



**WILSONVILLE**  
OREGON

29799 SW Town Center Loop E, Wilsonville, OR 97070  
Phone: 503.682.4960 Fax: 503.682.7025  
Web: [www.ci.wilsonville.or.us](http://www.ci.wilsonville.or.us)

**Planning Division**  
**Development Permit Application**

Final action on development application or zone change is required within 120 days in accordance with provisions of ORS 227.175

A pre application conference is normally required prior to submittal of an application. Please visit the City's website for submittal requirements

Pre-Application Meeting Date: \_\_\_\_\_

Incomplete applications will not be scheduled for public hearing until all of the required materials are submitted.

**Applicant:**

Name: Adrian Petras  
Company: Petras Homes, LLC  
Mailing Address: 3673 SW Homesteader Road  
City, State, Zip: West Linn, OR 97068  
Phone: Please contact the applicant's consultant  
E-mail: Please contact the applicant's consultant

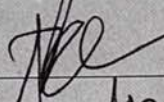
**Authorized Representative:**

Name: Consultant: Glen Southerland, AICP  
Company: AKS Engineering & Forestry, LLC  
Mailing Address: 12965 SW Herman Rd, Suite 100  
City, State, Zip: Tualatin, OR 97062  
Phone: (503) 563 -6151 Fax: (503) 563-6152  
E-mail: SoutherlandG@aks-eng.com

**Property Owner:**

Name: Adrian Petras & Ana Campean  
Company: Petras Homes, LLC  
Mailing Address: 3673 SW Homesteader Road  
City, State, Zip: West Linn, OR 97068  
Phone: Please contact the applicant's consultant  
E-mail: Please contact the applicant's consultant

**Property Owner's Signature:**

  
Printed Name: ADRIAN PETRAS Date: 6/5/23

**Applicant's Signature:** (if different from Property Owner)

Printed Name: \_\_\_\_\_ Date: \_\_\_\_\_

**Site Location and Description:**

Project Address if Available: No Situs Suite/Unit \_\_\_\_\_  
Project Location: Frog Pond West Planning Area  
Tax Map #(s): 3 1 W 12D Tax Lot #(s): 200 County:  Washington  Clackamas

**Request:**

Annexation, Zone Map Amendment, Planned Development (Stage I Master Plan, Stage II Final Plan), Site Design Review of Open Space, Tentative Subdivision Plat, and Middle Housing.

**Project Type:**  **Class I**  **Class II**  **Class III**

Residential  Commercial  Industrial  Other: \_\_\_\_\_

**Application Type(s):**

- |  |   |   |   |
|--|---|---|---|
| <input checked="" type="checkbox"/> Annexation         | <input type="checkbox"/> Appeal                         | <input type="checkbox"/> Comp Plan Map Amend            | <input type="checkbox"/> Parks Plan Review              |
| <input type="checkbox"/> Final Plat                    | <input type="checkbox"/> Major Partition                | <input type="checkbox"/> Minor Partition                | <input type="checkbox"/> Request to Modify Conditions   |
| <input type="checkbox"/> Plan Amendment                | <input checked="" type="checkbox"/> Planned Development | <input checked="" type="checkbox"/> Preliminary Plat    | <input checked="" type="checkbox"/> Site Design Review  |
| <input type="checkbox"/> Request for Special Meeting   | <input type="checkbox"/> Request for Time Extension     | <input type="checkbox"/> Signs                          | <input checked="" type="checkbox"/> Stage II Final Plan |
| <input type="checkbox"/> SROZ/SRIR Review              | <input type="checkbox"/> Staff Interpretation           | <input checked="" type="checkbox"/> Stage I Master Plan | <input type="checkbox"/> Variance                       |
| <input type="checkbox"/> Type C Tree Removal Plan      | <input type="checkbox"/> Tree Permit (B or C)           | <input type="checkbox"/> Temporary Use                  | <input type="checkbox"/> Other (describe)               |
| <input type="checkbox"/> Villebois SAP                 | <input type="checkbox"/> Villebois PDP                  | <input type="checkbox"/> Villebois FDP                  |   |
| <input checked="" type="checkbox"/> Zone Map Amendment | <input checked="" type="checkbox"/> Waiver(s)           | <input type="checkbox"/> Conditional Use                |   |



# Frog Pond – Petras Homes Subdivision

## Consolidated Land Use Applications

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**Date:** Updated October 2023

**Submitted to:** City of Wilsonville  
29799 SW Town Center Loop E  
Wilsonville, OR 97070

**Applicant:** Petras Homes, LLC  
3673 SW Homesteader Road  
West Linn, OR 97068

**AKS Job Number:** 9338



12965 SW Herman Road, Suite 100  
Tualatin, OR 97062  
(503) 563-6151

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## Exhibits

- Exhibit A:** Preliminary Plans
  - Exhibit B:** Land Use Application Forms & Annexation Petitions
  - Exhibit C:** Ownership Information
  - Exhibit D:** Clackamas County Assessor's Map
  - Exhibit E:** Traffic Impact Study
  - Exhibit F:** Wetland Memo and Concurrence
  - Exhibit G:** Preliminary Stormwater Report
  - Exhibit H:** Geotechnical Report
  - Exhibit I:** Draft CC&Rs
  - Exhibit J:** Annexation Legal Description and Exhibit
  - Exhibit K:** Annexation County Certifications
  - Exhibit L:** Zoning Change Legal Description and Exhibit
  - Exhibit M:** Preliminary Conceptual Elevations
  - Exhibit N:** 250-Foot Radius Notification Labels
  - Exhibit O:** Service Provider Letters
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# Frog Pond – Petras Homes Subdivision Consolidated Land Use Applications

<b>Submitted to:</b>	City of Wilsonville 29799 SW Town Center Loop E Wilsonville, OR 97070
<b>Applicant:</b>	Petras Homes, LLC 3673 SW Homesteader Road West Linn, OR 97068
<b>Property Owners:</b>	Petras Homes, LLC 3673 SW Homesteader Road West Linn, OR 97068
<b>Applicant’s Consultant:</b>	AKS Engineering & Forestry, LLC 12965 SW Herman Road, Suite 100 Tualatin, OR 97062
	Contact(s): Glen Southerland, AICP Email: SoutherlandG@aks-eng.com Phone: (503) 563-6151
<b>Site Location:</b>	No situs address Northwest of the intersection of SW Frog Pond Lane and SW Stafford Road
<b>Clackamas County Assessor’s Map:</b>	3 1W 12D; Tax Lot 200
<b>Site Size:</b>	±2.02 acres (Lot 200)
<b>Land Use Districts:</b>	Clackamas County Rural Residential Farm Forest 5-Acre (RRFF-5) (Current) Residential Neighborhood (RN) (Upon Annexation)



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## I. Executive Summary

Petras Homes LLC (Applicant) is submitting this application to accommodate an attached middle housing single-family residential neighborhood within the Frog Pond West master planned community. The project requires the following approvals:

1. Annexation to the City of Wilsonville
2. Zoning Map Amendment
3. Planned Development – Stage I Preliminary Plan
4. Planned Development – Stage II Final Plan
5. Site Design Review of Open Space
6. Tentative Subdivision Plat
7. Waiver Request for Minimum Street Frontage

This property is located within the Frog Pond West planning area, which Metro Regional Services (Metro) included in its Urban Growth Boundary (UGB) in 2002 to accommodate projected residential growth. The City of Wilsonville (City) undertook extensive planning of Frog Pond West over several years, ultimately adopting the *Frog Pond Area Plan* in 2015 and *Frog Pond West Master Plan* (Master Plan) in 2017. Annexation of the project site into the City of Wilsonville is the next step in the progression from the thorough planning process and helps implement the City's vision for this area.

This application involves the development of land for housing. Oregon Revised Statutes (ORS) 197.307(4) states that a local government may apply only clear and objective standards, conditions, and procedures regulating the provision of housing, and that such standards, conditions, and procedures cannot have the effect, either in themselves or cumulatively, of discouraging housing through unreasonable cost or delay. This application involves a "limited land use application," as that term is defined in ORS 197.015 (12), as it involves a tentative subdivision plan for property within an urban growth boundary.

Oregon Courts and the Land Use Board of Appeals (LUBA) have generally held that an approval standard is not clear and objective if it imposes on an applicant "subjective, value-laden analyses that are designed to balance or mitigate impacts of the development" (*Rogue Valley Association of Realtors v. City of Ashland*, 35 OR LUBA 139, 158 [1998] aff'd, 158 OR App 1 [1999]). ORS 197.831 places the burden on local governments to demonstrate that the standards and conditions placed on housing applications can be imposed only in a clear and objective manner. While this application addresses all standards and conditions, the Applicant reserves the right to object to the enforcement of standards or conditions that are not clear and objective and does not waive its right to assert that the housing statutes apply to this application. Exceptions in ORS 197.307(4)(a) and 197.307(5) do not apply to this application; ORS 197.307(7)(a) is controlled by ORS 197.307(4).

ORS 197.195(1) describes how certain standards can be applied as part of a limited land use application. The applicable land use regulations for this application are found in the City of Wilsonville Development Code. Pursuant to ORS 197.195(1), Comprehensive Plan provisions (as well as goals, policies, etc. from within the adopted elements of the Comprehensive Plan) may not be used as a basis for a decision or an appeal of a decision unless they are specifically incorporated into the land use regulations. While this application may respond to the Comprehensive Plan and/or related documents, such a response does not imply or concede that said provisions are applicable approval criteria. Similarly, the Applicant does not

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waive its right to object to the attempted implementation of these provisions unless they are specifically listed in the applicable land use regulations, as is required by ORS 197.195(1).

Pursuant to ORS 197.522, if this application is found to be inconsistent with the applicable land use regulations, the Applicant may offer an amendment or propose conditions of approval to make the application consistent with applicable regulations. In fact, the local government is obligated to consider and impose any conditions of approval proposed by the Applicant if such conditions would allow the local government to approve an application that would not otherwise meet applicable approval criteria.

## **II. Site Description/Setting**

### **Project Location**

The site is ±2.02 gross acres with frontage on SW Frog Pond Lane, SW Stafford Road, and SW Windflower Street. The property is in unincorporated Clackamas County, within the City of Wilsonville UGB, and within the Frog Pond West subarea of the City. The property is within Frog Pond West Subdistrict 10, zoned R-5.

### **Surrounding Land Use**

The project site is within the UGB and is surrounded by the existing city limits. Surrounding properties will eventually be built out as the Frog Pond master planned community. The properties adjacent to the project site to the north and west are part of Frog Pond Crossing and are within Frog Pond West Subdistricts 10 and 11. Properties across SW Frog Pond Lane opposite the project site are part of Subdistrict 6 with a zoning designation of R-5. The project site will also be annexed to the City and rezoned from Clackamas County Rural Residential Farm Forest 5-Acre (RRFF-5) to Residential Neighborhood (RN) with an R-5 *Frog Pond Area Plan* Designation.

### **Existing Site Condition**

The site consists of Tax Lot 200 of Clackamas County Assessor's Map 3 1W 12D and has Clackamas County zoning designation RRFF-5. The site is currently undeveloped and was previously used for agriculture, mainly hazelnut production.

