construction plans and utility facility specifications are required to be submitted for City review and approval prior to commencing construction. Stamped approval will be shown on the utility plans.

Title 9, Chapter 5, Stormwater Management

40. If the Nopal Street public swale is to be used for private stormwater originating from the project site (as opposed to surface drainage only, as stipulated in the 2009 approved stormwater plan), the 2019 stormwater plan shall be modified to address the discrepancy between the 2009 and 2019 plans. And the Nopal Street swale shall be improved to meet current qualitative treatment standards (plantings) and, if needed, quantitative standards (to handle flow).

ADOPTED BY THE FLORENCE PLANNING COMMISSION/DESIGN REVIEW BOARD the 26th day of November, 2019.

J E Murphey 12/2/19

John Murphey, Chairperson Date
Florence Planning Commission

CITY OF FLORENCE
PLANNING COMMISSION
RESOLUTION PC 20 05 CUP 01

A PHASE 2 SITE INVESTIGATION REPORT AND ASSOCIATED CONDITIONAL USE PERMIT, FOR EXCAVATION AND BANK STABILIZATION ON THE SITE OF A PLANNED UNIT DEVELOPMENT IN THE HIGH DENSITY DISTRICT.

WHEREAS, application was made by Josh Shafer, on behalf of Stonewood Construction and Corvallis Neighborhood Housing Services dba DevNW, for a Conditional Use Permit required by FCC 10-7-7, FCC 10-1-1-4, FCC 10-1-1-6-3, FCC 10-4-4, and

WHEREAS, the Planning Commission/Design Review Board met in a public hearing on February 25, 2020, as outlined in Florence City Code 10-1-1-6-3, to consider the application, evidence in the record, and testimony received, and

WHEREAS, the Planning Commission of the City of Florence, per FCC 10-1-1-6-3 and FCC 10-4-5 finds, based on the Findings of Fact, application, staff recommendation, evidence and testimony presented to them, that the application meets the applicable criteria through compliance with certain Conditions of Approval.

NOW THEREFORE BE IT RESOLVED that the Planning Commission of the City of Florence finds, based on the Findings of Fact and the evidence in record that:

The request for a conditional use permit and Phase 2 Site Investigation review to excavate and stabilize the sloped embankment on the site for a proposed Planned Unit Development at 15th and Nopal Streets, in the High Density District, meets the applicable criteria in Florence City Code with the conditions of approval as listed below.

Conditions of Approval:

The application, as presented, meets or can meet applicable City codes and requirements, provided that the following conditions of approval are met.

1. Approval for shall be shown on:

"A"	Findings of Fact
"B"	Application
"C"	Phase 2 Site Investigation Report
"D"	Site Map
"E"	Vegetation Clearing Area Map
"F"	Geotechnical Report
"G"	Resolutions PC 19 22 PUD 03, 19 23 SUB 04 and 19 25 CUP 08
"H"	2019 Oregon Structural Specialty Code, Appendix J, Grading
"I"	ODOT Standard Detail RD1055
"J"	DOGAMI 2013 Landslide Susceptibility Map
"K"	Testimony: Civil West Engineering
"L"	Reference Testimony: Jonathan Hornung
"M"	Phase 1 Site Investigation Report

Findings of Fact attached as Exhibit "A" are incorporated by reference and adopted in support of this decision.

1. Any modifications to the approved plans or changes of use, except those changes relating to Building Codes, will require approval by the Community Development Director or Planning Commission/Design Review Board.

2. Regardless of the content of material presented, including application text and exhibits, staff reports, testimony and/or discussions, the applicant agrees to comply with all regulations and requirements of the Florence City Code which are current on this date, EXCEPT where variance or deviation from such regulations and requirements has been specifically approved by formal Planning Commission action as documented by the records of this decision and/or the associated Conditions of Approval. The applicant shall submit to the Community Development Department a signed "Agreement of Acceptance" of all conditions of approval prior to issuance of a building permit.

3. Upon encountering any cultural or historic resources during construction, the applicant shall immediately contact the State Historic Preservation Office and the Confederated Tribes of Coos, Lower Umpqua, and Siuslaw Indians. Construction shall cease immediately and shall not continue until permitted by either a SHPO or CTCLUSI representative.

4. The applicant shall follow the recommendations provided by Branch Engineering in their Geotechnical Report dated February 5, 2020 (Exhibit F), including recommendations related to oversight and any subsequent direction by Branch resulting from that oversight.

5. An on-site storm drainage system shall be engineered for this project, and approved by the City prior to issuance of a building permit or construction of parking and access drives.

6. If excavations do encounter the static water table, excavation shall cease and Florence Public Works shall be notified. Resulting dewatering measures (such as utility installation below the water table elevation) shall be approved by the Florence Public Works prior to commencing excavation.

7. The applicant shall submit a grading and erosion plan (bank stabilization plan), including (a) a timeline which incorporates removal, fill, revegetation, irrigation, and drainage plans, and (b) the methodology for devising the plan. This grading and erosion plan shall be submitted prior to any site disturbance.

8. The applicant shall furnish cost estimates and post a performance bond in that amount with the City, to accomplish the proposed excavation and stabilization.

9. The applicant shall include in the Covenants, Conditions and Restrictions for the development that the developer shall be responsible for long range vegetation and maintenance of the bank. (This is in addition to Condition 9 of Resolutions PC 19 22 PUD 03, 19 23 SUB 04 and 19 25 CUP 08, which states, "The applicant shall be required to submit a copy of the Covenants, Conditions and Restrictions for the development prior to the issuance of any relevant building permits. The developer shall be responsible for the maintenance of the common space areas.")

10. The property owner shall record a Covenant of Release which outlines the hazard, restrictions and/or conditions that apply to the property and shall state, "The applicant recognizes and accepts that this approval is strictly limited to a determination that the project as described and conditioned herein meets the land use provisions and development standards of the City Code and Comprehensive Plan current as of this

date. This approval makes no judgment or guarantee as to the functional or structural adequacy, suitability for purpose, safety, maintainability, or useful service life of the project."

ADOPTED BY THE FLORENCE PLANNING COMMISSION/DESIGN REVIEW BOARD the 26th day of February, 2020

2-27-20

Phil Tarvin, Vice Chairperson
Florence Planning Commission

February 27, 2020

From:	Wendy Farley-Campbell
To:	Chuck Trent
Cc:	Larry Martindale; Pixie Center; Patrick Bennett; Nancy Pearson; Michael Pearson; Eddie Osorio; Kristen Goodman - Christensen; Jimmie Zinn; Laurie Green; Joe Henry; Tom Turner; John Pitcher; Erin Reynolds; Megan Messmer; Roxanne Johnston; Mike Miller
Subject:	RE: WRITTEN TESTIMONY On DEVNW Airport Road Final Development Plan
Date:	Tuesday, June 02, 2020 12:43:42 PM
Attachments:	image001.png image003.png

Chuck,

Good afternoon. I'm writing to follow-up with you regarding the Boy's and Girl's Club concerns about safety with the adjacent development and surrounding area. I have the following updates provided from Public Works, Police and the Developer:

Site security: Police are increasing their patrol of the area and also will respond to call-outs about climbing on the construction equipment. They typically do not patrol for trespass but rather criminal activity such as vandalism and theft. The contractor is/has securing the area/equipment with additional construction netting. The City will require more or different fencing if safety continues to be a concern.

Speeding: The speed limit is 25 MPH. The type of construction does not qualify for a construction zone with reduced speed limit nor does the area fit the ORS definition to make the street a school zone. Even if it did meet the definition an engineering study would need to provide the data and illustrate the needs to make the change. Public Works will deploy a speed trailer and Police will patrol for speeding in this area. PW is looking into various traffic calming devices for Airport Rd. such as median circles or islands. These provide visual clues that the street is narrow and encourage slower speeds.

Street Lighting: There are already street lights at each of the intersections in the area as required. PW requested Central Lincoln PUD delimb/trim the trees so that the light at the alley between the B&G Club and the green building will be more productive to illuminating the area. Additionally, PW made a request to CLPUD to install another street light on the pole to the left of the B&G Club driveway.

Pedestrian Activated Light: This type of traffic signal requires certain conditions to be met prior to installation. The conditions related to sight lines and traffic demand do not lend themselves to placement at this time.

Thank you again for your comments Chuck. Please let me know if you have additional thoughts.

Regards,

Wendy FarleyCampbell
Planning Director | City of Florence
O: 541.997.8237

From: Wendy Farley-Campbell
Sent: Friday, May 22, 2020 11:41 AM
To: 'Chuck Trent' <ctrent@bgcwlc.org>
Cc: Larry Martindale <larrymartindale30@gmail.com>; Pixie Center <pixiecenter@outlook.com>; Patrick

Exhibit P

Bennett <pat@pebennettco.com>; Nancy Pearson <nancymacp66@gmail.com>; Michael Pearson <jmichael313@gmail.com>; Eddie Osorio <daman39iz@gmail.com>; Kristen Goodman - Christensen <Kristen.gh@gmail.com>; Jimmie Zinn <jimmie.zinn@gmail.com>; Laurie Green <geofizz56@gmail.com>; Joe Henry <joe.henry@ci.florence.or.us>
Subject: RE: WRITTEN TESTIMONY On DEVNW Airport Road Final Development Plan

Good morning Chuck,

Thank you for your testimony. It has been added to the record for the hearing.

Your email was also forwarded to Public Works and Police for comment as some of those items they act /comment on and cannot be addressed by the current DevNW proposal. These are the speed limit and rapid flashing beacon crossing. The street light was discussed at the last hearing so I need to see what Mike's comments were. The fencing is likely in progress by the contractor who has over the last day or two received reports of the on-site activity you mentioned. When I was there a couple of evenings ago there were two children around 4 yrs old playing on the dirt mound.

Thank you again. Hope you have an enjoyable weekend.

Wendy FarleyCampbell
Planning Director | City of Florence
O: 541.997.8237

From: Chuck Trent <ctrent@bgcwlc.org>
Sent: Friday, May 22, 2020 10:40 AM
To: Wendy Farley-Campbell <wendy.farleycampbell@ci.florence.or.us>
Cc: Larry Martindale <larrymartindale30@gmail.com>; Pixie Center <pixiecenter@outlook.com>; Patrick Bennett <pat@pebennettco.com>; Nancy Pearson <nancymacp66@gmail.com>; Michael Pearson <jmichael313@gmail.com>; Eddie Osorio <daman39iz@gmail.com>; Kristen Goodman - Christensen <Kristen.gh@gmail.com>; Jimmie Zinn <jimmie.zinn@gmail.com>; Laurie Green <geofizz56@gmail.com>; Joe Henry <joe.henry@ci.florence.or.us>
Subject: WRITTEN TESTIMONY On DEVNW Airport Road Final Development Plan

Good morning Wendy,

I received the notice of public hearing on the DevNW Development across the street from the Boys & Girls Club. While the Boys & Girls Club Board of Directors and I strongly support the development, I have a few serious concerns that I would like to make sure gets addressed in the overall development plan:

1. The construction site needs to have a chain-link fence or some other significant barrier to keep children out of the construction site after the crew is done for the day. Almost every day, I see young children as young as 8 or 9 playing in and around the construction equipment and in and around the excavation. The orange netting currently surrounding the construction site is not a safety barrier to keep the children from across the street from

playing in the construction site.

2. As I previously requested, I'd like to make sure that there is adequate street lighting in and around the development because the number of children riding bikes and walking in and around the area during dusk hours and early morning waiting for the school bus
3. As this development puts additional traffic on the street, with the number of children that will be in this development as well as those in the nearby vicinty, it is imperative to install a crosswalk with blinking lights of some kind to protect the children that frequently cross the street going to and from school buses and crossing the street to and from the Boys & Girls Club. We often times have 40 – 50 teens at the Teen Center and many live in and around this development. Many across the street from the CLUB. We already have a problem with cars that travel significantly over the speed limit on the long stretch of 15th/Airport Road.
4. Make a stretch of this road between the development and the Boys & Girls Club a 20 mile an hour zone and treat as if were a school zone

Again, while we support the development and are looking forward to working with them, adequate measures need to be taken to protect the children in this neighborhood. I have personally witnessed a number of very close encounters between a vehicle and a child or child on a bike. I urge the developer and the City Planning Council to make adequate provisions to the development plan to protect the children in the community.

Thank you for your consideration,

Sincerely,

Chuck Trent

Chuck Trent
Executive Director
Boys & Girls Clubs of Western Lane County
541-902-0304
Ctrent@bgcwlc.org
www.bgcwlc.org

DevNW Airport Road

PC 20 16 SUB 02 & PC 20 17 PUD 02

Planning Staff Conditions Checklist for June 9, 2020 PC meeting

Checklist for: Resolutions PC 19 22 PUD 03, PC 19 23 SUB 04, and PC 19 25 CUP 08; and Resolution PC 20 05 CUP 01

1. **Any modifications to the approved plans or changes of use, except those changes relating to Building Codes, will require approval by the Community Development Director or Planning Commission/Design Review Board.**

2. **Regardless of the content of material presented, including application text and exhibits, staff reports, testimony and/or discussions, the applicant agrees to comply with all regulations and requirements of the Florence City Code which are current on this date, EXCEPT where variance or deviation from such regulations and requirements has been specifically approved by formal Planning Commission action as documented by the records of this decision and/or the associated Conditions of Approval. The applicant shall submit to the Community Development Department a signed "Agreement of Acceptance" of all conditions of approval prior to issuance of a building permit.**

3. **Upon encountering any cultural or historic resources during construction, the applicant shall immediately contact the State Historic Preservation Office and the Confederated Tribes of Coos, Lower Umpqua, and Siuslaw Indians. Construction shall cease immediately and shall not continue until permitted by either a SHPO or CTCLUSI representative.**

Sheet C1 of the final PUD plans draft notes language under for Condition 3, above, under 'General Notes," (Exhibit "C").

Title 10, Chapter 4, Conditional Uses

4. **The applicant shall be required to construct a fence spanning from the northwestern corner of Lot 1, along the 15th Street frontage, ending at the northeastern corner of Lot 5. The proposed design of the fence shall meet the requirements of 10-34-5, the details of which shall be included on the site plan or another document submitted to the Florence Planning Department prior to approval of the final PUD.**

The final PUD plans submitted May 11, 2020 indicates that this fencing construction plan has been added, (Exhibit "C", Sheet C2). This condition has been met.

Title 10, Chapter 7, Special Development Standards

5. **The applicant shall be required to submit a Phase 2 Site Evaluation Report, a geotechnical report, and a detailed bank stabilization plan prior to receiving any relevant building permit.**

Exhibit Q

This report and plans were conditionally approved on February 25th, 2020 as CUP 20 05 CUP 01. This condition has been met; some of the conditions are still outstanding and have been addressed in the Findings of Fact for the June 9, 2020 Planning Commission meeting.

Title 10, Chapter 13, Multi-Family Residential District

6. The applicant shall maintain a 10-foot vegetated buffer along the south-western perimeter of the development (from the trash enclosure to the 15th Street entrance).

The applicant has proposed a vegetated buffer on Sheet C2 of the final PUD plans. However, this sheet mentions that the Landscape Plan addresses this area. The Landscape Plan does not show how this area will be planted nor irrigated and needs to be addressed, [Condition 4 of the June 9, 2020 Finding of Fact, Exhibit "A"].

7. The minimum vision clearance at the proposed driveway entrances shall be 10 feet.

The final PUD plans indicate that minimum vision clearance has been addressed. This condition has been met and is shown on Sheet C2 of the plans.

8. There are currently no new parking signs proposed along the 15th Street frontage. Should a parking lane be installed along 15th Street, the applicant shall remove those signs. The applicant is not proposing a parking lane along 15th St. and has removed the signage. The City's future plans to widen 15th St. have not yet been scheduled. Widening could change how utility infrastructure is placed in the future. This condition is met.

Title 10, Chapter 23, Planned Unit Developments

9. The applicant shall be required to submit a copy of the Covenants, Conditions and Restrictions for the development prior to the issuance of any relevant building permits. The developer shall be responsible for the maintenance of the common space areas.

The applicant submitted a draft of the CC&R's on May 11, 2020, (Exhibit "E"). All easements and responsibilities for maintenance has been noted; but will need amending to include responsibility for maintenance of the public stormwater facility that the development will be using, [Condition

10. The applicant shall submit a development schedule that meets the criteria of 10-23-10-5, prior to the approval of the final PUD and subdivision plat.

