

**TO:** Olivia Glantz, Planner III  
Community Development Department

**FROM:** Glenn J. Davis, PE, CFM, Chief Development Engineer  
Public Works Department

**DATE:** July 26, 2019

**SUBJECT: PUBLIC WORKS RECOMMENDATIONS  
SUB19-05 (19-109483-LD)  
6719 DEVON AVENUE SE  
84-LOT SUBDIVISION**



## PROPOSAL

A tentative subdivision plan to divide approximately 19.89 acres into 84 lots ranging in size from 6,000 square feet to 10,630 square feet. The applicant is requesting an alternative street standard to increase the grade of Lone Oak Road SE (collector) from eight percent to twelve percent and increase the grade of two Local streets, One Avenue and Two Avenue, from twelve percent to approximately fifteen percent.

The subject property is approximately 19.89 acres in size, zoned RS (Single Family Residential), and located at 6719 Devon Avenue SE (Marion County Assessor Map and Tax Lot Number 083W22C00300).

## RECOMMENDED CONDITIONS OF APPROVAL

1. Comply with the conditions of approval for UG Preliminary Declaration Case No. UGA17-06, copied below:
  - a. Condition 1—Acquire and convey land for dedication of right-of-way to equal a width of 60 feet in an alignment approved by the Public Works Director as specified for the future Collector street in the Salem TSP from the existing terminus of Lone Oak Road SE at Sahalee Drive SE to Rees Hill Road SE.
  - b. Condition 2—Construct Lone Oak Road SE with a minimum 34-foot-wide full Collector street improvement within the subject property and from the north line of the subject property to Sahalee Drive SE.
  - c. Condition 3—Construct Lone Oak Road SE with a minimum 34-foot-wide

linking street improvement from the south line of the subject property to Rees Hill Road SE.

- d. Condition 4—Pay the applicable reimbursement fee as established in the Lone Oak Road Reimbursement District pursuant to Resolution 2018-08 to contribute the development's proportional share of the costs of the full Collector street improvement of Lone Oak Road SE from Muirfield Avenue SE to Rees Hill Road SE (in the event the Reimbursement District is terminated prior to final plat approval, no reimbursement fee shall be due). The reimbursement fee shall be credited toward the performance guarantee amount required in SRC 110.100(c) for Lone Oak Road SE construction.
- e. Condition 5—Convey land for dedication along the entire frontage of Devon Avenue SE to equal 30 feet from centerline.
- f. Condition 6—Construct a half-street improvement to Local street standards along the entire frontage of Devon Avenue SE.
- g. Condition 7—Construct 8-inch Salem Wastewater Management Master Plan sewer lines necessary to serve the development. The nearest available sewer main appears to be located at the terminus of Lone Oak Road SE at Sahalee Drive SE.
- h. Condition 8—As a condition of development within the S-3 water service area, the applicant shall construct the following facilities as specified in the Water System Master Plan and approved by the Public Works Director:
  - i. A 12-inch S-3 main in the portion of Lone Oak Road SE within the subject property.
  - ii. A 12-inch S-3 main connecting east/west through the property from Lone Oak Road SE to Devon Avenue SE.
  - iii. A 12-inch S-3 main along the entire frontage of Devon Avenue SE.
  - iv. A 12-inch S-3 main in Lone Oak Road SE from the north line of the subject property to the existing main at the Lone Oak Road SE and Sahalee Drive SE intersection and /r/ from the south line of the subject property to the existing main in Rees Hill Road SE.
- i. Condition 9—As a condition of development within the S-4 water service area, the applicant shall construct the following facilities as specified in the Water System Master Plan and approved by the Public Works Director:

- i. An S-4 domestic pump station with sufficient capacity to serve entire the S-4 water service area between Lone Oak Road SE and Devon Avenue SE.
  - ii. An 8-inch S-4 main from the pump station to the S-4 water service area within the subject property.
  - iii. One or more 8-inch S-4 mains to serve each lot within the S-4 service area.
  - iv. An 8-inch S-4 main extended to the south line of the subject property.
  - v. One or more S-3 mains that provide adequate fire flow to the entire S-4 area.
2. Construct internal streets to Local street standards. An alternative street grade up to 15 percent is authorized for the portion of One Street SE between Three Street SE and Four Street SE, and for the portion of Two Street SE between Three Street SE and Lone Oak Road SE.
3. Dedicate a 10-foot public utility easement along the street frontage of all abutting and internal streets.
4. Construct water, stormwater, and sewer systems to serve each lot.
5. The applicant has two options for providing stormwater service to properties within the Powell Creek basin:
  - a. Between Powell Creek and the subject property, acquire easements from downstream property owners and construct off-site improvements as needed to convey stormwater runoff from the proposed development to Powell Creek pursuant to PWDS; or
  - b. Demonstrate preservation of downstream stream health through the use of continuous flow simulation that simulates such hydrologic factors as interception, soil moisture, surface runoff, interflow, base flow, evapotranspiration, and ground-water recharge. The flow control system shall be designed to match peak flow rates and durations from the pre-developed to the developed condition for the half 2-year, 5-year, 10-year, 25-year, and 100-year events.

## **FACTS**

### **Streets**

#### 1. Lone Oak Road SE

- a. Standard—This street is designated as a Collector street in the *Salem TSP*. The standard for this street classification is a 34-foot-wide improvement within a 60-foot-wide right-of-way.
- b. Existing Condition—This street terminates near Sahalee Drive SE northwest of the subject property.

#### 2. Devon Avenue SE

- a. Standard—This street is currently under Marion County jurisdiction and is designated as a Local street in the *Salem TSP*. The standard for this street classification is a 30-foot-wide improvement within a 60-foot-wide right-of-way.
- b. Existing Condition—This street has an approximate 26-foot improvement within a 40-foot-wide right-of-way abutting the subject property.

### **Storm Drainage**

#### 1. Existing Stormwater

- a. Champion Swale is mapped to the west of the subject property, while an unidentified creek runs through the western portion of the property. Powell Creek is mapped east of the subject property. No public storm mains are adjacent to the proposed development.
- b. The subject property is within the Battle Creek Drainage Basin.

### **Water**

#### 1. Existing Water

- a. The subject property is located partially in the S-3 water service level, below an elevation of 629 feet, and partially in the S-4 water service level, above 629 feet.
- b. A 10-inch S-3 water line is located in Devon Avenue SE. Mains of this size generally convey flows of 700 to 1,700 gallons per minute.
- c. A 10-inch S-3 water line is located in Lone Oak Road SE. Mains of this size generally convey flows of 700 to 1,700 gallons per minute.

- d. A 16-inch S-3 water line is located in Rees Hill Road SE. Mains of this size generally convey flows of 3,800 to 8,800 gallons per minute.
- e. There is no existing S-4 water system.

### **Sanitary Sewer**

#### **1. Existing Sewer**

- a. The property is split into two sewage drainage basins, partially toward the west line and partially toward the east.
- b. The nearest adequate linking facility for the west basin appears to be an existing 8-inch sewer line approximately 400 feet to the northwest of the property in Lone Oak Road SE.
- c. The nearest adequate linking facility for the east basin appears to be an existing 8-inch sewer line approximately 850 feet to the northeast of the property. The east basin may be able to receive service from the existing sewer main in Lone Oak Road SE.

### **Parks**

The subject property abuts the lot designated for the future Neighborhood Park (NP 28) along its southern boundary. This property was recently purchased by the City to be developed as NP 28. A street connection and a pedestrian connection are proposed with the tentative plan.