### **Proposed Project**

The project includes 11 parent lots and 20 child lots with duplexes for 21 total single-family dwelling units. This project proposes to annex the site to the City of Wilsonville and apply the designated RN zoning district. Per Figure 6 of the *Frog Pond West Master Plan*, the ±2.02-acre site is within Subdistrict 10, which is designated R-5 (Small Size Lots: 4,000- to 6,000-square-foot lots). The site is planned for 21 dwelling units, open-space tracts with pedestrian walkways, and a stormwater facility.

Associated site improvements include grading, construction of a local street network, and open-space tracts to be privately maintained by a homeowners' association (HOA). The project dedicates ±21.5 feet of right-of-way width for the expansion of SW Frog Pond Lane and ±12 feet of right-of-way width for the expansion of SW Stafford Road. The project also proposes to provide a 10-foot right-of-way dedication for expansion of SW Windflower Street and the completion of a street elbow north of proposed Tract C.

### **Transportation & Circulation**

The subdivision obtains vehicular access from SW Windflower Street, a local street approved as part of the Frog Pond Crossing subdivision, and provides pedestrian access to SW Windflower Street, SW Stafford Road to the east, and SW Frog Pond Lane to the south. Vehicular access to each property will be provided

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via a private alley within Tract B. Tract B is not proposed to provide connection to streets other than SW Windflower Street.

SW Stafford Road is classified as an existing Major Arterial street. SW Frog Pond Lane is classified as a new Collector. Right-of-way dedications to the adjacent streets are planned in order to facilitate construction of the streets to their full width.

### III. Applicable Review Criteria

#### OREGON REVISED STATUTES (ORS)

#### ORS 222 – CITY BOUNDARY CHANGES, MERGERS; CONSOLIDATIONS; WITHDRAWALS

##### GENERAL PROVISIONS

ORS 222.111 Authority and procedure for annexation; specifying tax rate in annexed territory.

- (1) When a proposal containing the terms of annexation is approved in the manner provided by the charter of the annexing city or by ORS 222.111 to 222.180 or 222.840 to 222.915, the boundaries of any city may be extended by the annexation of territory that is not within a city and that is contiguous to the city or separated from it only by a public right of way or a stream, bay, lake or other body of water. Such territory may lie either wholly or partially within or without the same county in which the city lies.

**Response:** The property is within unincorporated Clackamas County and is contiguous to the Wilsonville City Limits.

- (2) A proposal for annexation of territory to a city may be initiated by the legislative body of the city, on its own motion, or by a petition to the legislative body of the city by owners of real property in the territory to be annexed.

**Response:** The proposal for annexation is initiated by the property owners of the land proposed for annexation and has been signed by all property owners. There are no electors residing on the property. The signed petition for annexation to City of Wilsonville is included in Exhibit B.

- (5) The legislative body of the city shall submit, except when not required under ORS 222.120 (Procedure for annexation without election), 222.170 (Annexation by consent before public hearing or order for election) and 222.840 (Short title) to 222.915 (Application of ORS 222.840 to 222.915) to do so, the proposal for annexation to the electors of the territory proposed for annexation and, except when permitted under ORS 222.120 (Procedure for annexation without election) or 222.840 (Short title) to 222.915 (Application of ORS 222.840 to 222.915) to dispense with submitting the proposal for annexation to the electors of the city, the legislative body of the city shall submit such proposal to the electors of the city. The proposal for annexation may be voted upon at a general election or at a special election to be held for that purpose.

- (6) The proposal for annexation may be voted upon by the electors of the city and of the territory simultaneously or at different times not more than 12 months apart.

- (7) Two or more proposals for annexation of territory may be voted upon simultaneously; however, in the city each proposal shall be stated separately on the ballot and voted on separately, and in the territory proposed for annexation no proposal for annexing other territory shall appear on the ballot.



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**Response:** Pursuant to ORS 222.120(1), the legislative body of the City of Wilsonville is not required to submit a proposal for annexation of territory to the electors of the City for their approval or rejection. The above criteria are not applicable.

**ORS 222.120** Procedure for annexation without election; hearing; ordinance subject to referendum.

- (1) Except when expressly required to do so by the city charter, the legislative body of a city is not required to submit a proposal for annexation of territory to the electors of the city for their approval or rejection.

**Response:** The City of Wilsonville Charter does not require a vote of the electors of the City for annexation. The property owners and electors of the subject site consent in writing to the annexation, and upon submittal of this application, a public hearing will be scheduled. The annexation will follow the process defined within the Development Code. The above criterion is met.

**ORS 222.125** Annexation by consent of all owners of land and majority of electors; proclamation of annexation.

The legislative body of a city need not call or hold an election in the city or in any contiguous territory proposed to be annexed or hold the hearing otherwise required under ORS 222.120 when all of the owners of land in that territory and not less than 50 percent of the electors, if any, residing in the territory consent in writing to the annexation of the land in the territory and file a statement of their consent with the legislative body. Upon receiving written consent to annexation by owners and electors under this section, the legislative body of the city, by resolution or ordinance, may set the final boundaries of the area to be annexed by a legal description and proclaim the annexation.

Note: 222.125 was added to and made a part of ORS chapter 222 by legislative action but was not added to any smaller series therein. See Preface to Oregon Revised Statutes for further explanation.

**Response:** The property owners of the area proposed for annexation have provided their consent in writing. There are no electors residing on the property. The City does not require a vote of the electors of the City to approve an annexation and instead will follow a public hearing process as defined within the City's Development Code. This criterion is met.

**ORS 222.170** Annexation by consent before public hearing or order for election; proclamation of annexation.

- (1) If the city legislative body has not dispensed with submitting the question to the electors of the city and a majority of the votes cast on the proposition within the city favor annexation, or if the city legislative body has previously dispensed with submitting the question to the electors of the city as provided in ORS 222.120 (Procedure for annexation without election), the legislative body, by resolution or ordinance, shall set the final boundaries of the area to be annexed by a legal description and proclaim the annexation.

**Response:** The draft legal description and exhibit map for annexation are included within Exhibit J. The criterion above is understood.

- (4) Real property that is publicly owned, is the right of way for a public utility, telecommunications carrier as defined in ORS 133.721 (Definitions for ORS 41.910 and 133.721 to 133.739) or railroad or is exempt from ad valorem taxation shall not be considered when determining the number of owners, the area of land or the assessed valuation required to grant consent to annexation under

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this section unless the owner of such property files a statement consenting to or opposing annexation with the legislative body of the city on or before a day described in subsection (1) of this section.

**Response:** The above standard is understood.

### **OREGON STATEWIDE PLANNING GOALS**

The following Oregon Statewide Planning Goals are applicable to this action:

Goal 1 – Citizen Involvement

Goal 2 – Land Use Planning

Goal 5 – Natural Resources, Scenic and Historic Areas, and Open Spaces

Goal 6 – Air, Land, and Water Resources Quality

Goal 8 – Recreational Needs

Goal 9 – Economic Development

Goal 10 – Housing

Goal 11 – Public Facilities and Services

Goal 12 – Transportation

Goal 3 (Agricultural Lands) and Goal 4 (Forest Lands) are not applicable to lands within the UGB and have been omitted for brevity.

Goal 7 (Areas Subject to Natural Hazards) is not applicable because the subject site does not contain mapped areas of steep slopes 25 percent or greater or other known hazard areas.

Goal 13 (Energy Conservation) is not applicable because the amendment does not affect the City or County goals or policies governing energy conservation.

Goal 14 (Urbanization) is not applicable because this application does not involve expansion of the Wilsonville UGB and thus analysis of the transition of rural to urban land uses is not relevant.

Goals 15 (Willamette River Greenway), 16 (Estuarine Resources), 17 (Coastal Shorelands), 18 (Beaches and Dunes), and 19 (Ocean Resources) are not applicable because the subject site does not contain lands described in those goals.

#### **Goal 1: Citizen Involvement**

To develop a citizen involvement program that ensures the opportunity for citizens to be involved in all phases of the planning process.

**Response:** The City of Wilsonville has an established public notice and hearing process for quasi-judicial applications. Once this annexation request is accepted as complete, the City will begin this public notification and citizen involvement process. Therefore, this request is consistent with Goal 1.

#### **Goal 2: Land Use Planning**

To establish a land use planning process and policy framework as a basis for all decision and actions related to use of land and to assure an adequate factual base for such decisions and actions.

**Response:** The Oregon Land Conservation and Development Commission (LCDC) has acknowledged the City of Wilsonville Comprehensive Plan as in compliance with the Statewide Planning Goals. This narrative demonstrates that the proposed amendment is in compliance with

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the goals and policies of the City of Wilsonville Comprehensive Plan, as applicable to the proposed annexation.

This application provides an adequate factual basis for the City and County to approve the application because it describes the current and planned future site characteristics and applies the relevant approval criteria to those characteristics. Therefore, following the application process will ensure consistency with Statewide Planning Goal 2.

**Goal 5: Natural Resources, Scenic and Historic Areas, and Open Spaces**

*To protect natural resources and conserve scenic and historic areas and open spaces.*

**Response:** The subject property is not designated as an open space or scenic area, and there are no protected natural resources or historic areas present on the site. Wetlands are present on the site but have not been deemed as significant. The project provides ±16,771 square feet of open space for the provision of pedestrian pathways and stormwater facilities. The proposal conforms with this statewide planning goal.

**Goal 6: Air, Water and Land Resources Quality**

*To maintain and improve the quality of the air, water and land resources of the state.*

**Response:** Land located within the UGB is considered urbanizable and is intended to be developed to meet the needs of the City. The effects of urban development on air, water, and land resources are anticipated. Development of the property is subject to tree preservation, stormwater, and wastewater requirements of the City of Wilsonville Development Code, which are intended to minimize the impact of development on the state's natural resources. The proposal is consistent with Goal 6.

**Goal 8: Recreational Needs**

*To satisfy the recreational needs of the citizens of the state and visitors and, where appropriate, to provide for the siting of necessary recreational facilities including destination resorts.*

**Response:** Goal 8 is implemented through the City of Wilsonville 2018 Parks and Recreation Comprehensive Master Plan. Together with the Metro Plan, the provisions identify future needs for parks, a natural area, and recreation facilities. The amendments will not negatively affect the City's Comprehensive Plan with respect to Goal 8 and its development regulations governing recreational needs (e.g. open space, park dedication, fee-in-lieu requirements, etc.). An increase in residential land supply will increase the number of residents and visitors and in turn System Development Charges (SDC) and the demand for recreational facilities will increase. Therefore, this application is consistent with Goal 8.

**Goal 9: Economic Development**

*To provide adequate opportunities throughout the state for a variety of economic activities vital to the health, welfare, and prosperity of Oregon's citizens.*

**Response:** This area has been identified in the City of Wilsonville Comprehensive Plan as appropriate for residential use. The Zone Map Amendment to change the zoning from unincorporated Clackamas County Rural Residential Farm Forest 5-Acre (RRFF-5) to Residential Neighborhood (RN) is consistent with the intent of the *Frog Pond West Master Plan*. The proposed project will create the needed housing for the City of Wilsonville's workforce,

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which indirectly promotes economic activities in the region. In addition, a thoughtfully designed community with active-use open space and a pedestrian trail system enhances the City's appeal, stimulating its business and industry and contributing to the health and vitality of the overall community. Therefore, this application is consistent with Goal 9.