A development schedule was submitted May 11, 2020, (Exhibit "F"). This condition has been met.

11. By November 26, 2020, the applicant shall file with the Planning Commission a final development plan containing in final form the information required in the preliminary plan, or a request for extension.

The applicant is not seeking an extension and filed a final PUD plan on May 11, 2020. This condition has been met.

Title 10, Chapter 34, Landscaping

12. The applicant shall update their landscaping plan to include the species, sizes and locations throughout the development, including in the proposed rain gardens and parking areas.

A Landscape Plan was submitted May 11, 2020, (Exhibit “K”). This condition has been met.

13. Specifications for soil at time of planting, irrigation and anticipated planting schedule shall be furnished by the applicant prior to any site disturbance, final PUD, final plat, and/or with each associated building permit.

A Landscape Plan was submitted May 11, 2020 (Exhibit “K”), and these specifications have been noted on the Plan. This condition has been met but note Condition 4 in the June 9, 2020 Planning Commission Findings (Exhibit “A”).

14. An irrigation plan is required prior to final PUD approval.

The Landscape Plan submitted May 11, 2020 addresses irrigation, (Exhibit “K”). Condition 4 in Exhibit “A” of the June 9, 2020 PC packet was created to address an omission. Since the Plan has been submitted, this condition (Condition 14) has been met.

15. The landscaping plan shall detail the location and species of each of the three trees required throughout the parking lot: 1 at the 15th Street entrance, 1 near the trash enclosure, and 1 along the Nopal entrance. ‘

The Landscape Plan submitted May 11, 2020 shows the required placement of trees. This condition has been met.

Title 10, Chapter 35, Access and Circulation

16. The applicant shall be required to obtain a Construction Permit in Right-of-Way prior to their construction of their access to and improvements of 15th Street.

The applicant has submitted this permit, (Exhibit “L”) in the Findings of Fact, Exhibit “A” for the June 9, 2020 Planning Commission meeting.

17. The applicant shall include an easement for joint use of the proposed driveway and parking lot on the Tentative Subdivision Plat.

The final PUD plans reflects this easement in what the final plat draft has labeled “Tract B.” Tract B is to be the driveway that with the Planning Commission’s approval on June 9, 2020, will be named “Murrelet Lane,” (Condition 6 of the June 9, 2020 PC meeting packet). Additionally, the Declaration block on the plat draft publicly dedicates this easement, Exhibit “D” of the same packet). This condition has been met.

18. Driveway approaches shall receive a Right of Way Excavation Work Permit prior to construction.

The applicant has submitted this permit, (Exhibit “L”). Exhibit “L” can be found in the Findings of Fact, Exhibit “A” for the June 9, 2020 Planning Commission meeting.

19. The applicant shall widen the proposed driveway to 23 feet in areas adjoining parking stalls.

The final plat shows that the area of the proposed driveway (Tract B) has been widened, (Exhibit “D”. This condition has been met.

20. The applicant shall obtain a Right of Way Excavation Work Permit prior to sidewalk construction.

The applicant has submitted this permit, (Exhibit "L") in the Findings of Fact, Exhibit "A" for the June 9, 2020 Planning Commission meeting. The application was approved by the Public Works Director. This condition has been met.

Title 10, Chapter 36, Public Facilities

21. In conjunction with the approval of the final plat, the Planning Commission shall determine whether the applicant shall either: (1) enter into a non-remonstrance agreement, consenting to financial participation and granting of easements as needed for future improvements to the section of 15th Street adjacent to DevNW Airport Road, (2) complete a half-street improvement of the same section of 15th Street, widening it 2 feet 2 inches (to meet the criteria of a Collector, No Parking), or (3) complete a half-street improvement of the same section of 15th Street, widening 4 feet 2 inches and installing a parking strip pullout (to meet the criteria of Collector, On Street Parking).

The final PUD plans have been revised to show widening of Airport Rd/15th St by an additional 2 feet 2 inches as Option 2 of this Condition. The City plans to widen 15th St., but this has not yet been scheduled nor budgeted. The applicant met with (2) listed in the criteria, above.

22. Should a parking lane be installed along 15th Street, the applicant shall update the site plan and signage plan accordingly.

No parking plans along Airport Rd/15th St. have been proposed with the final PUD plans. The signage has been removed. See explanation in 21. This condition has been met.

23. The applicant shall submit a plan for mail boxes, approved by the United States Postal Service, prior to the issuance of any building permits for residential structures.

Applicant references communication with Building Department discussing that addresses must first be assigned before this condition can be met. The addresses have been assigned and the mailbox noted on Sheet C3's Legend; however, staff was unable to confirm its location on the plans. Furthermore, the applicant shall coordinate placement of the mailboxes with the United States Postal Service, [Condition 9].

24. The sanitary sewer manhole located within the 15 foot public sewer easement must be accessible, for the City to maintain and service the system (the City must be able to drive up to the manhole, set up its combination sewer cleaner over the manhole, and set up its TVI equipment). The applicant shall relocate the manhole as far to the west of its proposed location as grade and cover standards will allow, while simultaneously providing for sufficient access.

The final PUD plans indicate that this has been done and can be found within Tract A immediately east of the ADA parking ramp and shown on Sheet C2 of Exhibit "C". The plans also show that the easement has been widened to 20'. This condition has been met.

25. The applicant shall increase the width of the proposed public sewer easement from 15 to 20 feet, except where adjacent to the house on Lot 6, and center the public sanitary sewer line in the easement.

26. There appears to be an irrigation water meter located in a concrete pad location north west of Lot 12 (just outside of the parking area).

27. The applicant shall relocate the irrigation water meter to the east of the bicycle parking area.

The final PUD plans indicate that Conditions 25, 26 and 27 have been addressed, (Exhibit "C" Sheet C2). These conditions have been met.

28. The water meter shall be located in a landscaped area, not in hardscape areas.

The final PUD plans indicate that this has been done, (Exhibit "C" Sheet C2). This condition has been met.

29. On Nopal Street towards the existing fire turn around (the future street stub that the proposed development will be utilizing) there is an existing water service. The applicant shall verify the location of the water service, and utilize it for one of the proposed homes if possible.

The final PUD plans indicate that this has been done. This condition has been met.

30. On 15th Street, there are two existing water services. If they cannot be utilized for the project, the applicant shall properly abandon them.

The applicant indicates that these revisions are shown in the final PUD plan set and the Public Works Director confirmed that these will be used. This condition has been met

31. The proposed connection to the existing water main on 15th Street, to loop the water system, shall be a cut-in connection complete with three water valves in a 'T' configuration. The existing water main in 15th Street is a 6-inch water main, so the connection will need to allow for an 8-inch water main connection and the new 8-inch extending to the south of the proposed fire hydrant, then reduce to 6-inch to continue the water system to the south with connection to the existing water main that is stubbed from Nopal Street.

Field investigations for this has changed. What is currently on the plans is not reflective of the final changes and they will be noted on the as-built drawings. The proposed fire hydrant is in the correct location, but will be connected to a new 'T' that will be cut into the existing water main. From that point continuing to the east to the connection for the water main that loops through the development, the contractor will re-section the water main in order to remove a cross and install a new 'T' and the valve cluster (the three water main line valves), [Condition 11].

32. Locate and cap the two existing sanitary sewer laterals that serviced the former Senior Center and the undeveloped area to the east.

The final PUD plans shall provide for this condition, [Condition 7].

33. A grading plan and erosion control plan shall be submitted prior to site disturbance or construction in the right-of-way. It shall meet the standards of the Portland Erosion and Sediment Control Manual.

The applicant has submitted the plan as a 1200C permit with the Department of Environmental Quality who approved the plan on February 7, 2020 under Permit Number 33493. This condition has been met.

34. The applicant shall grant a 20-foot waterline easement along the driveway/parking lot, from Nopal Street to 15th Street, for the 6-inch water main.

The final PUD plans reflects this easement in what the final plat draft has labeled "Tract B." Tract B is to be the driveway that with the Planning Commission's approval on June 9, 2020, will be named "Murrelet Lane." Additionally, the Declaration block on the plat draft publicly dedicates this easement. This condition has been met.

Title 10, Chapter 37, Lighting

35. Locations for general site lighting are shown on the landscape and site plans. A photometric plan shall be submitted and approved prior to the issuance of any relevant building permit(s), and parking lot construction.

The lighting plan submitted on May 11, 2020 and shown in Sheet 1/1Exhibit "C" shows that lighting spills onto neighboring properties. These need to be amended to keep lighting internal to the project, [Condition 8].

Title 11, Chapter 3, Major Partition, Tentative Plan Procedure

36. The applicant shall revise their subdivision plat to include existing and proposed easements, including their exact locations and dimensions, prior to approval of the final plat.

The final plat draft reflects these changes. These requirements have been met.

37. Lot A shall be renamed on the plat as "Tract A;" it is not a legal lot.

The final plat draft reflects this change. This condition has been met.

38. Tract A shall be divided into multiple tracts on the plat, to delineate the areas which are common ownership and the areas which are open space.

The final subdivision plat labels Tract A and identifies utility and pedestrian easements for the tract in the Declaration block, Exhibit "D". Common areas and open space need to be added to the final plat draft, [Condition 10].

Title 11, Chapter 5, Platting and Mapping Standards

39. Final construction plans and utility facility specifications are required to be submitted for City review and approval prior to commencing construction. Stamped approval will be shown on the utility plans.

Final construction plans were submitted electronically and will be approved and stamped after any necessary changes/amendments, if needed, are made and before construction. Additionally,

the draft of these final construction plans was approved by the Planning Commission on June 9, 2020.

Title 9, Chapter 5, Stormwater Management

40. If the Nopal Street public swale is to be used for private stormwater originating from the project site (as opposed to surface drainage only, as stipulated in the 2009 approved stormwater plan), the 2019 stormwater plan shall be modified to address the discrepancy between the 2009 and 2019 plans. And the Nopal Street swale shall be improved to meet current qualitative treatment standards (plantings) and, if needed, quantitative standards (to handle flow).

The applicant submitted an updated Stormwater Report on 5/11/2020, Exhibit "G" of the June 9, 2020 Planning Commission packet. There was a concern on how private gutter rainwater would be handled. This question is outlined in an email by the Public Works Director and the applicant dated June 2, 2020. The response by the Director of Public Works is for the applicant to provide a memorandum of understanding for the maintenance of the surface and subsurface facilities- instead of a depressed swale, the area between the sidewalk and back of curb will be a level planter strip. He also added that due care is to be made so the water main is not compromised, (Exhibit "R"), [Condition 5].

Conditions from PC 20 05 CUP 01

1. Any modifications to the approved plans or changes of use, except those changes relating to Building Codes, will require approval by the Community Development Director or Planning Commission/Design Review Board.

2. Regardless of the content of material presented, including application text and exhibits, staff reports, testimony and/or discussions, the applicant agrees to comply with all regulations and requirements of the Florence City Code which are current on this date, EXCEPT where variance or deviation from such regulations and requirements has been specifically approved by formal Planning Commission action as documented by the records of this decision and/or the associated Conditions of Approval. The applicant shall submit to the Community Development Department a signed "Agreement of Acceptance" of all conditions of approval prior to issuance of a building permit.

3. Upon encountering any cultural or historic resources during construction, the applicant shall immediately contact the State Historic Preservation Office and the Confederated Tribes of Coos, Lower Umpqua, and Siuslaw Indians. Construction shall cease immediately and shall not continue until permitted by either a SHPO or CTCLUSI representative.

Sheet C1 of the final PUD plans recognizes this condition. This condition has been met.

4. The applicant shall follow the recommendations provided by Branch Engineering in their Geotechnical Report dated February 5, 2020 (Exhibit "T" of June 9, 2020 Planning Commission packet), including recommendations related to oversight and any subsequent direction by Branch resulting from that oversight.

These recommendations have been met and modified as needed. This condition has been met.

5. **An on-site storm drainage system shall be engineered for this project, and approved by the City prior to issuance of a building permit or construction of parking and access drives.**

   The applicant submitted storm drainage plans on May 11, 2020. The Planning Commission meeting for the application packet is June 9, 2020. This condition has been met.

6. **If excavations do encounter the static water table, excavation shall cease and Florence Public Works shall be notified. Resulting dewatering measures (such as utility installation below the water table elevation) shall be approved by the Florence Public Works prior to commencing excavation.**

   This condition, which serves more of a notice, explains steps to take if the static water table were encountered during excavation.

7. **The applicant shall submit a grading and erosion plan (bank stabilization plan), including (a) a timeline which incorporates removal, fill, revegetation, irrigation, and drainage plans, and (b) the methodology for devising the plan. This grading and erosion plan shall be submitted prior to any site disturbance.**

   The applicant has provided a Site Improvements Erosion and Sediment Control Plan on May 11, 2020 and shown in Exhibit "H" of the June 9, 2020 Planning commission packet. This condition has been met; however, an important note is that Tract C contains a slope which a prior plan (Exhibit F in the February 2020 Resolution for PC 20 05 CUP 01) recommended vegetation for to stabilize the slope. Condition 4 addresses this requirement.

8. **The applicant shall furnish cost estimates and post a performance bond in that amount with the City, to accomplish the proposed excavation and stabilization.**
   The estimated cost provided by the contractor ranges from $50,000 to $55,000 not including clearing and grubbing per the Public Works Director. This condition has been met.

9. **The applicant shall include in the Covenants, Conditions and Restrictions for the development that the developer shall be responsible for long range vegetation and maintenance of the bank. (This is in addition to Condition 9 of Resolutions PC 19 22 PUD 03, 19 23 SUB 04 and 19 25 CUP 08, which states, "The applicant shall be required to submit a copy of the Covenants, Conditions and Restrictions for the development prior to the issuance of any relevant building permits. The developer shall be responsible for the maintenance of the common space areas.")**

   The applicant provided a copy of the CC&R's on May 11, 2020. Maintenance was addressed therein. (Exhibit "E" of June 9, 2020 Planning Commission meeting). This condition has been met.

10. The property owner shall record a Covenant of Release which outlines the hazard, restrictions and/or conditions that apply to the property and shall state, "The applicant recognizes and accepts that this approval is strictly limited to a determination that the project as described and conditioned herein meets the land use provisions and development standards of the City Code and Comprehensive Plan current as of this date. This approval makes no judgment or guarantee as to the functional or structural adequacy, suitability for purpose, safety, maintainability, or useful service life of the project."

The applicant provided a copy of the CC&R's on May 11, 2020. Maintenance was addressed therein. This condition has been met, (Exhibit "E" of June 9, 2020 Planning Commission meeting).

Roxanne Johnston

From: Mike Miller
Sent: Tuesday, June 02, 2020 10:53 AM
To: Roxanne Johnston
Cc: Wendy Farley-Campbell
Subject: RE: DevNW questions

Howdy Roxanne,

Yes, we have received, reviewed and approved the plans for the public improvements.

On the approved plans, they proposed a stormwater facility along the Airport Road frontage to handle both street runoff and their private roof drain runoff. However, the existing water main is very shallow and conflicts with the planned stormwater facility. We determined that it was in the best interests of the developer and the City to not require the relocation of the water main at this time. In the City's 20-year capital improvement plan the existing 6-inch water main will be replaced with a 12-inch water main. Again, that will take place sometime in the next 20 years. The change will be noted on the as-built plans and will not require additional revisions to the public improvement plans.

What we agreed to was the elimination of the stormwater treatment facility (the portion that would have treated the stormwater runoff from the street) and continue to allow the stormwater to run along the gutter line and enter the storm system as it does today. The sidewalk will remain property tight (the back of sidewalk at the property line) with a planter strip between the sidewalk and back of curb. We will have them enter into a private use of pubic right-of-way agreement to locate their roof drain infiltration systems within that area. In the future that may need to change if Airport is fully widened to allow on-street parking.

Please let me know if you have any other questions.

Thanks!