### **CRITERIA AND FINDINGS**

The following code references indicate the criteria that must be found to exist before an affirmative decision may be made. The applicable criteria and the corresponding findings are as follows:

**SRC 205.010(d)(1)**—The tentative subdivision plan complies with the standards of this Chapter and with all applicable provisions of the Unified Development Code, including, but not limited to the following:

- 1. Lot standards, including, but not limited to, standards for lot area, lot width and depth, lot frontage, and designation of front and rear lot lines;
- 2. City infrastructure standards; and
- 3. Any special development standards, including, but not limited to floodplain

development, special setbacks, geological or geotechnical analysis, and vision clearance.

**Findings**—The applicant shall provide the required field survey and subdivision plat per Statute and Code requirements outlined in the *Oregon Revised Statutes (ORS)* and SRC. If said documents do not comply with the requirements outlined in ORS and SRC, and as per SRC Chapter 205, the approval of the subdivision plat by the City Surveyor may be delayed or denied based on the non-compliant violation. It is recommended the applicant request a pre-plat review meeting between the City Surveyor and the applicant's project surveyor to ensure compliance with ORS 672.005(2)(g)&(h), 672.007(2)(b), 672.045(2), 672.060(4), *Oregon Administrative Rules* 850-020-0015(4)&(10), 820-020-0020(2), and 820-020-0045(5).

Trees that are located in the right-of-way require Tree Removal permits pursuant to SRC Chapter 86 and/or tree protection measures pursuant to PWDS.

Public Works staff has reviewed the Flood Insurance Study and Flood Insurance Rate Maps and has determined that no floodplain or floodway areas exist on the subject property.

A 10-foot-wide public utility easement is required along the frontages of all internal streets and along the frontages of Lone Oak Road SE and Devon Avenue SE pursuant to SRC 803.035(n).

The Salem-Keizer Local Wetland Inventory shows that there are wetland channels and/or hydric soils mapped on the property. The applicant should contact the Oregon Department of State Lands to verify if any permits are required for development or construction in the vicinity of the mapped wetland area(s). Wetland notice was sent to the Oregon Department of State Lands pursuant to SRC 809.025.

According to the City's adopted landslide hazard susceptibility maps and SRC Chapter 810 (Landslide Hazards), there are areas of landslide susceptibility on the subject property. There are 2 mapped site points for the property pursuant to SRC Chapter 810. The proposed subdivision adds three activity points to the proposal, which results in a total of 5 points. Therefore, the proposed subdivision is classified as a moderate landslide risk and requires a geologic assessment. A geologic assessment, prepared by Redmond Geotechnical Services and dated August 11, 2017, was submitted to the City of Salem. This assessment demonstrates the subject property could be subdivided and developed with single-family dwellings, without increasing the potential for slope hazard on the site or adjacent properties.

**SRC 205.010(d)(3)**—Development within the tentative subdivision plan can be adequately served by City infrastructure.

**Findings**—The subject property is located outside of the Urban Service Area and Urban Growth Preliminary Declaration Case No. UGA17-06 was issued July 17, 2018. Pursuant to SRC 200.055, 200.060, 200.065, 200.070, the proposed development shall be linked to existing adequate facilities as defined in SRC 200.005. Developments are also required to extend public utility services to serve upstream and neighboring properties. The applicant shall provide linking water mains consistent with the *Water System Master Plan* adequate to convey fire flows to serve the proposed development as specified in the *Water Distribution Design Standards*. These improvements ensure that permanent water service is available in accordance with the *Water System Master Plan*.

As a condition of development within the S-3 water service area, the applicant shall construct the following facilities as specified in the *Water System Master Plan* and approved by the Public Works Director:

1. A 12-inch S-3 main in the portion of Lone Oak Road SE within the subject property.
2. A 12-inch S-3 main connecting east/west through the property from Lone Oak Road SE to Devon Avenue SE.
3. A 12-inch S-3 main along the entire frontage of Devon Avenue SE.
4. A 12-inch S-3 main in Lone Oak Road SE from the north line of the subject property to the existing main at the Lone Oak Road SE and Sahalee Drive SE intersection and or from the south line of the subject property to the existing main in Rees Hill Road SE.