**Goal 10: Housing**

To provide for the housing needs of citizens of the state.

**Response:** The 2014 Wilsonville Residential Land Study, which serves as the City's state-acknowledged Housing Needs Analysis, anticipates that the City will need to accommodate 3,794 new households by 2034. The Frog Pond West master planned community has been planned with a strategy to meet state-required supply for residential land and housing. The project provides 11 residential parent lots at allowable residential density for 21 small-lot single-family homes. This land has been designated for housing so that the City may meet its forecasted residential needs. Annexation of the property and approval of the proposed Comprehensive Plan Map amendment will allow for the provision of urban residential land for the construction of homes. The proposed housing type, attached single-family, will help the City meet its Goal 10 requirements to provide an "opportunity for at least 50 percent of new residential units to be attached single family housing or multiple family housing." Therefore, this application is consistent with Statewide Planning Goal 10.

**Goal 11: Public Facilities and Services**

To plan and develop a timely, orderly and efficient arrangement of public facilities and services to serve as a framework for urban and rural development.

**Response:** The City of Wilsonville Comprehensive Plan and the *Frog Pond West Master Plan* include implementation measures to ensure site development complies with the City's Wastewater Collections System Master plan, Stormwater Master Plan, Water System Master Plan, and Transportation System Plan. Therefore, the proposed annexation implements the Comprehensive Plan and master plans and is consistent with Goal 11.

**Goal 12: Transportation**

To provide and encourage a safe, convenient and economic transportation system.

**Response:** Goal 12 is implemented by the Transportation Planning Rule (TPR), which requires local governments to adopt transportation system plans (TSPs) and consider transportation impacts resulting from land use decisions and development. This application includes a traffic impact study (TIS) prepared by DKS Associates (Exhibit E). It demonstrates that the project will not have a "significant effect" on the surrounding transportation system. Therefore, the application is consistent with Goal 12.

**FINDINGS FOR TRANSPORTATION PLANNING RULE COMPLIANCE**

**Response:** The key provision of the TPR related to local land use decisions is Oregon Administrative Rule (OAR) 660-012-0060. OAR 660-012-0060(1) and (2) apply to amendments to acknowledged maps, as is the case with this application.

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The TPR requires a two-step analysis. First, under OAR 660-012-0060(1), the Applicant must determine if the application has a “significant effect,” as that term is defined in OAR 660-012-0060(1). The City may rely on transportation improvements found in TSPs, as allowed by OAR 660-012-0060(3)(a), (b), and (c), to show that failing intersections will not be made worse or intersections not now failing will not fail. If there is a “significant effect,” then the Applicant must demonstrate appropriate mitigation under OAR 660-012-0060(2), et seq.

**OAR 660-012-0060 Plan and Land Use Regulation Amendments**

- (1) If an amendment to a functional plan, an acknowledged comprehensive plan, or a land use regulation (including a zoning map) would significantly affect an existing or planned transportation facility, then the local government must put in place measures as provided in section (2) of this rule, unless the amendment is allowed under section (3), (9) or (10) of this rule. A plan or land use regulation amendment significantly affects a transportation facility if it would:
  - (a) Change the functional classification of an existing or planned transportation facility (exclusive of correction of map errors in an adopted plan);
  - (b) Change standards implementing a functional classification system; or
  - (c) Result in any of the effects listed in paragraphs (A) through (C) of this subsection based on projected conditions measured at the end of the planning period identified in the adopted TSP. As part of evaluating projected conditions, the amount of traffic projected to be generated within the area of the amendment may be reduced if the amendment includes an enforceable, ongoing requirement that would demonstrably limit traffic generation, including, but not limited to, transportation demand management. This reduction may diminish or completely eliminate the significant effect of the amendment.
    - (A) Types or levels of travel or access that are inconsistent with the functional classification of an existing or planned transportation facility;
    - (B) Degrade the performance of an existing or planned transportation facility such that it would not meet the performance standards identified in the TSP or comprehensive plan; or
    - (C) Degrade the performance of an existing or planned transportation facility that is otherwise projected to not meet the performance standards identified in the TSP or comprehensive plan.

**Response:** The TIS prepared by the City’s traffic engineer, DKS Associates, contains a detailed discussion of the traffic impacts associated with the proposed project and any potential mitigation for the project as it relates to the Oregon TPR found in OAR 660-012-0060. As described in the study, this project and the associated traffic improvements will comply with OAR 660-012-0060 (1) and (2). Compliance with the TPR is included within the *Frog Pond Area Plan*, which assumed full development of the Frog Pond area. Please refer to the TIS (Exhibit E) for further information.

These criteria are met.

[...]

- (4) Determinations under sections (1)–(3) of this rule shall be coordinated with affected transportation facility and service providers and other affected local governments.

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- (a) In determining whether an amendment has a significant effect on an existing or planned transportation facility under subsection (1)(c) of this rule, local governments shall rely on existing transportation facilities and services and on the planned transportation facilities, improvements and services set forth in subsections (b) and (c) below.
  - (b) Outside of interstate interchange areas, the following are considered planned facilities, improvements and services:
    - (A) Transportation facilities, improvements or services that are funded for construction or implementation in the Statewide Transportation Improvement Program or a locally or regionally adopted transportation improvement program or capital improvement plan or program of a transportation service provider.
    - (B) Transportation facilities, improvements or services that are authorized in a local transportation system plan and for which a funding plan or mechanism is in place or approved. These include, but are not limited to, transportation facilities, improvements or services for which: transportation systems development charge revenues are being collected; a local improvement district or reimbursement district has been established or will be established prior to development; a development agreement has been adopted; or conditions of approval to fund the improvement have been adopted.
    - (C) Transportation facilities, improvements or services in a metropolitan planning organization (MPO) area that are part of the area's federally-approved, financially constrained regional transportation system plan.
    - (D) Improvements to state highways that are included as planned improvements in a regional or local transportation system plan or comprehensive plan when ODOT provides a written statement that the improvements are reasonably likely to be provided by the end of the planning period.
    - (E) Improvements to regional and local roads, streets or other transportation facilities or services that are included as planned improvements in a regional or local transportation system plan or comprehensive plan when the local government(s) or transportation service provider(s) responsible for the facility, improvement or service provides a written statement that the facility, improvement or service is reasonably likely to be provided by the end of the planning period.
  - (c) Within interstate interchange areas, the improvements included in (b)(A)–(C) are considered planned facilities, improvements and services, except where:
    - (A) ODOT provides a written statement that the proposed funding and timing of mitigation measures are sufficient to avoid a significant adverse impact on the Interstate Highway system, then local governments may also rely on the improvements identified in paragraphs (b)(D) and (E) of this section; or
    - (B) There is an adopted interchange area management plan, then local governments may also rely on the improvements identified in that plan and which are also identified in paragraphs (b)(D) and (E) of this section.

- 
- (d) As used in this section and section (3):
    - (A) Planned interchange means new interchanges and relocation of existing interchanges that are authorized in an adopted transportation system plan or comprehensive plan;
    - (B) Interstate highway means Interstates 5, 82, 84, 105, 205 and 405; and
    - (C) Interstate interchange area means:
      - (i) Property within one-quarter mile of the ramp terminal intersection of an existing or planned interchange on an Interstate Highway; or
      - (ii) The interchange area as defined in the Interchange Area Management Plan adopted as an amendment to the Oregon Highway Plan.
    - (e) For purposes of this section, a written statement provided pursuant to paragraphs (b)(D), (b)(E) or (c)(A) provided by ODOT, a local government or transportation facility provider, as appropriate, shall be conclusive in determining whether a transportation facility, improvement or service is a planned transportation facility, improvement or service. In the absence of a written statement, a local government can only rely upon planned transportation facilities, improvements and services identified in paragraphs (b)(A)-(C) to determine whether there is a significant effect that requires application of the remedies in section (2).

**Response:** This section of the TPR requires coordination with affected transportation service providers. The City provides the roads that serve the subject property. The adjacent street sections are under City jurisdiction and have been assigned road classifications within the City's TSP; SW Stafford Lane is designated as an arterial street, SW Frog Pond Lane is designated as a collector street, and SW Windflower Street is designated as a local street. The City has a duty to coordinate with transportation facility and service providers and other affected agencies, as applicable. Therefore, the criteria of OAR 660-012-0060(4) are met.

#### METRO FUNCTIONAL PLAN COMPLIANCE

Metro Code 3.07.810(c) requires compliance with applicable provisions of the Functional Plan when a City amends its acknowledged comprehensive plan and land use regulations. In this case, the City's acknowledged Land Use Zoning Map and Land Development Code are consistent with the Functional Plan. This application does not amend the City's acknowledged Land Use Zoning Map or Land Development Code in a way that is inconsistent with the Functional Plan. Therefore, the City can find that the Functional Plan is satisfied.

Additionally, Metro Code 3.07.810(f) requires that the City give notice to the Metro Chief Operating Officer of the map amendments 35 days before the first Planning Commission hearing. If the City provides such notice, the Land Use Zoning Map Amendment will comply with the Functional Plan upon final approval by the City.

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## Chapter 3.09 – Local Government Boundary Changes

### 3.09.040 Requirements for Petitions

- A. A petition for a boundary change must contain the following information:
1. The jurisdiction of the reviewing entity to act on the petition;
  2. A map and a legal description of the affected territory in the form prescribed by the reviewing entity;
  3. For minor boundary changes, the names and mailing addresses of all persons owning property and all electors within the affected territory as shown in the records of the tax assessor and county clerk; and
  4. For boundary changes under ORS 198.855(3), 198.857, 222.125 or 222.170, statements of consent to the annexation signed by the requisite number of owners or electors.
- B. A city, county and Metro may charge a fee to recover its reasonable costs to carry out its duties and responsibilities under this chapter.

**Response:** The City is the reviewing entity that will act on this petition. Necessary application forms and exhibits, as well as associated review fees, have been submitted with this application. A map and legal description of the affected territory are included in Exhibit J. The names and mailing addresses of persons owning property in the affected territory, per County Tax Assessor and County Clerk records, are included in Exhibit C. Finally, a statement of consent from the requisite owners and electors is included in Exhibit B. Therefore, the criteria are met.

### 3.09.045 Expedited Decisions

- D. To approve a boundary change through an expedited process, the city shall:
1. Find that the change is consistent with expressly applicable provisions in:  
[...]

**Response:** The applicable provisions have been addressed within this written narrative. The proposed annexation is consistent with the City of Wilsonville Comprehensive Plan, *Frog Pond West Master Plan*, and other applicable plans and agreements. These criteria are met.

2. Consider whether the boundary change would:
  - a. Promote the timely, orderly and economic provision of public facilities and services;
  - b. Affect the quality and quantity of urban services; and
  - c. Eliminate or avoid unnecessary duplication of facilities or services.

**Response:** The annexation of this property is part of the orderly and timely development of the Frog Pond West master planned area, adding necessary housing and infrastructure to this planned area of urban development. The utility and service capacity and availability necessary to serve this new area of the City have been determined to be sufficient per the applicable City master plans. These criteria are met.