Mike

Exhibit R

Branch ENGINEERING inc
Since 1977
civil · transportation
structural · geotechnical
SURVEYING

February 5, 2020

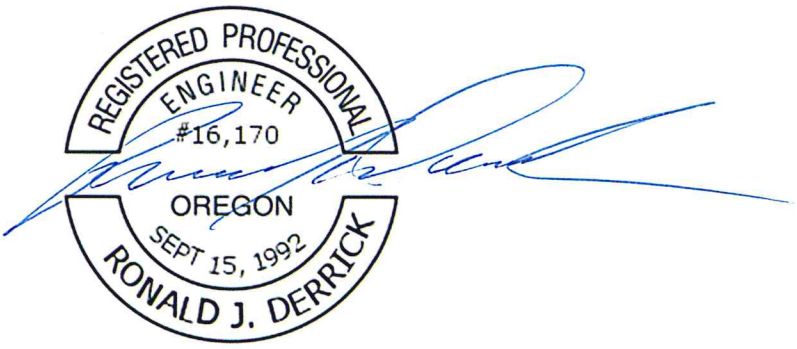
Erin Dey
DevNW Airport Road PUD
Via Email: erin.dey@devnw.org

RE: GEOTECHNICAL ENGINEERING RECOMMENDATIONS AND SITE EVALUATION
DEVNW AIRPORT ROAD PUD
AIRPORT ROAD AND NOPAL STREET
FLORENCE, OREGON
BRANCH ENGINEERING INC. PROJECT NO. 18-493

Pursuant to your authorization Branch Engineering Inc. (BEI) performed a geotechnical engineering investigation at the subject site for the proposed development of a multi-family residential subdivision.

On January 24, 2020 five (5) exploratory test pits were advanced using a metal tracked excavator to a maximum depth of 6.7-feet below ground surface (BGS), and the subsurface soil conditions in the test pits were logged in accordance the USCS (Unified Soil Classification System) ASTM D2488. Four (4) falling head infiltration tests were previously performed by BEI on January 24, 2019. The accompanying report presents the results of our site research, field exploration and testing, data analysis, our conclusions and geotechnical engineering recommendations for the project. The site is suitable for the planned development, provided the recommendations of this report are implemented in the design and construction of the project.

Sincerely,
Branch Engineering Inc.



EXPIRES: 12/31/2021

Ronald J. Derrick, P.E., G.E.
Principal Geotechnical Engineer

Exhibit S/F

TABLE OF CONTENTS

1.0 INTRODUCTION

The subject site is located on the southwest corner of the intersection between Airport Road and Nopal Street, at latitude 43.978802° north and longitude 124.105754° west. The site is a single lot 1.73 acres in size. The northwestern portion of the property has some minor improvements including a paved parking area, with a fenced garden area.

This report presents the results and findings of Branch Engineering, Inc. (BEI) field observations, testing, and research for the subject site. Our investigation included the evaluation of the subsurface conditions at the site to provide geotechnical recommendations for the design and construction of proposed residential buildings and site improvements for access and parking.

1.1 Project and Site Description

Our understanding of the project is a residential development consisting of detached housing units with associated site improvements such as utility installation, paved access roads, and parking is proposed. Access to the site is expected to be taken from Airport Road with a through drive aisle connecting to Nopal Street. The site is surrounded by single-family residential development with Airport Road trending east-west along the northern perimeter of the site. Miller Park is located approximately 500 feet to the North of the site.

At the time of our visit the site surface was covered with vegetation consisting of scattered shore pines, salal, rhododendrons, and other vegetation typical of the Oregon Coast dune ecology. Two former driveways, or pathways were used to access the interior of the site. Review of historical photos available from Google Earth ™ indicate that in the 1990's through the early 2000's the site was used as a Senior Center. During our site visit we observed several areas of debris indicating the site has been used as an unauthorized camp site. Water and wastewater pipes from the former Senior Center were observed in various locations on the site. Areas of undocumented sand fill are also likely to be encountered during site clearing activities.

The northwestern site topography is relatively flat, with elevations ranging from 48-feet to 55-feet above sea level. The southern portion of the site beginning between 60- and 100- feet from the northwest property line consists of a vegetated dune that measures approximately 75-feet to 80-feet above sea level at its peak. There is also a retaining wall 20-feet from the northwest property line that supports the former building pad.

1.2 Scope of Work

Our scope of work included a site reconnaissance and subsurface investigation on January 24, 2020. Five (5) exploratory test pits were advanced at the locations shown on the attached Figure-1 Site Exploration Map with the observed soil stratigraphy classified in accordance with the American Society of Testing and Materials (ASTM) Method D-2488. A portable dynamic cone penetrometer which consists of graduated steel rods driven into the soil by dropping a 35-lb slide hammer a vertical distance of 18-inches was used to assess the consistency of the site soil at select locations and depths in the test pits.

In addition to the exploratory test pits, four (4) Enclosed Falling Head Infiltration Tests were performed by BEI on January 24, 2019 at the locations shown on the attached Figure-1 with results summarized below and field data attached.

Field log summaries of the site exploratory test pits, including field test results, are presented in Appendix A. Also included in Appendix A are copies of nearby well logs from the Oregon Department of Water Resources on-line database, and the soil survey mapping of the site. Field and laboratory test results are summarized on the test pit log summaries.

1.3 Site Information Resources

The following site investigation activities were performed and literature resources were reviewed for pertinent site information:

- Review of the United States Department of the Interior Geological Survey (USGS) 2017 Mercer Lake, Oregon Quadrangle Map and the 2017 Florence, OR Quadrangle Map.
- Five exploratory test pits were advanced to a maximum depth of 6.7-feet below ground surface (BGS), and four Falling Head Infiltration Tests were performed on the site at the approximate locations shown on Figure-1.
- Review of the Lane County area Web Soil Survey, United States Department of Agricultural (USDA) Natural Resources Conservation Service (NRCS), see Appendix A.
- Review of the USGS Geologic Map of Oregon, (USGS 1991, Walker & MacLeod).
- Review of Oregon Department of Water Resources Well Logs from nearby locations, see Appendix A.
- Review of DOGAMI online hazard view for the subject site vicinity.

2.0 SITE SUBSURFACE CONDITIONS

The analyses, conclusions and recommendations contained in this report are based on site conditions as they presently exist and assume the exploratory test pit excavation, presented in Appendix A, are representative of the subsurface conditions throughout the site. If, during construction, subsurface conditions differ from those encountered in the exploratory test pits; BEI requests that we be informed to review the site conditions and adjust our recommendations, if necessary.

2.1 Site Soils

The NRCS Web Soil Survey maps two soil units across the site area; Waldport fine sand, 0 to 12 percent slopes and Waldport fine sand, 12-30 percent slopes are mapped across the entirety of the site area. Both soil units are described as well drained fine grain eolian sand.

In the exploratory test pits, loose to medium dense, tan, moist, fine grain sand was observed underlying existing topsoil, or root zones. Sidewall caving was observed as excavation depths increased below approximately 3-feet to 5-feet BGS. Test Pit 5 deviated from the other test pits

due to it being just above the retaining wall. The first 4.9 feet consisted of fill with the top 0.5' being ¾"-0 aggregate, followed by light brown to tan fine grain sand with some landscaping debris to a depth of 2.7 feet, and finally a brown clayey silt with reddish-brown and tan fine grain sand. The remaining soil was consistent with the other test pits found on site.

Blow counts recorded during DCP testing at depths from 3-feet to 6-feet BGS indicate a very loose to medium dense consistency of the sand.

2.2 Ground Water

No groundwater was observed in the exploratory test pits which were advanced to a maximum of 6.7-feet BGS or to about a bottom elevation of 42-feet (mean sea level) MSL. Well logs from nearby sites were obtained from the Oregon Water Resources Department and list static water levels at 8.2-feet, 9-feet and 17-feet BGS, see attached logs. Variations in the depth to water is typical in stabilized dune environments with raised dunal areas and deflation zones with water closer to the surface.

We expect that ground water levels (from the regional water table or perched lenses) will fluctuate with the seasons and should be expected to be highest during the late winter and spring months when rainstorms are more intense and frequent, and soils are near saturation.

The presence of ground water is not expected to impact the proposed development, provided the recommendations of this report are implemented in the design and construction of the project. Perched lenses of water may be encountered but impacts can be mitigated by the recommendations within this report. If excavations do encounter the static water table dewatering measures may be required for work such as utility installation below the water table elevation.

3.0 GEOLOGIC SETTING

The 1991 Geologic map of Oregon by Walker and MacLeod maps the site geology as lacustrine and fluvial sedimentary rocks. The subject site is located near the southern bend of the Siuslaw River. The dunes in the area were likely formed post ice-age during the Holocene epoch by eolian processes associated with the activity of wind. The area is mapped unconsolidated to semi-consolidated lacustrine clay, silt, sand and gravel. This includes deltaic gravel and sand and gravel bars.

The site is located on the Oregon Coast, the entire Oregon Coast is located near the Cascadia Subduction Zone, which is a zone of converging tectonic plates that historically produces major earthquake events, a depiction of the historical Subduction Zone earthquake events is shown below.

Occurrence and Relative Size of Cascadia Subduction Zone Megathrust Earthquakes

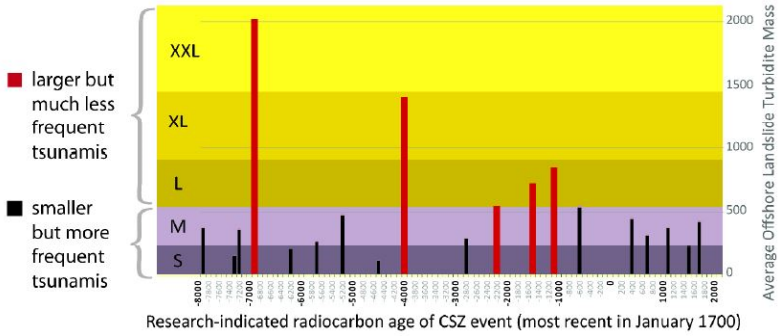


Figure 3: This chart depicts the timing, frequency, and magnitude of the last 19 great Cascadia Subduction Zone events over the past 10,000 years. The most recent event occurred on January 26, 1700. The 1700 event is considered to be a "medium sized" event. The data used to create this chart came from research that examined the many submarine landslides, known as "turbidites," that are triggered only by these great earthquakes (Witter and others, 2011). The loose correlation is "the bigger the turbidite, the bigger the earthquake."

3.1 Seismic Site Classification

Based on the soil properties encountered in our site pits and on-site well log information, Site Class D (Table 20.1-1 ASCE 7) is recommended for the medium dense sand encountered in the test pits. Pursuant to the 2019 Oregon Structural Specialty Code the following potential geologic and seismic hazards are addressed.

- Slope Instability: Our review of the online Department of Geologic and Mining Industries (DOGAMI) hazard viewer maps the area as a high possibility of landslide due to the existing topography, with no existing landslides in the vicinity of the site, or in a location that may affect the site illustrated in the landslide inventory. The existing slopes mapped as a high landslide hazard are planned to be removed or reduced as part of the proposed development. Provided the earthwork recommendations in this report are incorporated into design and construction of the project the risk of landslides impacting the site is low.

- Liquefaction: Near surface sands are loose and susceptibility to liquefaction and settlement exists if saturated at the time of a seismic event; however, based on our investigation findings and review of area well logs, it appears that the high ground water level is at least 8.5-feet below most areas of the site, at or below an elevation of 50-feet MSL. The sand at this depth becomes a medium dense consistency. Based on an anticipated lateral acceleration of 0.4g in the event of CSZ earthquake resulting in a cyclic stress ratio of 0.26 the sands within 20-feet BGS, liquefaction may occur (Boulanger & Idriss, University of California, Davis 2014) in saturated conditions; however, the risk of ground surface effects due to liquefaction are considered to be low. The potential from tsunami and ground shaking at the site in the event of a CSZ earthquake are considered to be the primary potential site impacts.

- There are no known active faults on the site, other quaternary faults are mapped in the hills approximately 9 miles east of the site, however, these faults are not known to be active. The risk of surface rupture is low.

- The proposed site grading contains no abrupt changes in ground elevation on or near the site that would present a potential for lateral spreading to occur during a seismic event;

the risk for lateral spread on the site is low, provided any embanked fill on the site is constructed per the recommendations in this report.

4.0 CONCLUSIONS

Based on our field observations, subsurface explorations, and data analyses, we conclude that the site is geologic and geotechnically suitable for the proposed development provided that the recommendations of this report are incorporated into the design and construction of the project. Our investigation did not reveal any specific site features or subsurface conditions that would impede the proposed design and construction of the project. We conclude that no further geotechnical analysis is required on the subject site for the proposed site improvements.

5.0 RECOMMENDATIONS

The following sections present site-specific recommendations and design parameters for site preparation, drainage, foundations, utility excavations, and slab/pavement design. General material and construction specifications for the items discussed herein are provided in Appendix B.

The subsurface conditions observed in our site investigation are consistent; however, our field explorations only represent a very small portion of the site. Should loose or unsuitable soils extend to a depth greater than that described herein, or areas of distinct soil variation be discovered, this office shall be notified to perform site observation and additional excavation may be required.

5.1 Site Preparation and Foundation Subgrade Requirements

The following recommendations are for earthwork in the building foundation areas, roadways, and parking areas. Earthwork shall be performed in general accordance with the standard of practice as described in Appendix J of the 2019 Oregon Structural Specialty Code and as specified in this report.

All areas intended to directly or laterally support structures or roadways shall be stripped of vegetation, organic soil, unsuitable fill, and/or other deleterious material. These stripping's shall be removed from the site or reserved for use in landscaping or non-structural areas. Once subgrade is exposed, which is expected to be loose to medium dense sand, the recommended subgrade preparation is as follows:

Foundation Subgrade Preparation
In areas of foundation footings, organic topsoil and loose sand shall be removed to consistently medium dense sand either for the placement of foundation forms or structural fill. Upon excavation to suitable subgrade, the subgrade shall be wetted and rolled with a vibratory smooth drum roller with a minimum weight of 6,500 lbs until no additional visual settlement of the subgrade is detected. Conventional strip and spread footings may be used for the foundation system of the proposed structures. Foundation footings shall be placed at least 5-feet from the competent face of downward slopes below footings.

If footings are not constructed immediately upon subgrade preparation, we recommend that the subgrade be covered with a minimum of 4-inches of compacted aggregate to mitigate wind and

water erosion. After construction of footings, the perimeter of the footings shall be protected from erosion to mitigate undermining of footings. If structural fill is required to raise subgrade elevations, the fill shall conform to the recommendations in Sections 5.2 below.

Pavement Subgrade Preparation
In areas of pavement for vehicle access or parking, we recommend that the existing vegetation, topsoil, previously placed fill, and areas of loose soil be removed to consistent subgrade material as described above. The expected depth of excavation to the subgrade material described above is approximately 12 to 16-inches which may increase to approximately 5-feet in areas of previously placed fill. Upon excavation to suitable subgrade, the subgrade shall be wetted and rolled with a vibratory smooth drum roller until no additional visual settlement of the subgrade is detected. Fill placed to raise pavement subgrade elevations shall be placed on suitable subgrade, and conform to the recommendations below. We recommend that a minimum of 8-inches of compacted aggregate be placed on the subgrade in light vehicle pavement areas. Heavy construction traffic will require additional aggregate thickness, a minimum of 12-inches, to mitigate rutting of the subgrade.

During subgrade excavation in foundation and pavement areas we recommend the Geotechnical Engineer of Record, or designated representative visit the site to observe the subgrade material prior to placement of structural fill or aggregate.

5.2 Engineered Fill Recommendations

All engineered fill placed on the site shall consist of homogenous material and shall meet the following recommendations. Clean, native sand is suitable for use as structural fill material.

- Areas of structural fill placement shall be stripped of organic material, loose soil, and subgrade approved by the Geotechnical Engineer prior to the placement of fill materials. Sloped areas in excess of 20% shall be properly keyed and benched horizontally into competent material as the fill height progresses. Proof-rolling or hand-probing of the subgrade may be required to assess competence.

- Prior to placement, fill material shall be approved by the Geotechnical Engineer. Acceptable fill shall be free of organics or other deleterious materials. The sand present on the site is acceptable for use as engineered fill upon removal of any organic material.

- The fill shall be moisture conditioned within 2% +/- of optimum moisture content and compacted in lifts with loose lift thickness not exceeding 8- inches with appropriate equipment for the fill material.

- Periodic visits to the site to verify lift thickness, source material, and compaction efforts shall be conducted by the Geotechnical Engineer or designated representative and documented.

- The recommended compaction level for engineered fill is 90% of ASHTO T-180/ASTM 1557-D (modified Proctor) unless otherwise specified. Compaction shall be measured by testing with nuclear densometer ASTM D-6938, or D-1556 sand cone method. If compaction testing by nuclear densometer is not possible due to the nature of the approved fill material, proof rolling

with a fully loaded 10 CY dump truck observed by the Geotechnical Engineer or designated representative shall be conducted.