Based on the topography of the subject property, the S-4 area of the proposed development shall receive domestic service from the S-4 service level and fire service from the S-3 service level. As a condition of development within the S-4 water service area, the applicant shall construct the following facilities as specified in the *Water System Master Plan* and approved by the Public Works Director:

1. An S-4 domestic pump station with sufficient capacity to serve entire the S-4 water service area between Lone Oak Road SE and Devon Avenue SE.
2. An 8-inch S-4 main from the pump station to the S-4 water service area within the subject property.
3. One or more 8-inch S-4 mains to serve each lot within the S-4 service area.
4. An 8-inch S-4 main extended to the south line of the subject property.
5. One or more S-3 mains that provide adequate fire flow to the entire S-4 area.

As a condition of sewer service, all developments will be required to provide public sewers to adjacent upstream parcels. This shall include the extension of sewer mains in easements or rights-of-way across the property to adjoining properties, and across the street frontage of the property to adjoining properties when the main is located in the street right-of-way. This shall include trunk sewers that are oversized to provide capacity for upstream development (PWDS Sewer Division 003). Pursuant to SRC 200.060, the proposed development shall be linked to adequate facilities by the construction of sewer lines and pumping stations, which are necessary to connect to such existing sewer facilities. The nearest available sewer facility appears to be located in Sahalee Drive SE, both northwest and northeast of the subject property. The applicant shall construct 8-inch Salem Wastewater Management Master Plan sewer lines necessary to serve the development and upstream parcels. The applicant shall construct the *Salem Wastewater Management Master Plan* improvements and link the site to existing facilities that are defined as adequate under SRC 200.005.

The proposed development is subject to SRC Chapter 71 and the revised PWDS as adopted in Administrative Rule 109, Division 004. To demonstrate the proposed parcels can meet the PWDS, the applicant shall provide an engineered tentative stormwater design to accommodate future impervious surface on all proposed lots. Public Works staff has reviewed the tentative stormwater design and recommends that additional area will be required to accommodate the stormwater facilities needed to serve the proposed development. The final stormwater facility requirements will be determined at the time of construction plan approval.

The nearest available public storm system appears to be Champion Swale to the west and county ditches along Devon Avenue SE to the east of the subject property. The applicant shall link the on-site system to existing facilities that are defined as adequate under SRC 200.005. The applicant has two options for providing stormwater service to properties within the Powell Creek basin: (1) Between Powell Creek and the subject property, acquire easements from downstream property owners and construct off-site improvements as needed to convey stormwater runoff from the proposed development to Powell Creek pursuant to PWDS; or (2) Demonstrate preservation of downstream stream health through the use of continuous flow simulation that simulates such hydrologic factors as interception, soil moisture, surface runoff, interflow, base flow, evapotranspiration, and ground-water recharge. The flow control system shall be designed to match peak flow rates and durations from the pre-developed to the developed condition for the half 2-year, 5-year, 10-year, 25-year, and 100-year events.

As specified in the conditions of approval, private water, sewer, and storm services shall be constructed to serve each lot as a condition of plat approval. All public and private City infrastructure proposed to be located in the public right-of-way shall be constructed or secured per SRC 205.035(c)(7)(B) prior to final plat approval. Any easements needed to serve the proposed parcels with City infrastructure shall be shown on the final plat.

**SRC 205.010(d)(4) and SRC 205.0010(d)(5)—The street system in and adjacent to the tentative subdivision plan conforms to the *Salem Transportation System Plan*. The street system in and adjacent to the tentative subdivision plan is designed so as to provide for the safe, orderly, and efficient circulation of traffic into, through, and out of the subdivision.**

**Finding**— Pursuant to SRC 200.055(c), all streets abutting the property boundaries shall be designed to the greater of the standards of SRC Chapter 803 and the standards of linking streets in SRC 200.055(b).