- E. A city may not annex territory that lies outside the UGB, except it may annex a lot or parcel that lies partially within and partially outside the UGB.



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**Response:** The territory proposed for annexation is wholly within the UGB and eligible for annexation. This criterion is met.

**3.09.050 Hearing and Decision Requirements [...] Other Than Expedited Decisions**

A. The following requirements for hearings on petitions operate in addition to requirements for boundary changes in ORS Chapters 198, 221 and 222 and the reviewing entity’s charter, ordinances or resolutions.

**Response:** This narrative and the accompanying exhibits respond to applicable state and local requirements pertaining to boundary changes. Additionally, Metro Code Section 3.09 and the Wilsonville Development Code implement the applicable annexation provisions from ORS Chapters 198, 221, and 222. This narrative demonstrates that applicable boundary change requirements have been satisfied. The criterion is met.

B. Not later than 15 days prior to the date set for a hearing the reviewing entity shall make available to the public a report that addresses the criteria identified in subsection (D) and includes the following information:

1. The extent to which urban services are available to serve the affected territory, including any extra territorial extensions of service;

**Response:** Urban services are or will be made available to serve the affected territory to a level consistent with City and Clean Water Services (CWS) standards.

2. Whether the proposed boundary change will result in the withdrawal of the affected territory from the legal boundary of any necessary party; and

**Response:** Metro Code Section 3.09.020 defines the following terms: “affected territory” means a territory described in a petition; “necessary party” means any county, city, or district whose jurisdictional boundary or adopted urban service area includes any part of the affected territory, or who provides any urban service to any portion of the affected territory, including Metro, or any other unit of local government, as defined in ORS 190.003, that is a party to any agreement for provision of an urban service to the affected territory. The annexation will add ±2 acres of land to the City of Wilsonville for the provision of urban services but will not withdraw the affected territory from the legal boundary of any party. The legal description of the area is included in Exhibit J.

3. The proposed effective date of the boundary change.

**Response:** The Applicant anticipates approval of the Annexation application by roughly September 2023.

C. The person or entity proposing the boundary change has the burden to demonstrate that the proposed boundary change meets the applicable criteria.

**Response:** This application includes responses demonstrating compliance to applicable boundary change criteria.

D. To approve a boundary change, the reviewing entity shall apply the criteria and consider the factors set forth in subsections (D) and (E) of section 3.09.045.

**Response:** Responses to Metro Code Sections 3.09.045 (D) and (E) are included above.

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## CITY OF WILSONVILLE COMPREHENSIVE PLAN

### URBAN GROWTH MANAGEMENT

#### Urban Growth Boundaries

**Goal 2.1** To allow for urban growth while maintaining community livability, consistent with the economics of development, City administration, and the provision of public facilities and services.

**Policy 2.2.1** The City of Wilsonville shall support the development of all land within the City, other than designated open space lands, consistent with the land use designations of the Comprehensive Plan.

#### Implementation Measure 2.2.1.a

Allow annexation when it is consistent with future planned public services and when a need is clearly demonstrated for immediate urban growth.

**Response:** The proposed project is located within the West Neighborhood of the Frog Pond planning area. This area was brought into the UGB in 2002 to meet regional housing needs. A plan for the area, the *Frog Pond Area Plan*, was adopted in 2015 and the *Frog Pond West Master Plan* was adopted in 2017 as a sub-element of the Comprehensive Plan. It provides for single-family residential uses to meet the housing needs of Wilsonville’s growing population. The City’s Housing Needs Analysis validates the need for inclusion of the Frog Pond West subarea to meet state-required supply for residential land. The *Frog Pond Area Plan* includes a transportation network, parks and open-space framework, and infrastructure funding plan to support development within the Frog Pond area and ensure adequate public services.

#### Implementation Measure 2.2.1.e

Changes in the City boundary will require adherence to the annexation procedures prescribed by State law and Metro standards. Amendments to the City limits shall be based on consideration of:

1. Orderly, economic provision of public facilities and services, i.e., primary urban services are available and adequate to serve additional development or improvements are scheduled through the City's approved Capital Improvements Plan.

**Response:** The *Frog Pond Area Plan* provides guidance for the orderly economic provision of public facilities and services within the Frog Pond Area. The Applicant has submitted concurrent applications for Stage I and Stage II Planned Development Review, Site Design Review, and Tentative Subdivision Plat, which propose the extension of public facilities and services to the Frog Pond – Petras Homes Subdivision. The applicable state and Metro regulations have been evaluated within this narrative. The proposed services are consistent with the *Frog Pond Area Plan*, *Frog Pond West Master Plan*, and the City’s Finance Plan and Capital Improvements Plan.

2. Availability of sufficient land for the various uses to ensure choices in the marketplace for a 3 to 5 year period.

**Response:** The proposed project implements the uses envisioned in the adopted *Frog Pond West Master Plan* on the land with zoned Residential Neighborhood (RN). The inclusion of the

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Frog Pond area within the UGB and the adoption of the *Frog Pond Area Plan* demonstrate the need for residential development in the Frog Pond Area.

3. **Statewide Planning Goals.**

**Response:** A separate section in this narrative demonstrates compliance with applicable Statewide Planning Goals.

4. **Applicable Metro Plans;**

**Response:** A separate section in this narrative demonstrates compliance with the applicable provisions of the Metro Urban Growth Management Functional Plan.

5. **Encouragement of development within the City limits before conversion of urbanizable (UGB) areas.**

**Response:** The subject site was brought into the UGB in 2002 but has not yet been annexed to the City limits. The City began the planning process for the development of the Frog Pond Area in 2014. Annexation of the project site is the next stage of the process and will allow the City of Wilsonville to implement the vision of the *Frog Pond West Master Plan*.

## LAND USE AND DEVELOPMENT

### Residential Development

**GOAL 4.1** To have an attractive, functional, economically vital community with a balance of different types of land uses.

#### Policy 4.1.4

The City of Wilsonville shall provide opportunities for a wide range of housing types, sizes, and densities at prices and rent levels to accommodate people who are employed in Wilsonville.

#### Implementation Measure 4.1.4.b

Plan for and permit a variety of housing types consistent with the objectives and policies set forth under this section of the Comprehensive Plan, while maintaining a reasonable balance between the economics of building and the cost of supplying public services. It is the City's desire to provide a variety of housing types needed to meet a wide range of personal preferences and income levels. The City also recognizes the fact that adequate public facilities and services must be available in order to build and maintain a decent, safe, and healthful living environment.

**Response:** The proposed annexation of the property and zone change to Residential Neighborhood (RN) implement the Comprehensive Plan to provide new single-family homes, consistent with the residential densities and housing types established in the *Frog Pond West Master Plan*. The proposed project will provide adequate public facilities and services for the new dwellings.

#### Implementation Measure 4.1.4.c

Establish residential areas that are safe, convenient, healthful, and attractive places to live while encouraging variety through the use of planned developments and clusters and legislative Master Plans.

**Response:** The proposed Planned Development is consistent with the legislatively adopted *Frog Pond West Master Plan*. The project proposes development within the RN zoning district

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and is consistent with the City’s Development Code standards to ensure a residential area that is safe, convenient, healthful, and attractive.

**Implementation Measure 4.1.4.d**

Encourage the construction and development of diverse housing types, but maintain a general balance according to housing type and geographic distribution, both presently and in the future. Such housing types may include, but shall not be limited to: Apartments, single-family detached, single-family common wall, manufactured homes, mobile homes, modular homes, and condominiums in various structural forms.

**Response:** The project provides attached single-family housing on parent lots ranging from ±3,600 square feet to ±4,900 square feet, as allowed by the R-5 district regulations established in the *Frog Pond West Master Plan*.

**Implementation Measure 4.1.4.e**

Targets are to be set in order to meet the City’s Goals for housing and assure compliance with State and regional standards.

**Response:** The *Frog Pond Area Plan* and *Frog Pond West Master Plan* establish minimum and maximum residential densities for this area in compliance with state and regional standards. The proposed zone change will allow development of the subject site in conformance with those targets. Please refer to Table 1 within this written narrative and applicable code responses for further details.

**Implementation Measure 4.1.4.r**

All development, except as indicated in the lowest density districts, will coincide with the provision of adequate streets, water, and sanitary sewerage and storm drainage facilities, as specified in the Public Facilities and Services Section of the Plan. These facilities shall be (a) capable of adequately serving all intervening properties as well as the proposed development and (b) designed to meet City standards.

**Response:** The Petras Homes Subdivision follows the sequential development pattern of the Frog Pond West master planned community and extends public facilities from previously approved, adjacent Frog Pond subdivisions.

**Implementation Measure 4.1.4.u**

To provide variety and flexibility in site design and densities, residential lands shown on the Land Use Map and legislative Master Plans of the Comprehensive Plan have been divided into districts, with different density ranges for each district. In all residential developments, other than those that are so small that it is not mathematically feasible to achieve the prescribed minimum density, the 80% minimum shall apply. The following density ranges have been prescribed for each district:

- Density: 0-1 units/acre
- 2-3 units/acre
- 4-5 units/acre
- 6-7 units/acre
- 10-12 units/acre
- 16-20 units/acre

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**Response:** The project site is within Subdistrict 10 of the *Frog Pond West Master Plan* area, designated for R-5 residential density. The proposed project is consistent with the recommended density range for this area, as demonstrated within Table 1 of this narrative response.

#### Residential Neighborhood Development

##### Policy 4.1.7.a

New neighborhoods in residential urban growth expansion areas may be designated “Residential Neighborhood” on the Comprehensive Plan Map.

##### Implementation Measure 4.1.7.a

Area Plans (also called Concept Plans) shall be prepared to guide the overall framework of land use, multi-modal transportation, natural resources, parks and open space, public facilities, and infrastructure funding. Master Plans shall direct more detailed planning. The City may at its discretion combine Area Planning and Master Planning.

##### Implementation Measure 4.1.7.c

The “Residential Neighborhood” Zone District shall be applied in all areas that carry the Residential Neighborhood Plan map designation, unless otherwise directed by an area plan or master plan.

**Response:** The project site has been designated “Residential Neighborhood” on the City’s Comprehensive Plan Map and is part of the *Frog Pond West Master Plan* area. The subject area has been proposed to receive the planned designation of Residential Neighborhood (RN) as required for the area. The proposed development is consistent with the purpose of the RN designation and the *Frog Pond West Master Plan*.

### CITY OF WILSONVILLE DEVELOPMENT CODE

#### CHAPTER 4. PLANNING AND LAND DEVELOPMENT

##### ZONING

##### Section 4.113 STANDARDS APPLYING TO RESIDENTIAL DEVELOPMENTS IN ANY ZONE

##### (.01) *Open Space*

**Response:** The *Frog Pond West Master Plan* controls open space standards for the area. The subject site is within an area designated R-5 and therefore is required to provide open space per Wilsonville Development Code (WDC) Section 4.127(.09). For additional information, please refer to narrative responses to the applicable open space requirements.

##### (.02) *Building Setbacks*

**Response:** The *Frog Pond West Master Plan* controls development standards for the area. The setbacks in the proposed project are consistent with the Frog Pond West Master Plan. Please refer to the response under WDC Section 4.127(.08).