5.3 Cut/Fill Slopes

No fill slopes are proposed. Temporary cut slopes may be excavated up to 1.5:1 (H:V) in steepness. but permanent slopes shall not exceed 2:1. All slopes shall be protected from erosion by timely placement of vegetation, or other means, and runoff should not be allowed to flow down the face of slopes.

Cut and/or fill slopes shall be no steeper than 2:1 and shall be compacted to their outer edge by either back rolling or being over built and cut to grade. All slopes shall be protected with erosion control measures and surface water shall not be allowed to drain over the top of a slope. Foundations shall be placed such that there is at least 5 lateral feet from the face of slope or outside a 1:1 plane projected from the toe of slope; whichever is greater.

5.4 Lateral Earth Pressures and Friction Coefficient

The following equivalent fluid pressure parameters can be used for design of site retaining structures that are free draining with no hydrostatic pressures or surcharge loads.

Table-1 Lateral Earth Pressures

Material	Passive Earth Pressure (Kp)*1	Active Earth Pressure (Ka)*3	At-Rest Earth Pressure (Ko)*2
Sand (Level Backfill)	250 pcf	30 pcf	45 pcf
Sand (2:1 Backfill Slope)	250 pcf	40 pcf	55 pcf

*1 – Neglect upper foot of material unless covered by footing of pavement.
*2 – For walls restrained at the top from movement
*3 – For seismic design increase Ka by 0.7 of the peak ground acceleration (PGA) and apply at 0.4H above the base of the wall, where H is the wall height.

The coefficient of friction for concrete poured neat against undisturbed or compacted sand subgrade is 0.45 and 0.5 may be used for concrete poured on a minimum of 12-inches of compacted aggregate.

5.5 Drainage & Infiltration Testing

An on-site storm drainage system is expected to be engineered for this project. Four encased falling head infiltration tests were performed on January 24, 2019. Infiltration tests were conducted with 6-inch diameter pipes set and sealed in native soil. Infiltration test locations are shown on the attached Figures 1. The recorded field test measurements are provided in Appendix A. No factor of safety has been applied to the measured rates of vertical hydraulic conductivity.

Table 2: Hydraulic Conductivity

Test Location	*Test Depth (Inches)*	*Measured Hydraulic Conductivity, k (in/hr)*
IT-1	42	58.9
IT-2	46	41.3
IT-3	70	59.6
IT-4	41	135.7

Alteration of existing grades for this project will likely change drainage patterns but should not adversely affect adjacent properties. We recommend that areas of structural fill be evaluated to ensure proper drainage away from structures is maintained. Accumulation of drainage near structural fills may result in saturation and softening of material. Final perimeter landscape grades shall slope away from the foundation and surface water shall not be allowed to pond adjacent to foundations.

5.6 Soil Bearing Capacity

Based on our site observations and review of proposed building plans, conventional spread or continuous strip footings are suitable for the proposed site development provided the building pad area preparation is in conformance with the recommendations described above in Section 5.1. The allowable bearing capacity for foundation elements placed on undisturbed sand subgrade or prepared structural fill is 1,500 psf. The allowable bearing capacity may be increased by 1/3 for short-term loading such as wind and seismic.

Additionally, if placed, structural fill should extend laterally, from all foundation edges, a minimum distance or 5-feet or within a 1:1 plane from at least 1-foot outside the edge of footing. Perimeter landscape grades shall be sloped away from all foundations and water should not be allowed to pond within 10-feet of footings.

The following recommendations shall be implemented in the design and construction of the project. Periodic site observations by a geotechnical representative of Branch Engineering, Inc. are recommended during the construction of the project. The specific phases of construction that should be observed are:

Table 3:

Recommended Construction Phases to be Observed by the Geotechnical Engineer	
Phase	*Observation*
At completion of street excavation	Subgrade observation by the geotechnical engineer before fabric and aggregate placement.
Imported fill material	Observation of material or information on material type and source.
Placement or compaction of fill material	Observation by geotechnical engineer or test results by qualified testing agency.

5.7 Settlement

The maximum building foundation loads are estimated to be less than 1.5 kip/linear foot for wall loads and/or 3 kips for column loads. Site-specific consolidation testing was not performed; however, based on soil observations and test results in similar soil conditions, the estimated total settlement at the site is not expected to exceed 0.75-inches with a differential settlement up to 0.5-inches over a span of 20 feet. The settlement estimates are based on the building load effects and area expected to occur over a short-term, generally by the time construction is completed. These settlement estimates do not account for seismic induced settlement, which may be as much as 2+ inches, but is expected to be relatively uniform across a building footprint. Foundations should be placed a minimum distance from each other to prevent overlapping of stress distributions defined as a 1:1 (H:V) slope projection from all foundation edges to a minimum depth of two (2) times the foundation width of the largest footing.

5.8 Slabs-On-Grade

After site preparation to expose suitable subgrade prepared in accordance with Section 5.1, load bearing concrete slabs shall be underlain by a compacted sand subgrade or leveling course of compacted, crushed aggregate, if necessary. A modulus of subgrade reaction of 150 pci may be used for design of slabs on approved native subgrade material or structural fill. Non-load bearing slabs or pavements do not require geotechnical design criteria; however, BEI recommends a stable subgrade to mitigate un-controlled cracks. The edges of slabs shall be protected from erosion and undermining of the slab; a vapor barrier system shall be selected by the project architect and may be dependent on slab cover materials.

5.9 Pavement Design Recommendations

The estimated California Bearing Raito (CBR) for the near surface loose sand is 2 based on blow count correlations; however, once the pavement section subgrade is exposed and compacted, the consistency of the sand can typically be increased to at least medium dense to depths of at least 3-feet thereby increasing the CBR of 8, which is a “Fair” classification. Our recommendations used the guidance of the 1993 AASHTO Guide for Design of Pavement Structures, the 2003 revised Asphalt Pavement Design Guide, published by the Asphalt Pavement Association of Oregon, and the 2019 ODOT Pavement Design Guide as well as results from engineered structural pavement sections developed for sites with similar soils and anticipated traffic loads. Based on an estimated equivalent 18-kip single axle loading (ESAL) of 50,000 over 20-years, a subgrade resilient modulus of 5000 psi, and 90% reliability, a Structural Number of 3.0 has been used for design of the pavement sections for the driveway portions of the site. Pavement may consist of 4-inches of Asphalt Concrete (AC) over 12-inches of base aggregate. The above section is recommended for areas of anticipated heavy traffic, including refuse, delivery, and furniture moving trucks. In areas that will be restricted to light passenger vehicle travel or parking, the recommended pavement section can be reduced to 3-inches of AC pavement over 8-inches of base aggregate. A geotextile separation fabric is recommended in wet areas where pumping of the sand may cause intrusion into the base aggregate.

The above recommended structural pavement sections are designed for the type of vehicle use on the site after construction completion, not for construction vehicle traffic which is generally heavier, occurs over a short time, and impacts the site before full pavement sections are constructed. The construction traffic may cause subgrade failures and the site contractor should

consider over-building designated haul routes through the site to mitigate soft areas at the time of final paving.

5.10 Wet Weather/Dry Weather Construction Practices

The site material is sand to the max depth of the site investigation and is relatively free-draining. Precipitation will not adversely impact site earthwork; however, high groundwater levels during the wet season may impact site trenching activities and cause "pumping" of the subgrade with repeated heavy vehicle traffic. Dewatering and/or shoring of excavation sidewalls may be required during construction. Construction traffic routes should have a minimum of 12-inches of aggregate, with preferably 3-inch minus angular aggregate in the lower 8-inches of the temporary road section to mitigate subgrade degradation during wet weather conditions. Final design pavement sections and foundation subgrade recommendations do not account for repeated heavy truck traffic associated with construction.

6.0 REPORT LIMITATIONS

This report has presented BEI's site observations and research, subsurface explorations, geotechnical engineering analyses, and recommendations for the proposed site development. The conclusions in this report are based on the conditions described in this report and are intended for the exclusive use of DevNW and their representatives for use in design and construction of the development described herein. The analysis and recommendations may not be suitable for other structures or purposes.

Services performed by the geotechnical engineer for this project have been conducted with the level of care and skill exercised by other current geotechnical professionals in this area. No warranty is herein expressed or implied. The conclusions in this report are based on the site conditions as they currently exist and it is assumed that the limited site locations that were physically investigated generally represent the subsurface conditions at the site. Should site development or site conditions change, or if a substantial amount of time goes by between our site investigation and site development, we reserve the right to review this report for its applicability. If you have any questions regarding the contents of this report please contact our office.

FIGURE 1

Site Map

INDEX

OWNER

CITY OF FLORENCE
250 HWY 101
FLORENCE, OR 97439

VERTICAL DATUM

OR NAD83 2011/GEOID12A–ORGN
OREGON COAST

SOIL TYPES:

ACCORDING TO THE USDA NATURAL RESOURCES CONSERVATION SERVICES WEB SOIL SURVEY, THE SITE SOIL IS MAPPED AS WALDPORT FINE SAND (NATIONAL MAP UNIT SYMBOL 234r).

TP# TEST PIT LOCATION

IT# INFILTRATION TEST LOCATION

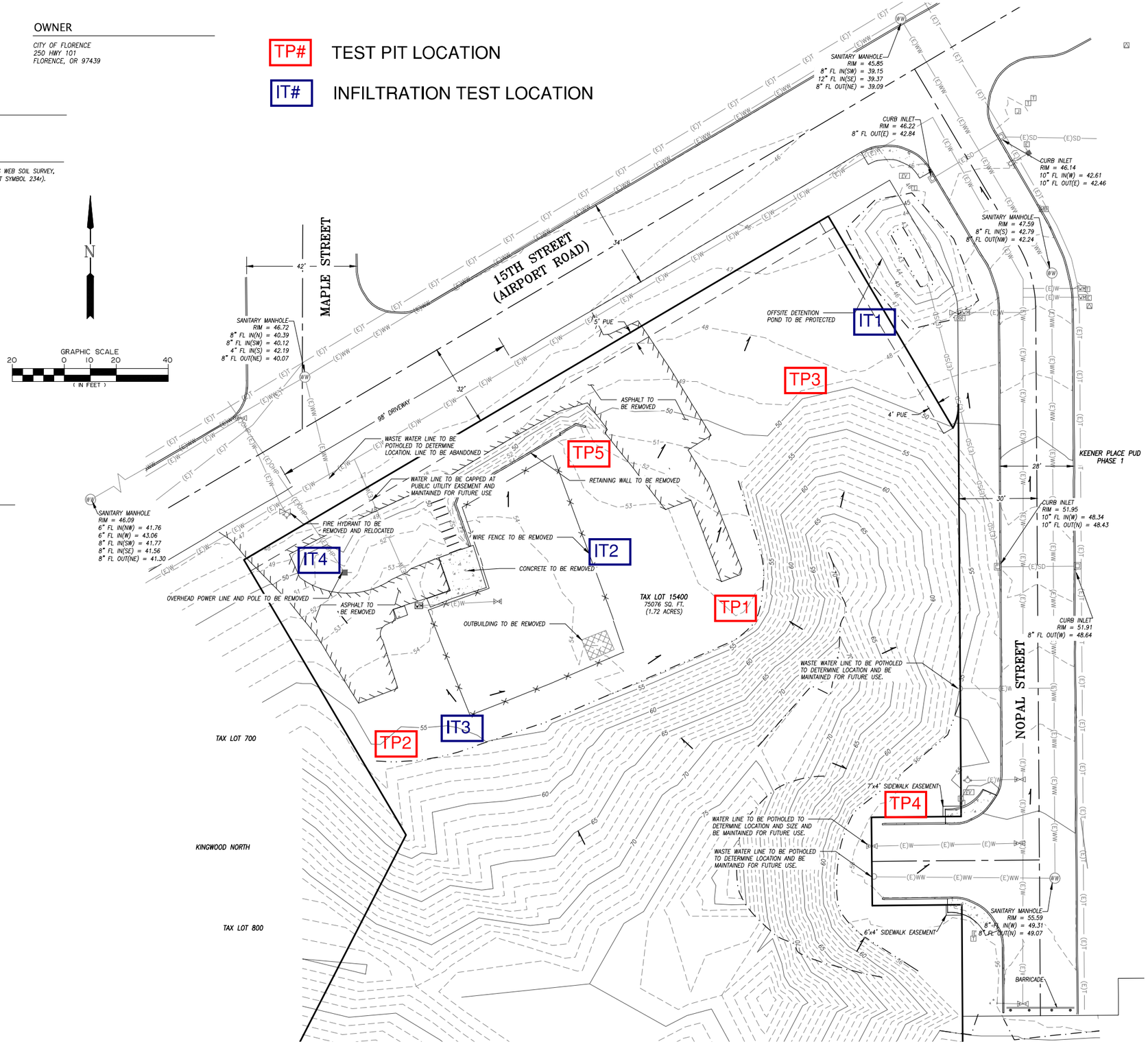
N

GRAPHIC SCALE
20 0 10 20 40
(IN FEET)

LEGEND

EXISTING

- CONTOUR LINE
- FENCE LINE
- STRUCTURE
- ASPHALT EDGE
- CONCRETE
- CURB
- STAIRS
- TOP OF SLOPE
- TOE OF SLOPE
- (E)W WATER LINE
- WATER VALVE
- WM WATER METER
- HOSE BIB
- FIRE HYDRANT
- IRRIGATION VALVE
- IRR IRRIGATION BOX
- (E)SD STORMWATER LINE
- STORMWATER CURB INLET
- (E)WW SANITARY SEWER MAIN
- SANITARY SEWER CLEANOUT
- WW SANITARY SEWER MANHOLE
- (E)T UNDERGROUND COMMUNICATION LINE
- T TELEPHONE RISER
- (E)OHP OVERHEAD WIRE
- ELECTRICAL POLE
- LIGHT POLE
- ONSITE LIGHT POLE
- EV ELECTRIC VAULT
- E ELECTRIC RISER
- J JUNCTION BOX
- TRANSFORMER
- MB MAIL BOX
- SLOPE ARROW



Branch ENGINEERING Inc
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civil • transportation
structural • geotechnical
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REGISTERED PROFESSIONAL LAND SURVEYOR

PRELIMINARY

OREGON
NOVEMBER 30, 2007
RENEE CLOUGH
69162LS
EXPIRES: December 30, 2021

project title:

DEVNW AIRPORT RD. PUD

TAX MAP: 18-12-27-1, TAX LOT: 15400
FLORENCE, OREGON
97439

revisions:

date: JAN. 24, 2020
drawn by: AWMS
designer: RC
project no: 18-493

EXISTING CONDITIONS AND DEMO PLAN

sheet: C1

Z:\2018\18-493 Keener Place\Drawings\Final PUD.dwg 1/24/2020 7:42 AM DREWS

APPENDIX A

Test Pit Logs & Field Test Summaries, Infiltration Testing Data, Well Logs, USDA NRCS Soil Mapping

RELATIVE DENSITY - COARSE GRAINED SOILS

RELATIVE DENSITY	SPT N-VALUE	D&M SAMPLER (140 lbs hammer)	D&M SAMPLER (300 lbs hammer)
VERY LOOSE	< 4	< 11	< 4
LOOSE	4 - 10	11 - 26	4 - 10
MEDIUM DENSE	10 - 30	26 - 74	10 - 30
DENSE	30 - 50	74 - 120	30 - 47
VERY DENSE	> 50	> 120	> 47

USCS GRAIN SIZE

FINES		< #200 (.075 mm)
SAND	Fine	#200 - #40 (.425 mm)
	Medium	#40 - #10 (2 mm)
	Coarse	#10 - #4 (4.75 mm)
GRAVEL	Fine	#4 - 0.75 inch
	Coarse	0.75 - 3 inch
COBBLES		3 - 12 inches

CONSISTENCY - FINE GRAINED SOILS

CONSISTENCY	SPT N-VALUE	D&M SAMPLER (140 lbs hammer)	D&M SAMPLER (300 lbs hammer)	POCKET PEN. / UNCONFINED (TSF)	MANUAL PENETRATION TEST
VERY SOFT	< 2	< 3	< 2	< 0.25	Easy several inches by fist
SOFT	2 - 4	3 - 6	2 - 5	0.25 - 0.50	Easy several inches by thumb
MEDIUM STIFF	4 - 8	6 - 12	5 - 9	0.50 - 1.00	Moderate several inches by thumb
STIFF	8 - 15	12 - 25	9 - 19	1.00 - 2.00	Readily indented by thumb
VERY STIFF	15 - 30	25 - 65	19 - 31	2.00 - 4.00	Readily indented by thumbnail
HARD	> 30	> 65	> 31	> 4.00	Difficult by thumbnail

UNIFIED SOIL CLASSIFICATION CHART

MAJOR DIVISIONS			GROUP SYMBOLS	TYPICAL NAMES
COARSE-GRAINED SOILS: More than 50% retained on No. 200 sieve	GRAVELS: 50% or more *retained* on the No. 4 sieve	CLEAN GRAVELS	GW	Well-graded gravels and gravel-sand mixtures, little or no fines.
			GP	Poorly-graded gravels and gravel-sand mixtures, little or no fines.
		GRAVELS WITH FINES	GM	Silty gravels, gravel-sand-silt mixtures.
			GC	Clayey gravels, gravel-sand-clay mixtures.
	SANDS: 50% or more *passing* the No. 4 sieve	CLEAN SANDS	SW	Well-graded sands and gravelly sands, little or no fines.
			SP	Poorly-graded sands and gravelly sands, little or no fines.
		SANDS WITH FINES	SM	Silty sands, sand-silt mixtures.
			SC	Clayey sands, sand-clay mixtures.
FINE-GRAINED SOILS: Less than 50% retained on No. 200 sieve	SILT AND CLAY	LIQUID LIMIT LESS THAN 50	ML	Inorganic silts, rock flour, clayey silts.
			CL	Inorganic clays of low to medium plasticity, lean clays.
			OL	Organic silt and organic silty clays of low plasticity.
		LIQUID LIMIT 50 OR GREATER	MH	Inorganic silts, clayey silts.
			CH	Inorganic clays of high plasticity, fat clays.
			OH	Organic clays of medium to high plasticity.
HIGHLY ORGANIC SOILS			PT	Peat, muck, and other highly organic soil.