Lone Oak Road SE is a future Collector street along the western boundary of the subject property in the Salem TSP and is planned to connect Muirfield Avenue SE to Rees Hill Road SE. To provide safe, orderly, and efficient circulation of traffic into, through, and out of the subdivision, the applicant shall acquire and convey land for dedication of right-of-way to equal a width of 60 feet in an alignment approved by the Public Works Director as specified for the future Collector street from the existing terminus of Lone Oak Road SE at Sahalee Drive SE to Rees Hill Road SE, construct Lone Oak Road SE with a minimum 34-foot-wide full Collector street improvement from Sahalee Drive SE to the south line of the subject property, and construct Lone Oak Road SE with a minimum 34-foot-wide linking street improvement from the south line of the subject property to Rees Hill Road SE pursuant to SRC Chapters 200 and 803.

City Council approved the Lone Oak Reimbursement District under Resolution 2018-08 on January 22, 2018. This district provides a funding mechanism for completion of Lone Oak Road SE from Muirfield Avenue SE to Rees Hill Road SE so that all benefited properties pay a proportional share of the cost for street improvements. Pursuant to Resolution 2018-08, the applicant is required to pay the applicable reimbursement fee as established in the Lone Oak Road Reimbursement District for development's proportional share of the costs of the full Collector street improvement of Lone Oak Road SE from Muirfield Avenue SE to Rees Hill Road SE. The reimbursement fee shall be credited toward the performance guarantee amount required in SRC 110.100(c) for the construction of Lone Oak Road SE.

Devon Avenue SE abuts the subject property and does not meet the current standard for a Local street. As identified in the conditions of approval, the applicant is required to convey land for dedication equal to 30 feet from the centerline and construct a half-street improvement along the entire frontage of Devon Avenue SE pursuant to SRC Chapter 803 and PWDS.

All internal streets will be constructed to Local Street standards as specified in the Salem TSP, with the exception of the proposed One Street SE and Two Street SE on the applicant's tentative plan. The applicant is requesting an alternative street standard for One Street SE and Two Street SE to allow for grade greater than 12 percent due to the existing topography and physical constraints of the site. Pursuant to

SRC 803.065(a), the Director may authorize the use of one or more alternate street standards: (1) where existing development or physical constraints make compliance with the standards set forth in this chapter impracticable; and (3) where topography or other conditions make the construction that conforms to the standards impossible or undesirable. Based on topographic constraints, the Public Works Director authorizes the proposed grade of up to 15 percent for the portion of One Street SE between Three Street SE and Four Street SE, and for the portion of Two Street SE between Three Street SE and Lone Oak Road SE.

**SRC 205.010(d)(6)—The tentative subdivision plan provides safe and convenient bicycle and pedestrian access from within the subdivision to adjacent residential areas and transit stops, and to neighborhood activity centers within one-half mile of the development. For purposes of this criterion, neighborhood activity centers include, but are not limited to, existing or planned schools, parks, shopping areas, transit stops, or employment centers.**

**Findings**—Future Neighborhood Park (NP 28) is a recently purchased, undeveloped park site that abuts the southern boundary of the proposed development. This park acquisition satisfies condition 10 of UG Preliminary Declaration Case No. UGA17-06. A street connection and a pedestrian sidewalk connection are proposed from the subject property to the park. The pedestrian path shall be constructed to Public Works Standard Plan No. 314. Curb ramps shall be constructed to PWDS. No park-related improvements are recommended as a condition of development.

**SRC 205.010(d)(7)—The tentative subdivision plan mitigates impacts to the transportation system consistent with the approved Traffic Impact Analysis (TIA), where applicable.**

**Findings**— The proposed 84-lot subdivision generates less than 1,000 average daily vehicle trips to Lone Oak Road SE (a Collector street). Therefore, a TIA was not required as part of the proposed subdivision submittal.

Prepared by: Jennifer Scott, Program Manager  
cc: File