##### (.03) *Height Guidelines*

**Response:** This application involves a preliminary subdivision plat; therefore, only lot dimensional standards are reviewed with this application. Site development standards (setbacks, height, etc.) are applied at the time of building permit review.

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(.05) *Off Street Parking:* Off-street parking shall be provided as specified in Section 4.155.

**Response:** Please refer to the response under WDC Section 4.155.

(.06) *Signs:* Signs shall be governed by the provisions of Sections 4.156.01 – 4.156.11.

**Response:** Signs are not included as part of this application. These standards do not apply at this time.

(.07) *Fences:*

- A. The maximum height of a sight-obscuring fence located in the required front yard of a residential development shall not exceed four (4) feet.
- B. The maximum height of a sight-obscuring fence located in the side yard of a residential lot shall not exceed four (4) feet forward of the building line and shall not exceed six (6) feet in height in the rear yard, except as approved by the Development Review Board. Except, however, that a fence in the side yard of residential corner lot may be up to six (6) feet in height, unless a greater restriction is imposed by the Development Review Board acting on an application. A fence of up to six (6) feet in height may be constructed with no setback along the side, the rear, and in the front yard of a residential lot adjoining the rear of a corner lot as shown in the attached Figure.
- C. Notwithstanding the provisions of Section 4.122(10)(a) and (b), the Development Review Board may require such fencing as shall be deemed necessary to promote and provide traffic safety, noise mitigation, and nuisance abatement, and the compatibility of different uses permitted on adjacent lots of the same zone and on adjacent lots of different zones.
- D. Fences in residential zones shall not include barbed wire, razor wire, electrically charged wire, or be constructed of sheathing material such as plywood or flakeboard.

**Response:** Fences in residential lots will be reviewed at the time of building permit. This application includes fences around the stormwater facility and a wall along SW Stafford Road, per the *Frog Pond West Master Plan*. Please refer to responses to WDC Section 4.176 Landscaping, Screening, and Buffering elsewhere within this written narrative.

(.08) *Corner Vision:* Vision clearance shall be provided as specified in Section 4.177, or such additional requirements as specified by the City Engineer.

**Response:** Please refer to the narrative response under WDC Section 4.177.

(.09) *Prohibited Uses:*

- A. Uses of structures and land not specifically permitted in the applicable zoning districts.
- B. The use of a trailer, travel trailer or mobile coach as a residence, except as specifically permitted in an approved RV park.
- C. Outdoor advertising displays, advertising signs, or advertising structures except as provided in Sections 4.156.05, 4.156.07, 4.156.09, and 4.156.10.

**Response:** The proposed project does not include prohibited uses.

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(.10) *Accessory Dwelling Units:*

- A. Accessory Dwelling Units are permitted subject to standards and requirements of this Subsection.

**Response:** This application does not include accessory units. These standards are not applicable.

- (.11) *Reduced Setback Agreements.* The following procedure has been created to allow the owners of contiguous residential properties to reduce the building setbacks that would typically be required between those properties, or to allow for neighbors to voluntarily waive the solar access provisions of Section 4.137. Setbacks can be reduced to zero through the procedures outlined in this subsection.

[...]

**Response:** Please refer to the response under WDC Section 4.127(.08). Reduced setbacks have not been requested. These standards do not apply.

(.12) *Bed and Breakfasts:*

**Response:** Bed and breakfasts have not been proposed as part of this application. These standards do not apply.

- (.13) The Planning Director and Development Review Board shall, in making their determination of compliance in attaching conditions, consider the effects of this action on the availability and cost of needed housing. The provisions of this section shall not be used in such a manner that additional conditions, either singularly or cumulatively, have the effect of unnecessarily increasing the cost of housing or effectively excluding a needed housing type. However, consideration of these factors shall not prevent the Board or Planning Director from imposing conditions of approval necessary to meet the minimum requirements of the Comprehensive Plan and Code.

**Response:** This standard is understood.

(.14) Design Standards for Detached Single-family and Middle Housing.

- A. The standards in this subsection apply in all zones, except as indicated in 1.—2. below:
1. The Façade Variety standards in Subsection C.1. do not apply in the Village Zone or Residential Neighborhood Zones, as these zones have their own variety standards, except that the standards do apply within middle housing development with multiple detached units on a single lot which the standards of these zones do not address;
  2. The entry orientation and window standards for triplexes, quadplexes, and townhouses in Subsections D.1-2. and E. 2-3. do not apply in the Village Zone or Residential Neighborhood Zone as these zones have their own related standards applicable to all single-family and middle housing.

[...]

**Response:** The project is located within the RN zoning district; therefore, the listed standards do not apply. The applicable standards of Section 4.127 are addressed later within this written narrative or will be addressed with future applications for each home.

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Section 4.118     STANDARDS APPLYING IN ALL PLANNED DEVELOPMENT ZONES

(.01)     *Height Guidelines:* In “S” overlay zones, the solar access provisions of Section 4.137 shall be used to determine maximum building heights. In cases that are subject to review by the Development Review Board, the Board may further regulate heights as follows: [...]

**Response:**     The subject site is not located within the “S” overlay zone.

(.02)     Underground Utilities shall be governed by Sections 4.300 to 4.320. All utilities above ground shall be located so as to minimize adverse impacts on the site and neighboring properties.

**Response:**     Please refer to response under Sections 4.300 to 4.320 in this narrative.

(.03)     Notwithstanding the provisions of Section 4.140 to the contrary, the Development Review Board, in order to implement the purposes and objectives of Section 4.140, and based on findings of fact supported by the record may:

A.     Waive the following typical development standards:

1.     Minimum lot area;
2.     Lot width and frontage;
3.     Height and yard requirements;
4.     Lot coverage;
5.     Lot depth;
6.     Street widths;
7.     Sidewalk requirements;
8.     Height of buildings other than signs;
9.     Parking space configuration and drive aisle design;
10.    Minimum number of parking or loading spaces;
11.    Shade tree islands in parking lots, provided that alternative shading is provided;
12.    Fence height;
13.    Architectural design standards;
14.    Transit facilities; and
15.    On-site pedestrian access and circulation standards; and
16.    Solar access standards, as provided in section 4.137.
17.    Open space in the Residential Neighborhood zone; and
18.    Lot orientation.

**Response:**     The project requires a minimum lot size waiver for Lot 6 and lot frontage waivers for proposed Lots 4 through 6.

The lots requiring a frontage waiver obtain vehicular access via a private alley within Tract B to the rear of each lot. Pedestrian access is provided along the front of each lot via Tract D, a pedestrian pathway. The waiver of street frontage benefits the public through additional lots meeting the master plan requirements, the provision of greater driveway



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and intersection spacing, and the provision of required sight distance from the SW Stafford Road/SW Frog Pond Lane intersection.

Lot 6 requires a reduction to the minimum lot size in order to provide greater than the minimum number of lots required within the district. Each of the other 10 lots is planned to provide a duplex dwelling, with Lot 6 providing a detached single-family residence. The reduction allows for the full buildout of the area as specified within the *Frog Pond West Master Plan*.

The requested waivers are needed in order to meet the purposes established by Chapter 4 of the Wilsonville Development Code, City of Wilsonville Comprehensive Plan and other implementing documents, and the *Frog Pond West Master Plan*.

**B.** The following shall not be waived by the Board, unless there is substantial evidence in the whole record to support a finding that the intent and purpose of the standards will be met in alternative ways:

1. Open space requirements in residential areas, except that the Board may waive or reduce open space requirements in the Residential Neighborhood zone. Waivers in compliance with [Section] 4.127(.08)(B)(2)(d);

**Response:** Per Section 4.127(.09)B.1, properties within the R-5 subdistrict are subject to the requirements of the Residential Neighborhood Open Space standards. A waiver is not sought. Open Space tracts will be established for construction of pedestrian pathways and stormwater facilities.

2. Minimum density standards of residential zones. The required minimum density may be reduced by the Board in the Residential Neighborhood zone in compliance with [Section] 4.127(.06) B; and

**Response:** Per Table 1, the project meets the minimum density standards of the Frog Pond West area and no waiver is required.

3. Minimum landscape, buffering, and screening standards.

**Response:** The project meets the minimum landscape, buffering, and screening standards and no waiver is required.

**C.** The following shall not be waived by the Board, unless there is substantial evidence in the whole record to support a finding that the intent and purpose of the standards will be met in alternative ways, and the action taken will not violate any applicable federal, state, or regional standards:

1. Maximum number of parking spaces;
2. Standards for mitigation of trees that are removed;
3. Standards for mitigation of wetlands that are filled or damaged; and
4. Trails or pathways shown in the Parks and Recreation Master Plan.

**Response:** The project meets the above standards; no waivers are requested.

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[...]

(.07) *Density Transfers.* In order to protect significant open space or resource areas, the Development Review Board may authorize the transfer of development densities from one portion of a proposed development to another. Such transfers may go to adjoining properties, provided that those properties are considered to be part of the total development under consideration as a unit.

**Response:** No density transfers are required. This standard does not apply.

(.08) *Wetland Mitigation and other mitigation for lost or damaged resources.* The Development Review Board may, after considering the testimony of experts in the field, allow for the replacement of resource areas with newly created or enhanced resource areas. The Board may specify the ratio of lost to created and/or enhanced areas after making findings based on information in the record. As much as possible, mitigation areas shall replicate the beneficial values of the lost or damaged resource areas.

**Response:** The southern portion of the project site features ±0.16 acres of wetland. The wetland is not included as part of the City's Significant Resource Overlay Zone (SROZ) map. An SROZ memo and wetland delineation concurrence determination by the Department of State Lands (DSL) are included with this application as part of Exhibit F. The delineation of Wetland A determined that it is locally non-significant and does not require Vegetated Corridor or Impact Area setbacks.

(.09) *Habitat-Friendly Development Practices.* To the extent practicable, development and construction activities of any lot shall consider the use of habitat-friendly development practices, which include:

- A. Minimizing grading, removal of native vegetation, disturbance and removal of native soils, and impervious area;
- B. Minimizing adverse hydrological impacts on water resources, such as using the practices described in Part (a) of Table NR-2 in Section 4.139.03, unless their use is prohibited by an applicable and required state or federal permit, such as a permit required under the federal Clean Water Act, 33 U.S.C. §§1251 et seq., or the federal Safe Drinking Water Act, 42 U.S.C. §§300f et seq., and including conditions or plans required by such permit;
- C. Minimizing impacts on wildlife corridors and fish passage, such as by using the practices described in Part (b) of Table NR-2 in Section 4.139.03; and
- D. Using the practices described in Part (c) of Table NR-2 in Section 4.139.03.

**Response:** This project is designed to minimize impacts to natural habitat through the use of habitat-friendly development practices, including limiting grading to the minimum necessary for installing site improvements and building homes and providing ±10,791 square feet of open space/landscape coverage area. Water, sewer, and stormwater infrastructure was designed and will be installed in accordance with the applicable City requirements to minimize adverse impacts on the site and to adjacent properties and surrounding resources.