MOISTURE CONTENT

DRY: Absence of moisture, dusty, dry to the touch
DAMP: Some moisture but leaves no moisture on hand
MOIST: Leaves moisture on hand
WET: Visble free water, usually saturated

	PLASTICITY	DRY STRENGTH	DILATANCY	TOUGHNESS
ML	Non to Low	Non to Low	Slow to Rapid	Low, can't roll
CL	Low to Med.	Med. to High	None to Slow	Medium
MH	Med. to High	Low to Med.	None to Slow	Low to Med.
CH	Med. to High	High to V.High	None	High

STRUCTURE

STRATIFIED: Alternating layers of material or color > 6mm thick.
LAMINATED: Alternating layers < 6mm thick.
FISSURED: Breaks along definate fracture planes.
SLICKENSIDED: Striated, polished, or glossy fracture planes.
BLOCKY: Cohesive soil that can be broken down into small angular lumps which resist further breakdown.
LENSES: Has small pockets of different soils, note thickness.
HOMOGENEOUS: Same color and appearance throughout.

LIST OF ABBREVIATION & EXPLANATIONS

SPT	Standard Penetration Test split barrel sampler
D&M	Dames and Moore sampler
LL	Atterberg Liquid Limit
PL	Atterberg Plastic Limit
PP	Pocket Penetrometer
VS	Vane Shear
G	Grab sample
MC	Moisture Content
MD	Moisture Density
UC	Unconfined Compressive Strength

EXPLORATORY KEY

Branch ENGINEERING Inc. Since 1977
310 5th Street, Springfield OR 97477 | p: 541.746.0637 | www.branchengineering.com

DEVNW - AIRPORT ROAD PUD

FLORENCE, OREGON

JANUARY 24, 2020

PROJECT NO. 18-493

DEPTH (FT)	GRAPHIC LOG	MATERIAL DESCRIPTION	DEPTH (FT) ELEVATION	SAMPLE AND SAMPLER TYPE	COMMENTS
TP-1					
0		(Fill) 3/4" minus aggregate with sand and silt	0.5'		
		(SP) Light brown, moist, fine grain Sand Loose to medium dense Sidewall caving at 4'			Dynamic Cone Penetrometer (DCP) at 3.3' BGS Blows/10 cm | See attached DCP log 2 3 3 4 4 5 5 5 5 7 6
5					
		Total Depth = 6.5', excavation progress slow due to caving sidewalls No groundwater observed	6.5'		
10					
15					
TP-2					
0		(OL) Topsoil: Moist, brown Silt with fine roots	0.8'		
		(SP) Light brown, moist, fine grain Sand Loose to medium dense Sidewall caving at approx. 3' as depth of excavation advanced			
5					
		Total Depth = 6.5', excavation progress slow due to caving sidewalls No groundwater observed	6.5'		
10					
15					

CLIENT: DEVNW
CONTRACTOR: RAY WELLS INC.
EXCAVATION METHOD: METAL TRACKED EXCAVATOR
LOGGED BY: MWR CHECKED BY: RJD
DATE OF EXCAVATION: JANUARY 24, 2020
NOTES: TEST PITS BACKFILLED LOSSELY WITH EXCAVATION SPOILS AFTER COMPLETION

EXPLORATORY TEST PITS

Branch ENGINEERING Inc Since 1977

DEVNW - AIRPORT ROAD PUD

FLORENCE, OREGON
JANUARY 24, 2020
PROJECT NO. 18-493

310 5th Street, Springfield OR 97477 | p: 541.746.0637 | www.branchengineering.com

DEPTH (FT)	GRAPHIC LOG	MATERIAL DESCRIPTION	DEPTH (FT) ELEVATION	SAMPLE AND SAMPLER TYPE	COMMENTS
TP-3					
		(Fill) 3/4" minus aggregate with sand, silt, and fine roots	0.5'		
		(SP) Reddish-brown, moist, fine grain Sand	1.5'		
		(SP) Light brown, moist, fine grain Sand Loose to medium dense Sidewall caving at approx. 5'			Dynamic Cone Penetrometer (DCP) at 2.5' BGS Blows/10 cm | See attached DCP log 3 4 8 10 10 12
5					
		Total Depth = 6.5', excavation progress slow due to caving sidewalls No groundwater observed	6.5'		
10					
15					
TP-4					
		(OL) Topsoil, roots, brown silt, organics	12"		
		(SP) Light brown, moist, fine grain Sand Loose to medium dense	3'		
		Layer of brown organic soil with wood debris	3.3'		
5		(SP) Light brown, moist, fine grain Sand Loose to medium dense			
		Total Depth = 6.5' No groundwater observed	6.5'		
10					
15					

CLIENT: DEVNW
CONTRACTOR: RAY WELLS INC.
EXCAVATION METHOD: METAL TRACKED EXCAVATOR
LOGGED BY: MWR
CHECKED BY: RJD
DATE OF EXCAVATION: JANUARY 24, 2020
NOTES: TEST PITS BACKFILLED LOSSELY WITH EXCAVATION SPOILS AFTER COMPLETION

DEPTH (FT)	GRAPHIC LOG	MATERIAL DESCRIPTION	DEPTH (FT) ELEVATION	SAMPLE AND SAMPLER TYPE	COMMENTS
TP-5					
		(Fill) 3/4" minus aggregate with sand, silt, and fine roots	0.5'		
		(Fill) Light brown - tan fine grain sand with occasional debris (landscaping materials)			
		(Fill) Brown, clayey silt with reddish-brown and tan fine grain sand	2.7'		
5		(SP) Light brown, moist, fine grain Sand Loose to medium dense	4.9'		
		Total Depth = 6.7' No groundwater observed	6.7'		
10					
15					
TP-6					
5					
10					
15					

CLIENT: DEVNW
LOGGED BY: MWR CHECKED BY: RJD
CONTRACTOR: RAY WELLS INC.
DATE OF EXCAVATION: JANUARY 24, 2020
EXCAVATION METHOD: METAL TRACKED EXCAVATOR
NOTES: TEST PITS BACKFILLED LOSSELY WITH EXCAVATION SPOILS AFTER COMPLETION, TEST PIT TP-5 EXCAVATED IN AREA LOCATED BEHIND EXISTING RETAINING WALL

Branch ENGINEERING Since 1977
civil · transportation
structural · geotechnical
SURVEYING

DYNAMIC CONE LOG

PROJECT NUMBER: 18-493
DATE STARTED: 01-24-2020
DATE COMPLETED: 01-24-2020

HOLE #: TP-1
CREW: MWR
PROJECT: DEVNW Airport Road PUD
ADDRESS: Airport Road
LOCATION: Florence, OR

SURFACE ELEVATION: N/A
WATER ON COMPLETION: No
HAMMER WEIGHT: 35 lbs.
CONE AREA: 10 sq. cm

DEPTH	BLOWS PER 10 cm	RESISTANCE Kg/cm²	GRAPH OF CONE RESISTANCE 0 50 100 150	N'	TESTED CONSISTENCY NON-COHESIVE	COHESIVE
1 ft						
2 ft						
3 ft						
1 m	2	8.9	••	2	VERY LOOSE	SOFT
	3	11.6	•••	3	VERY LOOSE	SOFT
4 ft	3	11.6	•••	3	VERY LOOSE	SOFT
	4	15.4	••••	4	VERY LOOSE	SOFT
	4	15.4	••••	4	VERY LOOSE	SOFT
5 ft	5	19.3	•••••	5	LOOSE	MEDIUM STIFF
	5	19.3	•••••	5	LOOSE	MEDIUM STIFF
	5	19.3	•••••	5	LOOSE	MEDIUM STIFF
6 ft	5	19.3	•••••	5	LOOSE	MEDIUM STIFF
	7	27.0	•••••••	7	LOOSE	MEDIUM STIFF
2 m	6	23.2	••••••	6	LOOSE	MEDIUM STIFF
7 ft						
8 ft						
9 ft						
3 m 10 ft						
11 ft						
12 ft						
4 m 13 ft						

C:\My Documents\Wildcat\WC_XL97.XLS

DYNAMIC CONE LOG

Branch ENGINEERING Inc. Since 1977
civil · transportation
structural · geotechnical
SURVEYING

PROJECT NUMBER: 18-493
DATE STARTED: 01-24-2020
DATE COMPLETED: 01-24-2020

HOLE #: TP-3
CREW: MWR
PROJECT: DEVNW Airport Road PUD
ADDRESS: Airport Road
LOCATION: Florence, OR

SURFACE ELEVATION: N/A
WATER ON COMPLETION: No
HAMMER WEIGHT: 35 lbs.
CONE AREA: 10 sq. cm

DEPTH	BLOWS PER 10 cm	RESISTANCE Kg/cm²	GRAPH OF CONE RESISTANCE 0 50 100 150	N'	TESTED CONSISTENCY NON-COHESIVE	COHESIVE
1 ft						
2 ft						
	3	13.3	•••	3	VERY LOOSE	SOFT
3 ft	4	17.8	•••••	5	LOOSE	MEDIUM STIFF
1 m	8	35.5	••••••••••	10	LOOSE	STIFF
	10	38.6	••••••••••••	11	MEDIUM DENSE	STIFF
4 ft	10	38.6	••••••••••••	11	MEDIUM DENSE	STIFF
	12	46.3	••••••••••••••	13	MEDIUM DENSE	STIFF
5 ft						
6 ft						
2 m						
7 ft						
8 ft						
9 ft						
3 m 10 ft						
11 ft						
12 ft						
4 m 13 ft						

INFILTRATION TESTING REPORT

BRANCH ENGINEERING INC.
310 5TH ST.
SPRINGFIELD, OREGON 97477

Project Name: Keener Place
Project Number: 18-493
Location: 1424 Airport Road, Florence OR
Date: 1-24-2019
Comments: Encased falling head tests performed in 6" auger borings

Infiltration Test No. 1 Depth: 42" Diameter: 6" Vol. of Presat. 2 gallons
Soil Description: 0-6" Grass, Gravel, Brown Organics; 6-42" Tan Moist Sand

Time Elapsed (min):	Depth to Water (in):	k (in/hr)	Notes:	
0.00	37.75		Trial #1	
1.00	38.75	60.0	k_{avg} =	58.2
2.00	39.75	60.0		
4.47	42.00	54.7		
0	38		Trial #2	
1	39	60.0	k_{avg} =	57.8
2	40	60.0		
4.25	42	53.3		
0	37		Trial #3	
1.25	38.5	72.0	k_{avg} =	60.8
2.5	39.5	48.0		
4.9	42	62.5		

Trial #1 Total k_{avg}= 58.9

Infiltration Test No. 2 Depth: 46" Diameter: 6" Vol. of Presat. 2 gallons
Soil Description: 0-6" Brown sandy gravel; 6-22" Dark Brown w/ some gravel; 12-18" firm moist fine grain sand; 18-30" Loose moist sand

Time Elapsed (min):	Depth to Water (in):	k (in/hr)	Notes:	
0.00	44.00		Trial #1	
1.00	45.25	75.0	k_{avg} =	52.3
2.52	46.00	29.6		
0	40.5		Trial #2	
1	41	30.0	k_{avg} =	38.9
2	42	60.0		
11.03	46	26.6		
0	41.75		Trial #3	
2.17	43	34.6	k_{avg} =	32.7
4	44.25	41.0		
8.63	46	22.7		

Trial #2 Total k_{avg}= 41.3

INFILTRATION TESTING REPORT

BRANCH ENGINEERING INC.
310 5TH ST.
SPRINGFIELD, OREGON 97477

Infiltration Test No. 3 Depth: 70" Diameter: 6" Vol. of Presat. 2 gallons
Soil Description: 0-12" Dark Brown Sandy Gravel; 12-42" Tan Firm Sand Moist

Time Elapsed (min):	Depth to Water (in):	k (in/hr)	Notes:	
0.00	63.50		Trial #1	
1.00	64.50	60.0	k_{avg} =	61.4
2.00	65.50	60.0		
3.00	66.50	60.0		
6.2	70	65.6		
0	64.5		Trial #2	
1	65.5	60.0	k_{avg} =	55.9
2	66.5	60.0		
3	67	30.0		
5.45	70	73.5		
0	64		Trial #3	
1	65.25	75.0	k_{avg} =	61.5
2	66	45.0		
3	67	60.0		
5.73	70	65.9		

Trial #3 Total k_{avg}= 59.6

Infiltration Test No. 4 Depth: 41" Diameter: 6" Vol. of Presat. 2 gallons
Soil Description: 0-4" Brown Organics; 4-16" Brown Firm Sand with Gravel; 16-42" Tan Moist Firm Sand

Time Elapsed (min):	Depth to Water (in):	k (in/hr)	Notes:	
0.00	37.50		Trial #1	
1.33	41.00	157.9	k_{avg} =	157.9
0	37.5		Trial #2	
0.5	38.75	150.0	k_{avg} =	126.1
1.82	41	102.3		
0	36.5		Trial #3	
1	39	150.0	k_{avg} =	123.0
2.25	41	96.0		

Trial #4 Total k_{avg}= 135.7

LANE 70972

lane 70972

STATE OF OREGON
MONITORING WELL REPORT

(as required by ORS 537.765 & OR 690-240-0395)

* AMENDED *

WELL LABEL # L 105957

START CARD # ~~101257~~ 199633

(1) LAND OWNER

Owner Well I.D. B - 7

First Name _____ Last Name _____

Company City of Florence

Address 250 Highway 101

City Florence State OR Zip 97439

(2) TYPE OF WORK

☒ New ☐ Deepening ☐ Conversion ☐ Alteration (repair/recondition) ☐ Abandonment

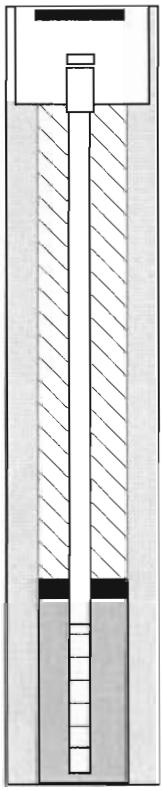
(3) DRILL METHOD

☐ Rotary Air ☐ Rotary Mud ☐ Cable ☐ Hollow Stem Auger ☐ Cable Mud ☐ Reverse Rotary ☒ Other Push Probe

(4) CONSTRUCTION

Piezometer Well ☒

Depth of Completed Well 20 ft. Special Standard ☐



MONUMENT/VAULT Below Ground
From 0 To 1

BORE HOLE
Diameter 2 From 0 To 20

CASING
Dia. .75 From ☒ 0 To 10
Gauge sch40 Wld ☐ Thrd ☒
Material ○ Steel ◉ Plastic

LINER
Dia. _____ From ☐ _____ To _____
Gauge _____ Wld ☐ Thrd ☐
Material ○ Steel ○ Plastic

SEAL
From 1 To 9
Material Bentonite Chips
Amount 10 P Grout weight _____

SCREEN
Casing/Liner Casing Material sch40
Diameter .75 From 10 To 20
Slot Size .02

FILTER
From 9 To 20 Material silica sand Size of pack 10/20

(5) WELL TESTS

○ Pump ○ Bailer ○ Air ○ Flowing Artesian

Yield gal/min	Drawdown	Drill stem/Pump depth	Duration (hr)

Temperature _____ °F Lab analysis ☐ Yes By _____

Supervising Geologist/Engineer _____

Water quality concerns? ☐ Yes (describe below)

From	To	Description	Amount	Units

(6) LOCATION OF WELL (legal description)

County LANE Twp 18 S N/S Range 12 W E/W WM
Sec 23 SW 1/4 of the SW 1/4 Tax Lot city right of way
Tax Map Number _____ Lot _____
Lat ° ' " or _____ DMS or DD
Long ° ' " or _____ DMS or DD
○ Street address of well ◉ Nearest address

Corner of 15th St. and Oak St. Florence OR.

(7) STATIC WATER LEVEL

	Date	SWL(psi)	+	SWL(ft)
Existing Well / Predeepening			☐	
Completed Well	02-04-2010		☒	9

Flowing Artesian? ☐ Dry Hole? ☐

WATER BEARING ZONES Depth water was first found 9

SWL Date	From	To	Est Flow	SWL(psi)	+	SWL(ft)
02-04-2010	9	20			☒	9
					☐	
					☐	
					☐	
					☐	

(8) WELL LOG

Ground Elevation _____

Material	From	To
Asphalt, gravel	0	1
Sand, loose	1	8
Sand medium dense	7	16
Sand dense	16	20

RECEIVED
FEB 25 2011
WATER RESOURCES DEPT
SALEM, OREGON

RECEIVED
JUN 24 2011
WATER RESOURCES DEPT
SALEM, OREGON

Date Started 02-04-2010 Completed 02-04-2010

(unbonded) Monitor Well Constructor Certification

I certify that the work I performed on the construction, deepening, alteration, or abandonment of this well is in compliance with Oregon monitoring well construction standards. Materials used and information reported above are true to the best of my knowledge and belief.

License Number 10496 Date 2/23/11

Password : (if filing electronically)

Signed _____

(bonded) Monitor Well Constructor Certification

I accept responsibility for the construction, deepening, alteration, or abandonment work performed on this well during the construction dates reported above. All work performed during this time is in compliance with Oregon monitoring well construction standards. This report is true to the best of my knowledge and belief.

License Number 10288 Date 2-23-11

Password : (if filing electronically)

Signed _____

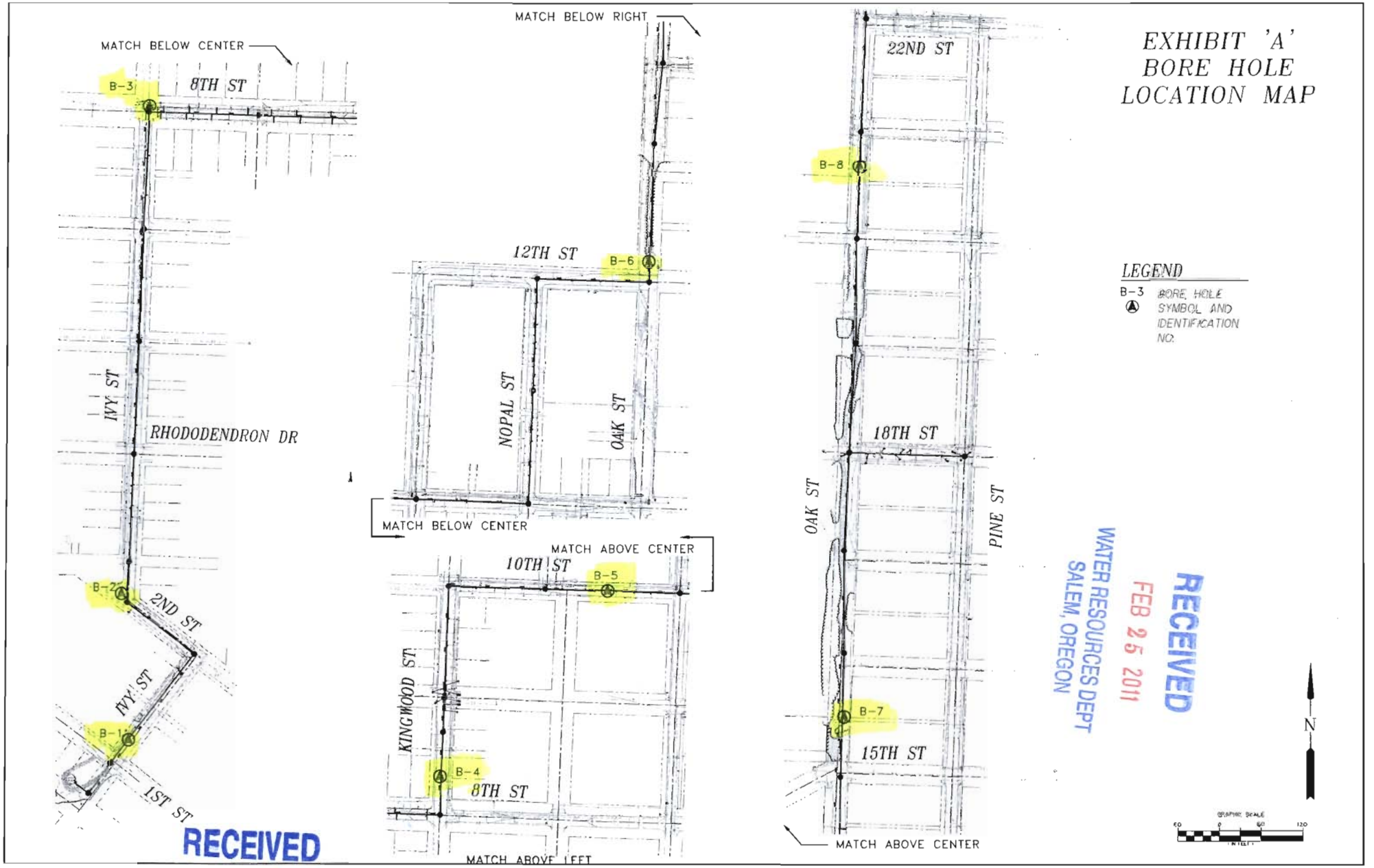
Contact Info (optional)

ORIGINAL - WATER RESOURCES DEPARTMENT

THIS REPORT MUST BE SUBMITTED TO THE WATER RESOURCES DEPARTMENT WITHIN 30 DAYS OF COMPLETION OF WORK

Form Version: 0.95

LANE 70972



LANE 70972

STATE OF OREGON
MONITORING WELL REPORT
(as required by ORS 537.765 & OAR 690-240-0395)

WELL LABEL # L 105957
START CARD # 1012527

(1) LAND OWNER

Owner Well I.D. B - 7
First Name ____ Last Name ____
Company City of Florence
Address 250 Highway 101
City Florence State OR Zip 97439

(2) TYPE OF WORK

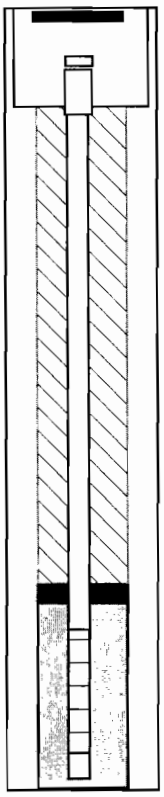
☒ New ☐ Deepening ☐ Conversion ☐ Alteration (repair/recondition) ☐ Abandonment

(3) DRILL METHOD

☐ Rotary Air ☐ Rotary Mud ☐ Cable ☐ Hollow Stem Auger ☐ Cable Mud ☐ Reverse Rotary ☒ Other Push Probe

(4) CONSTRUCTION

Piezometer Well ☒
Depth of Completed Well 20 ft. Special Standard ☐



MONUMENT/VAULT Below Ground
From 0 To 1

BORE HOLE
Diameter 2 From 0 To 20

CASING
Dia. .75 From ☒ 0 To 10
Gauge sch40 Wld Thrd
Material ◯Steel ◉Plastic ☐ ☒

LINER
Dia. ____ From ☐ ____ To ____
Gauge ____ Wld Thrd
Material ◯Steel ◯Plastic ☐ ☐

SEAL
From 1 To 9
Material Bentonite Chips
Amount 10 P Grout weight ____

SCREEN
Casing/Liner Casing Material sch40
Diameter .75 From 10 To 20
Slot Size .02

FILTER
From 9 To 20 Material silica sand Size of pack 10/20

(5) WELL TESTS

◯ Pump ◯ Bailer ◯ Air ◯ Flowing Artesian

Yield gal/min	Drawdown	Drill stem/Pump depth	Duration (hr)

Temperature ____ °F Lab analysis ☐ Yes By ____
Supervising Geologist/Engineer ____
Water quality concerns? ☐ Yes (describe below)

From	To	Description	Amount	Units

(6) LOCATION OF WELL (legal description)

County LANE Twp 18 S N/S Range 12 W E/W WM
Sec 23 SW 1/4 of the SW 1/4 Tax Lot city right of way
Tax Map Number ____ Lot ____
Lat ____ ° ____ ' ____ " or ____ DMS or DD
Long ____ ° ____ ' ____ " or ____ DMS or DD
◯ Street address of well ◉ Nearest address

Corner of 15th St. and Oak St. Florence OR.

(7) STATIC WATER LEVEL

	Date	SWL(psi)	+	SWL(ft)
Existing Well / Predeepening			☐	
Completed Well	02-04-2010		☒	9

Flowing Artesian? ☐ Dry Hole? ☐
WATER BEARING ZONES Depth water was first found 9

SWL Date	From	To	Est Flow	SWL(psi)	+	SWL(ft)
02-04-2010	9	20			☒	9
					☐	
					☐	
					☐	
					☐	

(8) WELL LOG

Ground Elevation ____

Material	From	To
Asphalt, gravel	0	1
Sand, loose	1	8
Sand medium dense	7	16
Sand dense	16	20

RECEIVED
FEB 25 2011
WATER RESOURCES DEPT
SALEM, OREGON

Date Started 02-04-2010 Completed 02-04-2010

(unbonded) Monitor Well Constructor Certification

I certify that the work I performed on the construction, deepening, alteration, or abandonment of this well is in compliance with Oregon monitoring well construction standards. Materials used and information reported above are true to the best of my knowledge and belief.

License Number 10496 Date 2/23/11
Password : (if filing electronically) ____
Signed [signature]

(bonded) Monitor Well Constructor Certification

I accept responsibility for the construction, deepening, alteration, or abandonment work performed on this well during the construction dates reported above. All work performed during this time is in compliance with Oregon monitoring well construction standards. This report is true to the best of my knowledge and belief.

License Number 100288 Date 2-23-11
Password : (if filing electronically) ____
Signed [signature]
Contact Info (optional) ____

ORIGINAL - WATER RESOURCES DEPARTMENT
THIS REPORT MUST BE SUBMITTED TO THE WATER RESOURCES DEPARTMENT WITHIN 30 DAYS OF COMPLETION OF WORK

Form Version: 0.95

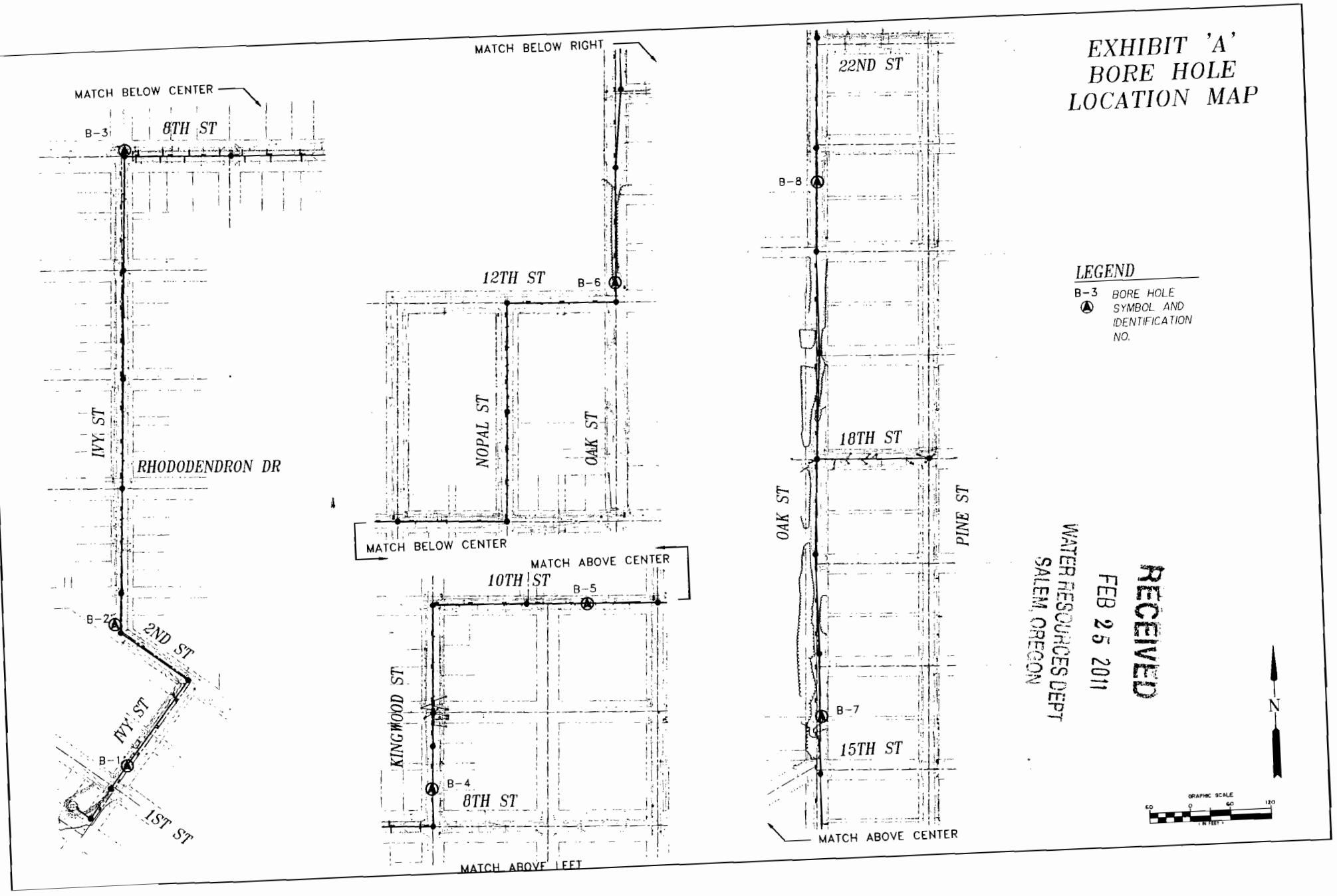


EXHIBIT 'A'
BORE HOLE
LOCATION MAP
LEGEND
B-3 BORE HOLE SYMBOL AND IDENTIFICATION NO.
MATCH BELOW CENTER
MATCH BELOW RIGHT
MATCH BELOW CENTER
MATCH ABOVE CENTER
MATCH ABOVE LEFT
MATCH ABOVE CENTER
8TH ST
12TH ST
10TH ST
8TH ST
22ND ST
18TH ST
15TH ST
2ND ST
1ST ST
IVY ST
IVY ST
RHODODENDRON DR
NOPAL ST
OAK ST
KINGWOOD ST
OAK ST
PINE ST
B-1
B-2
B-3
B-4
B-5
B-6
B-7
B-8
N
GRAPHIC SCALE
60 0 60 120
(IN FEET)
RECEIVED
FEB 25 2011
WATER RESOURCES DEPT
SALEM, OREGON

LANE 70972

LANE 70779

STATE OF OREGON
MONITORING WELL REPORT
(as required by ORS 537.765 & OAR 690-240-0395)