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In accordance with the intent of the *Frog Pond West Master Plan*, the layout of residential lots, streets, and open-space tracts was designed to protect the maximum number of trees and tree groves. These criteria are met.

Section 4.124 Standards Applying to all Planned Development Residential Zones.

(.01) *Permitted Uses:*

- A. Open Space.
- B. Single-Family Dwelling Units.
- C. Duplexes, triplexes, quadplexes, townhouses.

[...]

**Response:** Petras Homes Subdivision proposes open space and duplex uses. These uses are permitted, and this standard is met.

(.02) Permitted accessory uses to single family and detached dwelling units:

[...]

**Response:** Accessory uses have not been proposed as part of this application.

[...]

(.08) *Adjustments to Ensure Minimum Density is Met.* In development not involving Multi-Family Dwelling Units, if demonstrated by the applicant that it is not physically possible to accommodate the minimum number of units at the required minimum lot size and the minimum open space, the following adjustments, A.—B., shall be made to the minimum extent necessary to enable minimum density to be met. To prioritize the provision of required open space, adjustments to minimum lot size, width, and depth shall be used to the extent allowed, as described in A. below, prior to any adjustment to open space requirements as described in B. below.

- A. Adjustments to Minimum Lot Size, Width, and Depth: Reduce minimum lot size of up to 20 percent of the residential lots, rounded consistent with Subsection (.06) above or one lot for a four-lot subdivision, by up to 20 percent. For example, the potential adjustment, if determined necessary, for a 100-lot subdivision in the PDR-4 zone would be to reduce 20 lots to as low as 2,400 square feet (a 20 percent reduction of the 3,000 square foot minimum lot size). Also reduce the minimum lot width and minimum lot depth by up to 20 percent as necessary to allow the reduction of lot size.
- B. Adjustment to Open Space Area. Reduce the amount of open space area required pursuant to Subsection 4.113(.01). Reduce non-usable open space to the extent possible prior to usable open space required by Subsection 4.113(.01)C.3. After any adjustment to open space, all subdivisions with ten or more units must still include a minimum of one usable, programmed open space of at least 2,000 square feet meeting the requirements of Subsection 4.113(.01)C.3. Subdivisions less than ten units shall require one usable open space of at least 1,000 square feet meeting the same requirements.

**Response:** Adjustments are not needed to achieve minimum density.

(.09) Block and access standards:

- 1. Maximum block perimeter in new land divisions: 1,800 feet.

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**Response:** As shown on the Preliminary Plans (Exhibit A), the project meets the 1,800-foot maximum block perimeter standard. This criterion is met.

2. **Maximum spacing between streets or private drives for local access: 530 feet, unless waived by the Development Review Board upon finding that barriers such as railroads, freeways, existing buildings, topographic variations, or designated Significant Resource Overlay Zone areas will prevent street extensions meeting this standard.**

**Response:** The project does not involve the creation of public streets. The project obtains vehicular street access via SW Windflower Street to the north and is located between SW Marigold Terrace to the west and SW Stafford Road to the east. Because the project site is located immediately northwest of the intersection of Arterial (SW Stafford Road) and Collector – Greenway (SW Frog Pond Lane) streets, direct access to these higher-classification streets is not proposed. This criterion is met.

3. **Maximum block length without pedestrian and bicycle crossing: 330 feet, unless waived by the Development Review Board upon finding that barriers such as railroads, freeways, existing buildings, topographic variations, or designated Significant Resource Overlay Zone areas will prevent pedestrian and bicycle facility extensions meeting this standard.**

**Response:** The proposed residential blocks do not exceed 330 feet in length. Two pedestrian and bicycle accessways are provided from SW Windflower Street, one leading east to SW Stafford Road and another leading south to SW Frog Pond Lane. The maximum block length is not exceeded, and this criterion is met.

Section 4.127 **RESIDENTIAL NEIGHBORHOOD (RN) ZONE.**

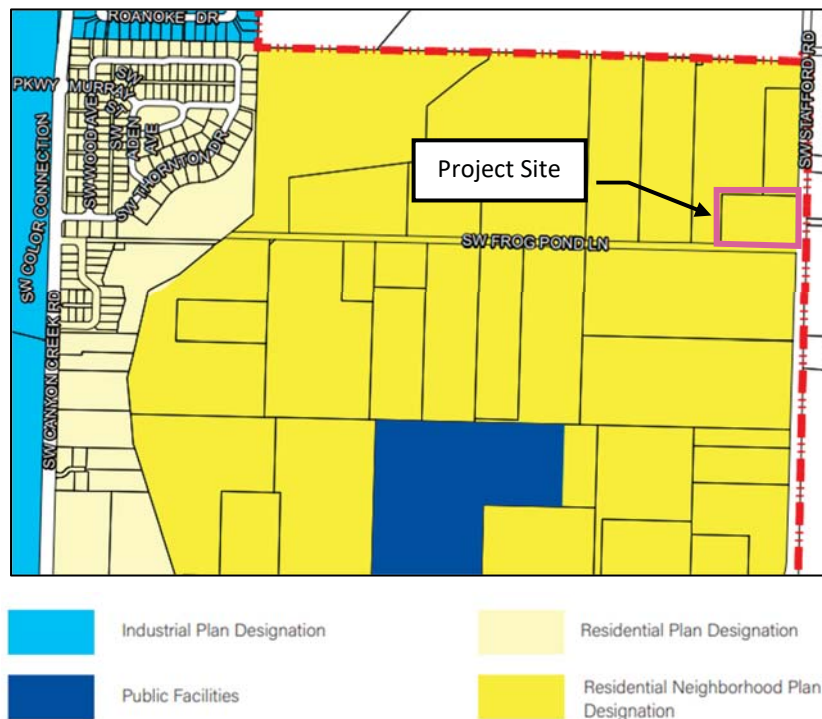
(.01) **Purpose.** The Residential Neighborhood (RN) zone applies to lands within Residential Neighborhood Comprehensive Plan Map designation. The RN zone is a Planned Development zone, subject to applicable Planned Development regulations, except as superseded by this section or in legislative master plans. The purposes of the RN Zone are to:

- A. Implement the Residential Neighborhood policies and implementation measures of the Comprehensive Plan.
- B. Implement legislative master plans for areas within the Residential Neighborhood Comprehensive Plan Map designation.
- C. Create attractive and connected neighborhoods in Wilsonville.
- D. Regulate and coordinate development to result in cohesive neighborhoods that include: walkable and active streets; a variety of housing appropriate to each neighborhood; connected paths and open spaces; parks and other non-residential uses that are focal points for the community; and, connections to and integration with the larger Wilsonville community.
- E. Encourage and require quality architectural and community design as defined by the Comprehensive Plan and applicable legislative master plans.
- F. Provide transportation choices, including active transportation options.

- G. Preserve and enhance natural resources so that they are an asset to the neighborhoods, and there is visual and physical access to nature.
- H. Create housing opportunities for a variety of households, including housing types that implement the Wilsonville Equitable Housing Strategic Plan and housing affordability provisions of legislative master plans.

**Response:** Per Figure 5 of the *Frog Pond West Master Plan* (below), the Petra Homes Subdivision site is located within the RN Comprehensive Plan Map designation and is subject to these provisions and to applicable Planned Development (PD) regulations.

**Frog Pond West Master Plan Figure 5 excerpt:** Comprehensive Plan Designations



(.02) *Permitted uses:*

- A. Open Space.
- B. Single-Family Dwelling Unit.
- C. Townhouses. During initial development in the Frog Pond West Neighborhood, a maximum of two townhouses may be attached, except on corners, a maximum of three townhouses may be attached.
- D. Duplex.
- E. Triplex and quadplex. During initial development in the Frog Pond West Neighborhood, triplexes are permitted only on corner lots and quadplexes are not permitted.
- F. Cluster housing. During initial development in the Frog Pond West Neighborhood, only two-unit cluster housing is permitted except on corner lots where three-unit cluster housing is permitted.

- 
- G. Multiple-Family Dwelling Units, except when not permitted in a legislative master plan, subject to the density standards of the zone. Multi-family dwelling units are not permitted within the Frog Pond West Master Plan area.
  - H. Cohousing.
  - I. Cluster Housing (Frog Pond West Master Plan).
  - J. Public or private parks, playgrounds, recreational and community buildings and grounds, tennis courts, and similar recreational uses, all of a non-commercial nature, provided that any principal building or public swimming pool shall be located not less than 45 feet from any other lot.
  - K. Manufactured homes.

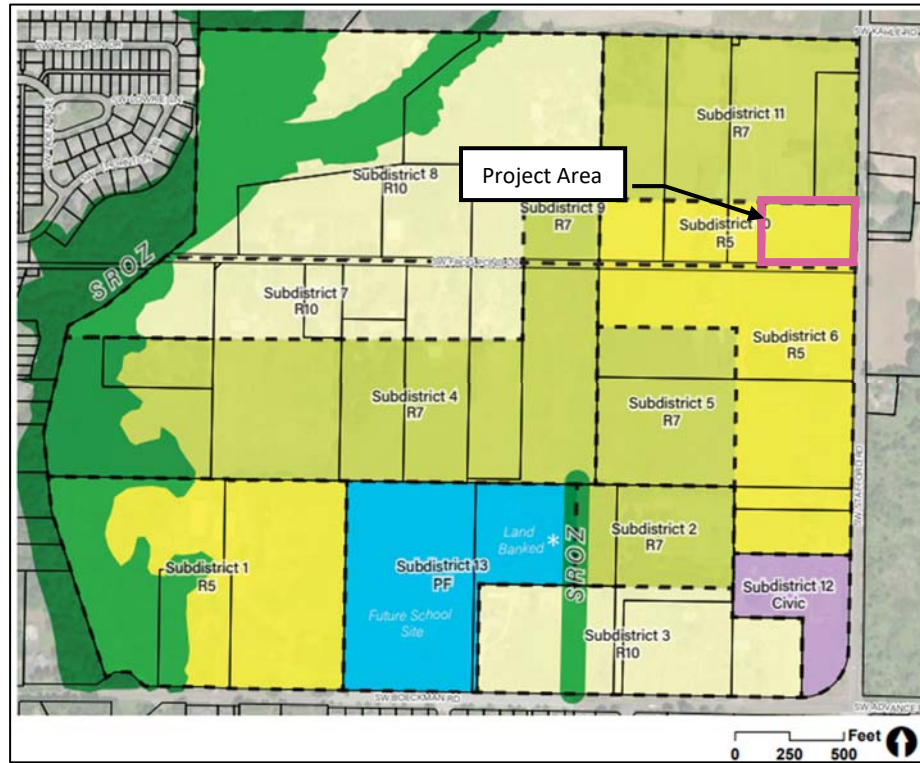
**Response:** The project includes plans for 11 parent lots planned for construction of duplexes and future middle housing land divisions. The project also involves open space for the provision of pedestrian and bicycle paths and stormwater facilities. Prohibited or conditional uses have not been proposed.

(.05) *Residential Neighborhood Zone Sub-districts:*

- A. RN Zone sub-districts may be established to provide area-specific regulations that implement legislative master plans.
  - 1. For the Frog Pond West Neighborhood, the sub-districts are listed in Table 1 of this Code and mapped on Figure 6 of the Frog Pond West Master Plan. The Frog Pond West Master Plan Sub-District Map serves as the official sub-district map for the Frog Pond West Neighborhood.