Amended

WELL LABEL # L 105956
START CARD # ~~1012526~~ 199632

(1) LAND OWNER

Owner Well I.D. B-6
First Name _____ Last Name _____
Company City of Florence
Address 250 Highway 101
City Florence State OR Zip 97439

(2) TYPE OF WORK

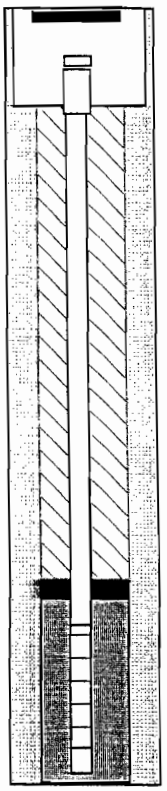
[X] New [ ] Deepening [ ] Conversion
[ ] Alteration (repair/recondition) [ ] Abandonment

(3) DRILL METHOD

[ ] Rotary Air [ ] Rotary Mud [ ] Cable [ ] Hollow Stem Auger [ ] Cable Mud
[ ] Reverse Rotary [X] Other Push Probe

(4) CONSTRUCTION

Piezometer Well [X]
Depth of Completed Well 20 ft. Special Standard [ ]



MONUMENT/VAULT Below Ground
From 0 To 1

BORE HOLE
Diameter 2 From 0 To 20

CASING
Dia. .75 From [X] 0 To 10
Gauge sch40 Wld [ ] Thrd [X]
Material (O) Steel (•) Plastic

LINER
Dia. _____ From [ ] _____ To _____
Gauge _____ Wld [ ] Thrd [ ]
Material (O) Steel (O) Plastic

SEAL
From 1 To 9
Material Bentonite Chips
Amount 10 P Grout weight _____

SCREEN
Casing/Liner Casing Material sch40
Diameter .75 From 10 To 20
Slot Size .02

FILTER
From 9 To 20 Material silica sand Size of pack 10/20

(5) WELL TESTS

(O) Pump (O) Bailer (O) Air (O) Flowing Artesian

Yield gal/min	Drawdown	Drill stem/Pump depth	Duration (hr)

Temperature _____ °F Lab analysis [ ] Yes By _____
Supervising Geologist/Engineer _____
Water quality concerns? [ ] Yes (describe below)

From	To	Description	Amount	Units

(6) LOCATION OF WELL (legal description)

County LANE Twp 18 S N/S Range 12 W E/W WM
Sec 27 NE 1/4 of the NE 1/4 Tax Lot city right of way
Tax Map Number _____ Lot _____
Lat _____ ° _____ ' _____ " or _____ DMS or DD
Long _____ ° _____ ' _____ " or _____ DMS or DD
(O) Street address of well (•) Nearest address

Corner of 12th St. and Oak St. Florence OR.

(7) STATIC WATER LEVEL

	Date	SWL(psi)	+	SWL(ft)
Existing Well / Predeepening			[ ]	
Completed Well	02-04-2010		[X]	17

Flowing Artesian? [ ] Dry Hole? [ ]
WATER BEARING ZONES Depth water was first found 17

SWL Date	From	To	Est Flow	SWL(psi)	+	SWL(ft)
02-04-2010	17	20			[X]	17
					[ ]	
					[ ]	
					[ ]	
					[ ]	

(8) WELL LOG

Ground Elevation _____

Material	From	To
Asphalt, gravel	0	1
Sand, loose, wet	1	7
Sand medium dense	7	20

RECEIVED
MAR 04 2011
WATER RESOURCES DEPT
SALEM, OREGON

Date Started 02-04-2010 Completed 02-04-2010

(unbonded) Monitor Well Constructor Certification

I certify that the work I performed on the construction, deepening, alteration, or abandonment of this well is in compliance with Oregon monitoring well construction standards. Materials used and information reported above are true to the best of my knowledge and belief.

License Number 10496 Date 2/23/11
Password : (if filing electronically)
Signed _____

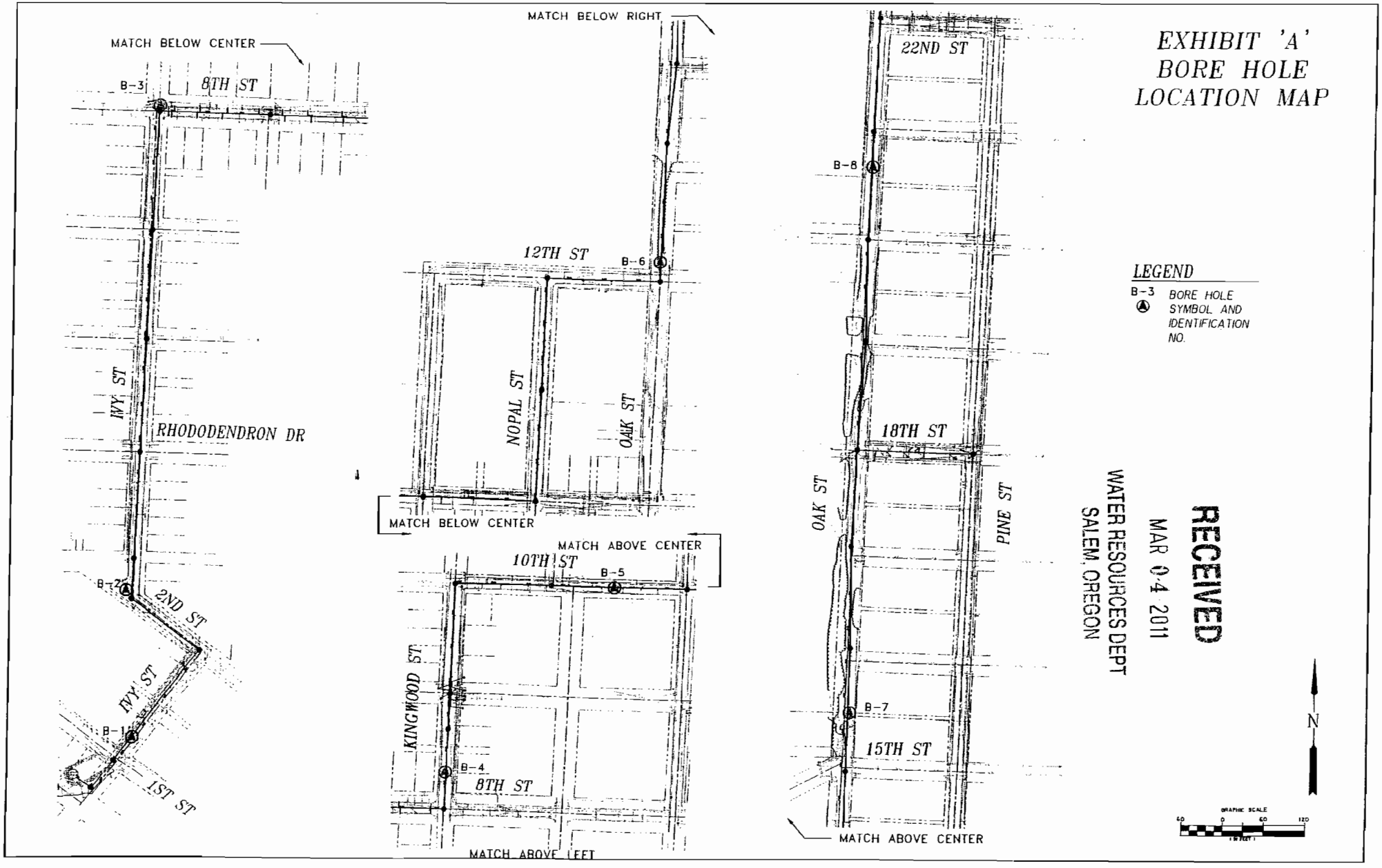
(bonded) Monitor Well Constructor Certification

I accept responsibility for the construction, deepening, alteration, or abandonment work performed on this well during the construction dates reported above. All work performed during this time is in compliance with Oregon monitoring well construction standards. This report is true to the best of my knowledge and belief.

License Number 10288 Date 2-23-11
Password : (if filing electronically)
Signed _____
Contact Info (optional)

ORIGINAL - WATER RESOURCES DEPARTMENT
THIS REPORT MUST BE SUBMITTED TO THE WATER RESOURCES DEPARTMENT WITHIN 30 DAYS OF COMPLETION OF WORK

Form Version: 0.95



LANE 70779

LANE 70779

10-08-2010

STATE OF OREGON
GEOTECHNICAL HOLE REPORT
(as required by OAR 690-240-0035)

(1) OWNER/PROJECT

Hole Number B - 6

PROJECT NAME/NBR: LCC01OS.10P

First Name _____ Last Name _____

Company City of Florence

Address 250 Hwy 101

City Florence State OR Zip 97439

(2) TYPE OF WORK

☒ New ☐ Deepening ☒ Abandonment
☐ Alteration (repair/recondition)

(3) CONSTRUCTION

☐ Rotary Air ☐ Hand Auger ☐ Hollow stem auger
☐ Rotary Mud ☐ Cable ☒ Push Probe
☐ Other _____

(4) TYPE OF HOLE:

◯ Uncased Temporary ◉ Cased Permanent
◯ Uncased Permanent ◯ Slope Stablity
◯ Other
Other: _____

(5) USE OF HOLE

Piezometer well for observing depth to water.

(6) BORE HOLE CONSTRUCTION

Special Standard ☐ (Attach copy)

Depth of Completed Hole 20.00 ft.

BORE HOLE Dia	From	To	SEAL Material	From	To	Amt	sacks/ lbs
2	0	20	Concrete	0	1	10	P
			Bentonite Chips	1	20	15	P

Backfill placed from _____ ft. to _____ ft. Material _____
Filter pack from _____ ft. to _____ ft. Material _____ Size _____

(7) CASING/SCREEN

Casing	Screen	Dia	+	From	To	Gauge	Stl	Plstc	Wld	Thrd
◯	◉	.75	☒	15	20	40	◯	◉	☐	☒
◉	◯	.75	☒	0	15	40	◯	◉	☐	☒
◯	◯		☐				◯	◯	☐	☐
◯	◯		☐				◯	◯	☐	☐
◯	◯		☐				◯	◯	☐	☐

(8) WELL TESTS

◯ Pump ◯ Bailer ◯ Air ◯ Flowing Artesian

Yield gal/min	Drawdown	Drill stem/Pump depth	Duration(hr)

Temperature _____ °F Lab analysis ☐ Yes By _____

Supervising Geologist/Engineer _____

Water quality concerns? ☐ Yes (describe below)

From	To	Description	Amount	Units

(9) LOCATION OF HOLE (legal description)

County Lane Twp 18.00 S N/S Range 12.00 W E/W WM
Sec 27 NE 1/4 of the NE 1/4 Tax Lot no tax lot number
Tax Map Number _____ Lot _____
Lat ° 0 ' " or _____ DMS or DD
Long ° 0 ' " or _____ DMS or DD
◯ Street address of hole ◉ Nearest address

Corner of Oak St. and 12th St. Florence, OR.

(10) STATIC WATER LEVEL

	Date	SWL(psi)	+	SWL(ft)
Existing Well / Predeepening				
Completed Well				

Flowing Artesian? ☐

WATER BEARING ZONES

Depth water was first found 17.00

SWL Date	From	To	Est Flow	SWL(psi)	+	SWL(ft)
02-04-2010	17	20			☒	17
					☐	
					☐	
					☐	
					☐	

(11) SUBSURFACE LOG

Ground Elevation _____

Material	From	To
Sand	0	20

Date Started 02-04-2010 Completed 02-04-2010

(12) ABANDONMENT LOG:

Material	From	To	Amt	sacks/ lbs
Cement	0	20	15	P

Date Started 09-10-2010 Completed 09-10-2010

Professional Certification (to be signed by an Oregon licensed water or monitoring well constructor,Oregon registered geologist or professional engineer).

I accept responsibility for the construction, deepening, alteration, or abandonment work performed during the construction dates reported above. All work performed during this time is in compliance with Oregon geotechnical hole construction standards. This report is true to the best of my knowledge and belief.

License/Registration Number 10496 Date _____
Electronically Submitted
First Name Rod Last Name Johnson
Affiliation Pacific Northwest Drilling

ORIGINAL - WATER RESOURCES DEPARTMENT
THIS REPORT MUST BE SUBMITTED TO THE WATER RESOURCES DEPARTMENT WITHIN 30 DAYS OF COMPLETION OF WORK

Form Version: 0.95

LANE 70772

STATE OF OREGON MONITORING WELL REPORT

(as required by ORS 537.765 & OAR 690-240-0395)

10-06-2010

WELL LABEL # L 97147

START CARD # 1011658

(1) LAND OWNER

Owner Well I.D. B-8

First Name _____ Last Name _____

Company City of Florence

Address 250 Hwy. 101

City Florence State OR Zip 97439

(2) TYPE OF WORK

☒ New ☐ Deepening ☐ Conversion ☐ Alteration (repair/recondition) ☐ Abandonment

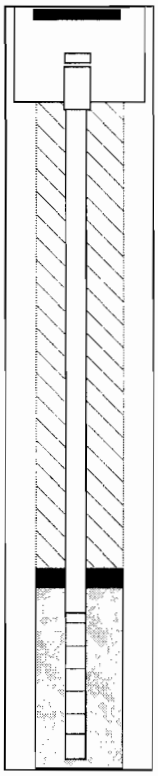
(3) DRILL METHOD

☐ Rotary Air ☐ Rotary Mud ☐ Cable ☐ Hollow Stem Auger ☐ Cable Mud ☐ Reverse Rotary ☒ Other Direct Push

(4) CONSTRUCTION

Piezometer Well ☐

Depth of Completed Well 15 ft. Special Standard ☐



MONUMENT/VAULT Below Ground From 0 To 1

BORE HOLE

Diameter 2.25 From 0 To 15

CASING

Dia. .75 From 0 To 5

Gauge Sch 40 Wld ☐ Thrd ☒

Material ○ Steel ◉ Plastic

LINER

Dia. _____ From _____ To _____

Gauge _____ Wld ☐ Thrd ☐

Material ○ Steel ○ Plastic

SEAL

From 1 To 4

Material Granular Bentonite

Amount 7.00 P Grout weight _____

SCREEN

Casing/Liner Casing Material Sch 40 Pre Pack

Diameter .75 From 5 To 15

Slot Size .010

FILTER

From 9 To 15 Material Silica Sand Size of pack 10/20

(5) WELL TESTS

○ Pump ○ Bailer ○ Air ○ Flowing Artesian

Yield gal/min	Drawdown	Drill stem/Pump depth	Duration (hr)

Temperature 56 °F Lab analysis ☐ Yes By _____

Supervising Geologist/Engineer _____

Water quality concerns? ☐ Yes (describe below)

From	To	Description	Amount	Units

(6) LOCATION OF WELL (legal description)

County Lane Twp 18.00 S N/S Range 12.00 W E/W WM

Sec 27 SE 1/4 of the NE 1/4 Tax Lot 100

Tax Map Number _____ Lot _____

Lat ° 0 ' " or _____ DMS or DD

Long ° 0 ' " or _____ DMS or DD

○ Street address of well ◉ Nearest address

1226 Airport Rd. Florence, OR 97439

(7) STATIC WATER LEVEL

	Date	SWL(psi)	+ SWL(ft)
Existing Well / Predeepening			
Completed Well	09-29-2010		8.2

Flowing Artesian? ☐ Dry Hole? ☐

WATER BEARING ZONES Depth water was first found 8.2

SWL Date	From	To	Est Flow	SWL(psi)	+ SWL(ft)

(8) WELL LOG

Ground Elevation _____

Material	From	To
Lt. Brown Fine Sand	0	15

RECEIVED
NOV 30 2010
WATER RESOURCES DEPT
SALEM, OREGON

Date Started 09-29-2010 Completed 09-29-2010

(unbonded) Monitor Well Constructor Certification

I certify that the work I performed on the construction, deepening, alteration, or abandonment of this well is in compliance with Oregon monitoring well construction standards. Materials used and information reported above are true to the best of my knowledge and belief.

License Number _____ Date _____

Electronically Submitted

Signed _____

(bonded) Monitor Well Constructor Certification

I accept responsibility for the construction, deepening, alteration, or abandonment work performed on this well during the construction dates reported above. All work performed during this time is in compliance with Oregon monitoring well construction standards. This report is true to the best of my knowledge and belief.

License Number 10582 Date 10-06-2010

Electronically Submitted

Signed COLIN WATSON (E-filed)

Contact Info (optional) Pacific Soil & Water LLC

ORIGINAL - WATER RESOURCES DEPARTMENT

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Form Version: 0.95

LANE 70772

MONITORING WELL REPORT -
Map with location identified must be attached and shall include an approximate scale and north arrow

LANE 70772

10-06-2010

WELL I.D. # L 97147

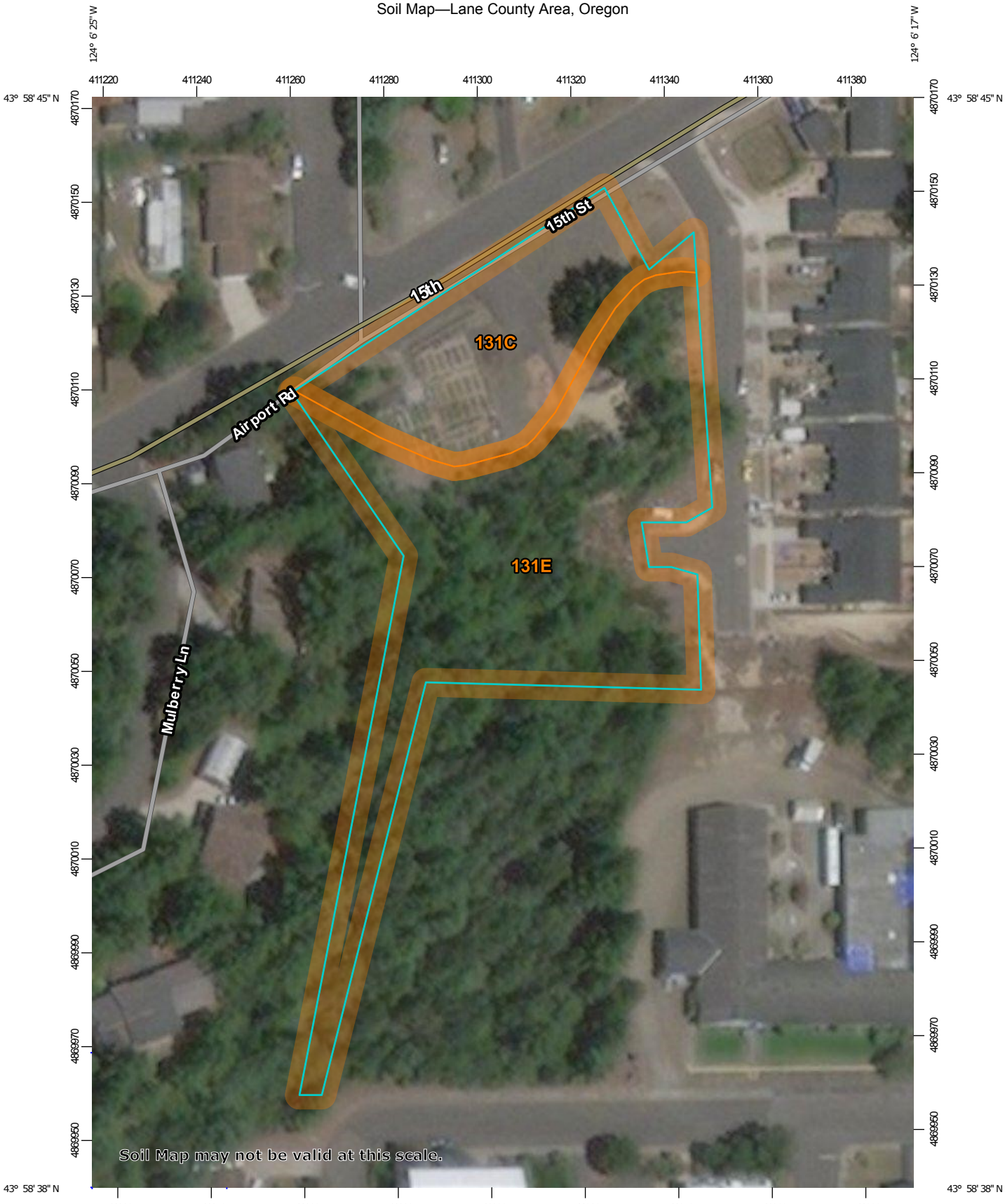
START CARD # 1011658

Map of well

Singing Pines Park -
Airport Rd. & Kingwood St.
Florence, OR 97439

N

60'



Map Scale: 1:1,130 if printed on A portrait (8.5" x 11") sheet.

N

Meters: 0 15 30 60 90

Feet: 0 50 100 200 300

Map projection: Web Mercator Corner coordinates: WGS84 Edge tics: UTM Zone 10N WGS84

MAP LEGEND

Area of Interest (AOI)
- Area of Interest (AOI)

Soils
- Soil Map Unit Polygons
- Soil Map Unit Lines
- Soil Map Unit Points

Special Point Features
- Blowout
- Borrow Pit
- Clay Spot
- Closed Depression
- Gravel Pit
- Gravelly Spot
- Landfill
- Lava Flow
- Marsh or swamp
- Mine or Quarry
- Miscellaneous Water
- Perennial Water
- Rock Outcrop
- Saline Spot
- Sandy Spot
- Severely Eroded Spot
- Sinkhole
- Slide or Slip
- Sodic Spot
- Spoil Area
- Stony Spot
- Very Stony Spot
- Wet Spot
- Other
- Special Line Features

Water Features
- Streams and Canals

Transportation
- Rails
- Interstate Highways
- US Routes
- Major Roads
- Local Roads

Background
- Aerial Photography

MAP INFORMATION

The soil surveys that comprise your AOI were mapped at 1:20,000.

Warning: Soil Map may not be valid at this scale.

Enlargement of maps beyond the scale of mapping can cause misunderstanding of the detail of mapping and accuracy of soil line placement. The maps do not show the small areas of contrasting soils that could have been shown at a more detailed scale.

Please rely on the bar scale on each map sheet for map measurements.

Source of Map: Natural Resources Conservation Service
Web Soil Survey URL:
Coordinate System: Web Mercator (EPSG:3857)

Maps from the Web Soil Survey are based on the Web Mercator projection, which preserves direction and shape but distorts distance and area. A projection that preserves area, such as the Albers equal-area conic projection, should be used if more accurate calculations of distance or area are required.

This product is generated from the USDA-NRCS certified data as of the version date(s) listed below.

Soil Survey Area: Lane County Area, Oregon
Survey Area Data: Version 15, Sep 18, 2018

Soil map units are labeled (as space allows) for map scales 1:50,000 or larger.

Date(s) aerial images were photographed: Aug 27, 2007—Sep 15, 2016

The orthophoto or other base map on which the soil lines were compiled and digitized probably differs from the background imagery displayed on these maps. As a result, some minor shifting of map unit boundaries may be evident.

Map Unit Legend

Map Unit Symbol	Map Unit Name	Acres in AOI	Percent of AOI
131C	Waldport fine sand, 0 to 12 percent slopes	0.5	30.1%
131E	Waldport fine sand, 12 to 30 percent slopes	1.2	69.9%
Totals for Area of Interest		**1.8**	**100.0%**

Lane County Area, Oregon

131C—Waldport fine sand, 0 to 12 percent slopes

Map Unit Setting

National map unit symbol: 234r
Elevation: 0 to 150 feet
Mean annual precipitation: 60 to 100 inches
Mean annual air temperature: 48 to 54 degrees F
Frost-free period: 165 to 300 days
Farmland classification: Not prime farmland

Map Unit Composition

Waldport and similar soils: 85 percent
Minor components: 8 percent
Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Waldport

Setting

Landform: Dunes
Down-slope shape: Linear
Across-slope shape: Linear
Parent material: Eolian sand of mixed origin

Typical profile

Oi - 0 to 1 inches: slightly decomposed plant material
Oe - 1 to 3 inches: moderately decomposed plant material
H1 - 3 to 8 inches: fine sand
H2 - 8 to 60 inches: fine sand

Properties and qualities

Slope: 0 to 12 percent
Depth to restrictive feature: More than 80 inches
Natural drainage class: Excessively drained
Capacity of the most limiting layer to transmit water (Ksat): High to very high (5.95 to 99.90 in/hr)
Depth to water table: More than 80 inches
Frequency of flooding: None
Frequency of ponding: None
Available water storage in profile: Low (about 4.8 inches)

Interpretive groups

Land capability classification (irrigated): None specified
Land capability classification (nonirrigated): 6e
Hydrologic Soil Group: A
Hydric soil rating: No

Minor Components

Heceta

Percent of map unit: 4 percent

Landform: Interdunes
Hydric soil rating: Yes

Yaquina
Percent of map unit: 4 percent
Landform: Marine terraces
Hydric soil rating: Yes

Data Source Information

Soil Survey Area: Lane County Area, Oregon
Survey Area Data: Version 15, Sep 18, 2018

Lane County Area, Oregon

131E—Waldport fine sand, 12 to 30 percent slopes

Map Unit Setting

National map unit symbol: 234s
Elevation: 0 to 150 feet
Mean annual precipitation: 60 to 100 inches
Mean annual air temperature: 48 to 54 degrees F
Frost-free period: 165 to 300 days
Farmland classification: Not prime farmland

Map Unit Composition

Waldport and similar soils: 85 percent
Minor components: 6 percent
Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Waldport

Setting

Landform: Dunes
Down-slope shape: Linear
Across-slope shape: Linear
Parent material: Eolian sand of mixed origin

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Depth to restrictive feature: More than 80 inches
Natural drainage class: Excessively drained
Capacity of the most limiting layer to transmit water (Ksat): High to very high (5.95 to 99.90 in/hr)
Depth to water table: More than 80 inches
Frequency of flooding: None
Frequency of ponding: None
Available water storage in profile: Low (about 4.8 inches)

Interpretive groups

Land capability classification (irrigated): None specified
Land capability classification (nonirrigated): 7e
Hydrologic Soil Group: A
Hydric soil rating: No

Minor Components

Heceta

Percent of map unit: 3 percent

Landform: Interdunes
Hydric soil rating: Yes

Yaquina
Percent of map unit: 3 percent
Landform: Marine terraces
Hydric soil rating: Yes

Data Source Information

Soil Survey Area: Lane County Area, Oregon
Survey Area Data: Version 15, Sep 18, 2018

APPENDIX B:

Recommended Earthwork Specifications

GEOTECHNICAL SPECIFICATIONS

General Earthwork

1. All areas where structural fills, fill slopes, structures, or roadways are to be constructed shall be stripped of organic topsoil and cleared of surface and subsurface deleterious material, including but limited to vegetation, roots, or other organic material, undocumented fill, construction debris, soft or unsuitable soils as directed by the Geotechnical Engineer of Record. These materials shall be removed from the site or stockpiled in a designated location for reuse in landscape areas if suitable for that purpose. Existing utilities and structures that are not to be used as part of the project design or by neighboring facilities, shall be removed or properly abandoned, and the associated debris removed from the site.

2. Upon completion of site stripping and clearing, the exposed soil and/or rock shall be observed by the Geotechnical Engineer of Record or a designated representative to assess the subgrade condition for the intended overlying use. Pits, depressions, or holes created by the removal of root wads, utilities, structures, or deleterious material shall be properly cleared of loose material, benched and backfilled with fill material approved by the Geotechnical Engineer of Record compacted to the project specifications.

3. In structural fill areas, the subgrade soil shall be scarified to a depth of 4-inches, if soil fill is used, moisture conditioned to within 2% of the materials optimum moisture for compaction, and blended with the first lift of fill material. The fill placement and compaction equipment shall be appropriate for fill material type, required degree of blending, and uncompacted lift thickness. Assuming proper equipment selection, the total uncompacted thickness of the scarified subgrade and first fill lift shall not exceed 8-inches, subsequent lifts of uncompacted fill shall not exceed 8-inches unless otherwise approved by the Geotechnical Engineer of Record. The uncompacted lift thickness shall be assessed based on the type of compaction equipment used and the results of initial compaction testing. Fine-grain soil fill is generally most effectively compacted using a kneading style compactor, such as a sheeps-foot roller; granular materials are more effectively compacted using a smooth, vibratory roller or impact style compactor.

4. All structural soil fill shall be well blended, moisture conditioned to within 2% of the material's optimum moisture content for compaction and compacted to at least 90% of the material's maximum dry density as determined by ASTM Method D-1557, or an equivalent method. Soil fill shall not contain more than 10% rock material and no solid material over 3-inches in diameter unless approved by the Geotechnical Engineer of Record. Rocks shall be evenly distributed throughout each lift of fill that they are contained within and shall not be clumped together in such a way that voids can occur.

5. All structural granular fill shall be well blended, moisture conditioned at or up to 3% above of the material's optimum moisture content for compaction and compacted to at least 90% of the material's maximum dry density as determined by ASTM Method D-1557, or an equivalent method. 95% relative compaction may be required for pavement base rock or in upper lifts of the granular structural fill where a sufficient thickness of the fill section allows for higher compaction percentages to be achieved. The granular fill shall not contain solid particles over 2-inches in diameter unless special density testing methods or proof-rolling is approved by the Geotechnical Engineer of Record. Granular fill is generally considered to be a crushed aggregate with a fracture surface of at least 70% and a maximum size not exceeding 1.5-inches in diameter, well-graded with less than 10%, by weight, passing the No. 200 Sieve.

6. Structural fill shall be field tested for compliance with project specifications for every 2-feet in vertical rise or 500 cy placed, whichever is less. In-place field density testing shall be performed by a competent individual, trained in the testing and placement of soil and aggregate fill placement, using either ASTM Method D-1556/4959/4944 (Sand Cone), D-6938 (Nuclear Densometer), or D-2937/4959/4944 (Drive Cylinder). Should the fill materials not be suitable for testing by the above methods, then observation of placement, compaction and proof-rolling with a loaded 10 cy dump-truck, or equivalent ground pressure equipment, by a trained individual may be used to assess and document the compliance with structural fill specifications.

Utility Excavations

1. Utility excavations are to be excavated to the design depth for bedding and placement and shall not be over-excavated. Trench widths shall only be of sufficient width to allow placement and proper construction of the utility and backfill of the trench.
2. Backfilling of a utility trench will be dependent on its location, use, depth, and utility line material type. Trenches that are required to meet structural fill specifications, such as those under or near buildings, or within pavement areas, shall have granular material strategically compacted to at least the spring-line of the utility conduit to mitigate pipeline movement and deformation. The initial lift thickness of backfill overlying the pipeline will be dependent on the pipeline material, type of backfill, and the compaction equipment, so as not to cause deflection or deformation of the pipeline. Trench backfill shall conform to the General Earthwork specifications for placement, compaction, and testing of structural fill.

Geotextiles

1. All geotextiles shall be resistant to ultraviolet degradation, and to biological and chemical environments normally found in soils. Geotextiles shall be stored so that they are not in direct sunlight or exposed to chemical products. The use of a geotextile shall be specified and shall meet the following specification for each use.

Subgrade/Aggregate Separation

Woven or nonwoven fabric conforming to the following physical properties:

• Minimum grab tensile strength	ASTM Method D-4632	180 lb
• Minimum puncture strength (CBR)	ASTM Method D-6241	371 lb
• Elongation	ASTM Method D-4632	15%
• Maximum apparent opening size	ASTM Method D-4751	No. 40
• Minimum permittivity	ASTM Method D-4491	0.05 s^{-1}

Drainage Filtration

Woven fabric conforming to the following physical properties:

• Minimum grab tensile strength	ASTM Method D-4632	110 lb
• Minimum puncture strength (CBR)	ASTM Method D-6241	220 lb
• Elongation	ASTM Method D-4632	50%
• Maximum apparent opening size	ASTM Method D-4751	No. 40
• Minimum permittivity	ASTM Method D-4491	0.5 s^{-1}

Geogrid Base Reinforcement

Extruded biaxially or triaxially oriented polypropylene conforming to the following physical properties:

• Peak tensile strength lb/ft	ASTM Method D-6637	925
• Tensile strength at 2% strain lb/ft	ASTM Method D-6637	300
• Tensile strength at 5% strain lb/ft	ASTM Method D-6637	600
• Flexural Rigidity	ASTM Method D-1388	250,000 mg-cm
• Effective Opening Size rock size	ASTM Method D-4751	1.5x

Exhibit “T” Excerpt from Tentative Stormwater Management Plan illustrating projected stormwater flows

Exhibit T