**Response:** The project site is within Subdistrict 10, which is designated Small Lot Single Family (R-5).

**Frog Pond West Master Plan Figure 6: Frog Pond West Land Use and Subdistricts**



\* Land banked for school facilities, a neighborhood park, and/or residential use.

**(.06) *Minimum and Maximum Residential Units:***

- A. The minimum and maximum number of residential units approved shall be consistent with this code and applicable provisions of an approved legislative master plan.
  - 1. For initial development of the Frog Pond West Neighborhood, Table 1 in this Code and Frog Pond West Master Plan Table 1 establish the minimum and maximum number of residential lots for the sub-districts.
  - 2. For areas that are a portion of a sub-district, the minimum and maximum number of residential lots are established by determining the proportional gross acreage and applying that proportion to the minimums and maximums listed in Table 1. The maximum density of the area may be increased, up to a maximum of ten percent of what would otherwise be permitted, based on an adjustment to an SROZ boundary that is consistent with 4.139.06.

**Response:** The project area encompasses ±2 gross acres of Subdistrict 10 within the *Frog Pond West Master Plan* area. The following table summarizes how the proposed residential units in

each subdistrict are consistent with the density range envisioned by the *Frog Pond West Master Plan*. Middle Housing units are not included within the density range calculations for the Frog Pond West area; therefore, calculations have been based on the number of parent lots rather than dwelling units.

**Table 1. Proposed Residential Units**

Subdistrict	Zoning Designation	Gross Subdistrict Area (Acres)	Site % of Gross Subdistrict	Established Dwelling Unit Range for Subdistrict		Proportional Lot Range for Site		Proposed Parent Lots
				Min	Max	Min	Max	
Subdistrict 10	R-5 (Small Lot)	6.0	33%	30	38	10	13	11

- B. The City may allow a reduction in the minimum density for a subdistrict when it is demonstrated that the reduction is necessary due to topography, protection of trees, wetlands and other natural resources, constraints posed by existing development, infrastructure needs, provision of nonresidential uses and similar physical conditions.

Table 1. Minimum and Maximum Dwelling Units Permitted in Each Subdistrict			
Area Plan Designation	Frog Pond West Subdistrict	Minimum Lots in Subdistrict	Maximum Lots in Subdistrict
R-5 Small Lot Single Family (4,000 – 6,000 SF)	10	30	38

- a. Each lot must contain at least one dwelling unit but may contain additional units consistent with the allowance for ADUs and middle housing.
- b. For townhouses, the combined lots of the townhouse project shall be considered a single lot for the purposes of the minimum and maximum of this table. In no case shall the density of a townhouse project exceed 25 dwelling units per net acre.
- c. These metrics apply to infill housing within the Community of Hope Church property, should they choose to develop housing on the site. Housing in the Civic sub-district is subject to the R-7 Medium Lot Single Family regulations.

**Response:** The Applicant is not requesting a reduction in minimum density.

(.07) Development Standards Generally:

- A. Unless otherwise specified by this the regulations in this Residential Development Zone chapter, all development must comply with Section 4.113, Standards Applying to Residential Development in Any Zone.

**Response:** Compliance with applicable regulations of Section 4.113 is addressed earlier in this written narrative. Some regulations of Section 4.127 supersede those of Section 4.113.

(.08) Lot Development Standards:

- A. Lot development shall be consistent with this Code and applicable provisions of an approved legislative master plan.
- B. Lot Standards Generally. For the Frog Pond West Neighborhood, Table 2 establishes the lot development standards unless superseded or supplemented by other provisions of the Development Code.
- C. Lot Standards for Small Lot Sub-districts. The purpose of these standards is to ensure that development in the Small Lot Sub-districts includes varied design that avoids homogenous street frontages,





creates active pedestrian street frontages and has open space that is integrated into the development pattern.

Standards. Planned developments in the Small Lot Sub-districts shall include one or more of the following elements on each block:

1. Alleys.
2. Residential main entries grouped around a common green or entry courtyard (e.g. cluster housing).
3. Four or more residential main entries facing a pedestrian connection allowed by an applicable legislative master plan.
4. Garages recessed at least four feet from the front façade or six feet from the front of a front porch.

**Response:** The project is within a Small Lot Sub-District. The applicable lot standards are outlined below.

Neighborhood Zone Sub-District	Min. Lot Size (sq.ft.) A, B	Min. Lot Depth (ft.)	Max. Lot Coverage (%)	Min. Lot Width (ft.) I, J, N	Max. Bldg. Height (ft.) H	Setbacks <sup>K, L, M</sup>				
						Front Min. (ft.)	Rear Min. (ft.)	Side Min. (note)	Garage Min Setback from Alley (ft.)	Garage Min Setback from Street <sup>O, P</sup> (ft.)
R-5 Small Lot	4,000 <sup>C, D</sup>	60'	60% <sup>E</sup>	35	35	12 <sup>F</sup>	15	M	18 <sup>G</sup>	20

*Notes:*

- A. Minimum lot size may be reduced to 80% of minimum lot size for any of the following three reasons: (1) where necessary to preserve natural resources (e.g. trees, wetlands) and/or provide active open space, (2) lots designated for cluster housing (Frog Pond West Master Plan), (3) to increase the number of lots up to the maximum number allowed so long as for each lot reduced in size a lot meeting the minimum lot size is designated for development of a duplex or triplex.
- B. For townhouses the minimum lot size in all sub-districts is 1,500 square feet.
- C. In R-5 and R-7 sub-districts the minimum lot size for quadplexes and cottage clusters is 7,000 square feet.
- D. In R-5 sub-districts the minimum lot size for triplexes is 5,000 square feet.
- E. On lots where detached accessory buildings are built, maximum lot coverage may be increased by 10%. Cottage clusters are exempt from maximum lot coverage standards.
- F. Front porches may extend 5 feet into the front setback.
- G. The garage setback from alley shall be minimum of 18 feet to a garage door facing the alley in order to provide a parking apron. Otherwise, the rear or side setback shall be between 3 and 5 feet.
- H. Vertical encroachments are allowed up to ten additional feet, for up to 10% of the building footprint; vertical encroachments shall not be habitable space.
- I. For townhouses in all sub-districts minimum lot width is 20 feet.
- J. May be reduced to 24' when the lot fronts a cul-de-sac. No street frontage is required when the lot fronts on an approved, platted private drive or a public pedestrian access in a cluster housing (Frog Pond West Master Plan) development.
- K. Front Setback is measured as the offset of the front lot line or a vehicular or pedestrian access easement line. On lots with alleys, Rear Setback shall be measured from the rear lot line abutting the alley.
- L. For cottage clusters all setbacks otherwise greater than 10 feet for other housing types is reduced to 10 feet
- M. On lots greater than 10,000 SF with frontage 70 ft. or wider, the minimum combined side yard setbacks shall total 20 ft. with a minimum of 10 ft. On other lots, minimum side setback shall be 5 ft. On a corner lot, minimum side setbacks are 10 feet.
- N. For cluster housing (Frog Pond West Master Plan) with lots arranged on a courtyard, frontage shall be measured at the front door face of the building adjacent to a public right-of-way or a public pedestrian access easement linking the courtyard with the Public Way.
- O. All lots with front-loaded garages are limited to one shared standard-sized driveway/apron per street regardless of the number of units on the lot.
- P. The garage shall be setback a minimum of 18 feet from any sidewalk easements that parallels the street.

**Response:** WDC Section 4.127, Table 2 (above) establishes the lot development standards for the Frog Pond West neighborhood. These standards supersede the setback standards of

4.113(.03). The table below demonstrates that the proposed project meets the lot dimensional standards, which are applied at the time of subdivision approval.

**Table 2. Parent Lot Compliance with Neighborhood Zone Lot Development Standards**

Standard	R-5 Designation	
	Required	Proposed
Min. Lot Size	4,000 square feet  3,200 square feet using 80% reduction <sup>A</sup>	4,000 square feet
Min. Lot Depth	60 feet	60 feet
Max Lot Coverage	60%	60%
Min. Lot Width	35 feet	35 feet
Max. Bldg. Height	35 feet	35 feet
Front Setback	12 feet	12 feet
Rear Setback	15 feet	15 feet
Side Setback – Interior	5 feet	5 feet
Side Setback – Corner Lot	10 feet	10 feet
Garage Setback From Street	20 feet	20 feet
Garage Setback From Alley	18 feet	18 feet
<sup>A</sup> May be reduced to 80% of minimum lot size where necessary to preserve natural resources (e.g. trees, wetlands) and/or provide active open space, per WDC 4.127 Table 2, Note A.		

As shown on the Preliminary Plans (Exhibit A), the proposed lots have vehicular access via a private alley. Front lot lines meet the 35-foot minimum width and provide pedestrian access to an adjacent right-of-way or pedestrian access/open-space tract. Since each proposed lot will obtain vehicular access via the proposed alley and maintains pedestrian access via the front of the property, the City can make a finding that the waiver of street frontage for Lots 4 – 6 will result in greater public benefit gained from density meeting the requirements of the *Frog Pond West Master Plan*, greater driveway and intersection spacing, and sight distance from the SW Stafford Road/SW Frog Pond Lane intersection.

Lot 6 is planned to utilize the allowed 20% lot size reduction. Per the stipulations of Footnote A of Table 2, Section 4.127, the lot size reduction is being utilized to provide a greater number of lots up to the maximum number allowed and because the project provides active open space in the form of pedestrian pathways within Tract A, C, and D.

Site development standards, including lot coverage, setbacks, and heights, will be reviewed at the time of building permit approval. The preliminary conceptual building elevations included in Exhibit M demonstrate that setback, height, and lot coverage standards can be met.



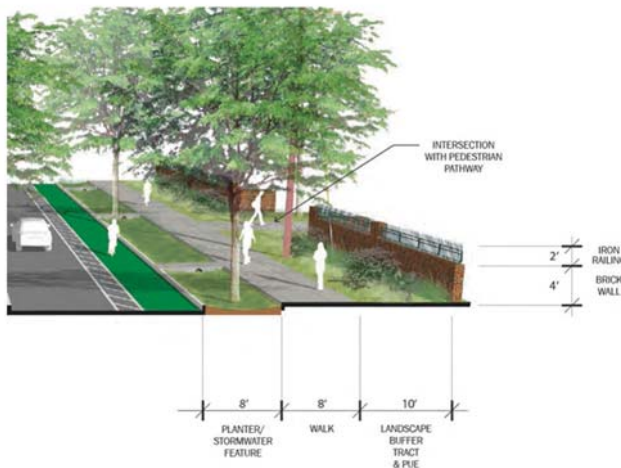
These criteria, as applicable at this time, are met.

**D. Lot Standards Specific to the Frog Pond West Neighborhood.**

1. Lots adjacent to Boeckman Road and Stafford Road shall meet the following standards:
  - a. Rear or side yards adjacent to Boeckman Road and Stafford Road shall provide a wall and landscaping consistent with the standards in Figure 10 of the Frog Pond West Master Plan.

**Response:** Figure 10 of the *Frog Pond West Master Plan* is as follows:

**Figure 10.** Boeckman Road and Stafford Road Frontage Improvements



As shown on Sheets P-14 and P-16 of the Preliminary Plans (Exhibit A), the area adjacent to SW Stafford Road is proposed to be landscaped and feature a wall as specified within the *Frog Pond West Master Plan*. The wall is planned to match the connecting wall adjacent to the Frog Pond Crossing subdivision. Other required improvements are planned to be constructed as part of the City's SW Stafford Road project. Sufficient right-of-way width is proposed to be dedicated as part of this project. This criterion is met.

2. Lots adjacent to the collector-designated portions of Willow Creek Drive and Frog Pond Lane shall not have driveways accessing lots from these streets, unless no practical alternative exists for access. Lots in Large Lot Sub-districts are exempt from this standard.

**Response:** The project involves a small-lot subdivision; therefore, this standard applies. The site includes a portion of Frog Pond Lane. No driveways are proposed to access the lots from that street. This standard does not apply to the project.

**(.09) Open Space:**

- A. **Purpose.** The purposes of these standards for the Residential Neighborhood Zone are to:
  1. Provide light, air, open space, and useable recreation facilities to occupants of each residential development.
  2. Retain and incorporate natural resources and trees as part of developments.

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3. Provide access and connections to trails and adjacent open space areas.

For Neighborhood Zones which are subject to adopted legislative master plans, the standards work in combination with, and as a supplement to, the park and open space recommendations of those legislative master plans. These standards supersede the Open Space requirements in WC Section 4.113(.01).

- B. *Within the Frog Pond West Neighborhood, the following standards apply:*

[...]

2. For properties within the R-5 Small Lot sub-districts, Open Space Area shall be provided in the following manner:

- a. Ten percent of the net developable area shall be in open space. Net developable area does not include land for non-residential uses, SROZ-regulated lands, streets and private drives, alleys and pedestrian connections. Open space must include at least 50 percent usable open space as defined by this Code and other like space that the Development Review Board finds will meet the purpose of this section.

**Response:** Wilsonville Development Code defines “Usable Open Space” as “Open Space that serves a planned recreational, active transportation, environmental education or relaxation purpose and is of sufficient size and shape for the intended purpose.” Approximately 12 percent (±10,791 square feet) of the net developable area (±87,980 square feet) is provided within open space tracts, not including stormwater or vehicular access areas. Of those areas, ±8,524 square feet are provided as tracts for pedestrian access, an active transportation use. Therefore, this criterion is met.

- b. Natural resource areas such as tree groves and/or wetlands, and unfenced low impact development storm water management facilities, may be counted toward the ten percent requirement at the discretion of the Development Review Board. Fenced storm water detention facilities do not count toward the open space requirement. Pedestrian connections may also be counted toward the ten percent requirement.

**Response:** The stormwater treatment facility is not planned to be fenced; therefore, the facility may be counted toward the 10 percent open-space requirement. Per the above standard, open-space areas with pedestrian connections are counted toward the 10 percent open-space requirement.

- c. The minimum land area for an individual open space is 2,000 square feet, unless the Development Review Board finds, based on substantial evidence in the record, that a smaller minimum area adequately fulfills the purpose of this Open Space standard.

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**Response:** Each of the proposed open-space tracts are greater than 2,000 square feet in area. This criterion is met.

- d. The Development Review Board may reduce or waive the usable open space requirement in accordance with Section 4.118(.03). The Board shall consider substantial evidence regarding the following factors: the walking distance to usable open space adjacent to the subject property or within 500 feet of it; the amount and type of open space available adjacent or within 500 feet of the subject property, including facilities which support creative play.

**Response:** A waiver to the usable open space requirement is not sought as part of this application. This standard does not apply.

- e. The Development Review Board may specify the method of assuring the long-term protection and maintenance of open space and/or recreational areas. Where such protection or maintenance are the responsibility of a private party or homeowners' association, the City Attorney shall review any pertinent bylaws, covenants or agreements prior to recordation.

**Response:** This requirement is understood. Maintenance of the proposed open-space areas is planned to be the responsibility of the homeowners' association (HOA).

(.10) *Block, access and connectivity standards:*

- A. *Purpose.* These standards are intended to regulate and guide development to create: a cohesive and connected pattern of streets, pedestrian connections and bicycle routes; safe, direct and convenient routes to schools and other community destinations; and, neighborhoods that support active transportation and Safe Routes to Schools.
- B. *Blocks, access and connectivity shall comply with adopted legislative master plans:*
  - 1. Within the Frog Pond West Neighborhood, streets shall be consistent with Figure 18, Street Demonstration Plan, in the Frog Pond West Master Plan. The Street Demonstration Plan is intended to be guiding, not binding. Variations from the Street Demonstration Plan may be approved by the Development Review Board, upon finding that one or more of the following justify the variation: barriers such as existing buildings and topography; designated Significant Resource Overlay Zone areas; tree groves, wetlands or other natural resources; existing or planned parks and other active open space that will serve as pedestrian connections for the public; alignment with property lines and ownerships that result in efficient use of land while providing substantially equivalent connectivity for the public; and/or site design that provides substantially equivalent connectivity for the public.

2. If a legislative master plan does not provide sufficient guidance for a specific development or situation, the Development Review Board shall use the block and access standards in Section 4.124(.06) as the applicable standards.

**Response:** The project does not propose new streets; however, the project will add to existing streets via right-of-way dedication. These streets meet the planned widths and construction for SW Windflower Street, SW Frog Pond Lane, and SW Stafford Road. The location of the blocks and planned pedestrian accessways generally align with those outlined within the *Frog Pond West Master Plan*.

**Comparison of Frog Pond Master Plan Figure 18: Street Demonstration Plan & Proposed Connections**

**Master Plan:**

**Proposed Plan:**



- (.11) *Signs.* Per the requirements of Sections 4.156.01 through 4.156.11 and applicable provisions from adopted legislative master plans.

**Response:** Sections 4.156.01 through 4.156.11 do not apply to this application.

- (.12) *Parking.* Per the requirements of Section 4.155 and applicable provisions from adopted legislative master plans.

**Response:** The proposed project meets parking Code requirements. Compliance with the applicable portions of Section 4.155 is addressed further in this written narrative.

- (.13) *Corner Vision Clearance.* Per the requirements of Section 4.177.

**Response:** Compliance with Section 4.177 is addressed further within this written narrative.

- (.14) *Main Entrance Standards*

[...]

- (.15) *Garage Standards:*

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[...]

(.16) *Residential Design Standards:*

[...]

**Response:** The design of individual homes will be reviewed at the time of building permit submittal. The application includes conceptual building elevations (Exhibit M) that demonstrate the standards of subsections 4.127(.14), (.15), and (.16) can be met.

(.17) *Fences:*

A. Within Frog Pond West, fences shall comply with standards in 4.113 (.07) except as follows:

1. Columns for the brick wall along Boeckman Road and Stafford Road shall be placed at lot corners where possible.
2. A solid fence taller than four feet in height is not permitted within eight feet of the brick wall along Boeckman Road and Stafford Road, except for fences placed on the side lot line that are perpendicular to the brick wall and end at a column of the brick wall.
3. Height transitions for fences shall occur at fence posts.

**Response:** The project site is adjacent to SW Stafford Road. Open Space Tract B will feature a brick landscape wall consistent with the requirements included within the *Frog Pond West Master Plan* for frontages along Stafford Road. This project continues the brick landscape wall approved as part of the Frog Pond Crossing subdivision immediately north of the project site. Where feasible, brick wall columns have been placed at lot corners, with height transitions and connections to perpendicular fencing anticipated to occur in those locations. These criteria are met.

(.18) *Residential Structures Adjacent to Schools, Parks and Public Open Spaces.*

A. *Purpose.* The purpose of these standards is to ensure that development adjacent to schools and parks is designed to enhance those public spaces with quality design that emphasizes active and safe use by people and is not dominated by driveways, fences, garages, and parking.

B. *Applicability.* These standards apply to development that is adjacent to or faces schools and parks. As used here, the term adjacent includes development that is across a street or pedestrian connection from a school or park.

C. *Development must utilize one or more of the following design elements:*

1. Alley loaded garage access.
2. On corner lots, placement of the garage and driveway on the side street that does not face the school, park, or public open space.
3. Recess of the garage a minimum of four feet from the front façade of the home. A second story above the garage, with windows, is encouraged for this option.

D. Development must be oriented so that the fronts or sides of residential structures face adjacent schools or parks. Rear yards and

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rear fences may generally not face the schools or parks, unless approved through the waiver process of 4.118 upon a finding that there is no practicable alternative due to the size, shape or other physical constraint of the subject property.

**Response:** The project site is located across SW Stafford Road from a future Institutional/Civic designation and the Frog Pond Grange, a historic site. While this area is not included as a school, park, or public open space, the project is proposed to consist of alley-loaded homes oriented so that the building fronts are oriented toward adjacent streets or pedestrian pathways.

**Section 4.139.00. SIGNIFICANT RESOURCE OVERLAY ZONE (SROZ) ORDINANCE.**

**Response:** The proposed project is not within an SROZ. The Applicant has completed a delineation of the wetland present on-site and has determined that it does not meet the criteria to be added to the SROZ map. As indicated in the Natural Resource Assessment attached as Exhibit F, the Applicant and DSL concur with the accuracy of the SROZ map of the subject property.

**Section 4.140 PLANNED DEVELOPMENT REGULATIONS.**

**(.02) Lot Qualification:**

- A. Planned Development may be established on lots which are suitable for and of a size to be planned and developed in a manner consistent with the purposes and objectives of Section 4.140.
- B. Any site designated for development in the Comprehensive Plan may be developed as a Planned Development, provided that it is zoned "PD" or specifically defined as a PD zone by this Code. All sites which are greater than two acres in size, and designated in the Comprehensive Plan for commercial, residential, or industrial use shall be developed as Planned Developments, unless approved for other uses permitted by the Development Code. Smaller sites may also be developed through the City's PD procedures, provided that the location, size, lot configuration, topography, open space and natural vegetation of the site warrant such development.

**Response:** The subject site is ±2.02 acres and is suitable for Planned Development. The project accommodates 11 residential lots (21 dwelling units with future Middle Housing Land Divisions), provides an efficient circulation system, and provides active and passive open space consistent with the purpose of Section 4.140. The application requests to rezone the property to RN (Residential Neighborhood). Pursuant to the *Frog Pond West Master Plan*, development in the RN zoning district follows the same Planned Development procedure as Planned Development (PD) zones. The application meets these standards.

**(.03) Ownership:**

- A. The tract or tracts of land included in a proposed Planned Development must be in one (1) ownership or control or the subject of a joint application by the owners of all the property included. The holder of a written option to purchase, with written authorization by the owner to make applications, shall be deemed the owner of such land for the purposes of Section 4.140.
- B. Unless otherwise provided as a condition for approval of a Planned Development permit, the permittee may divide and transfer units or



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parcels of any development. The transferee shall use and maintain each such unit or parcel in strict conformance with the approval permit and development plan.

**Response:** The proposed project consists of one lot under the ownership of the Applicant. The land use application has been signed by the property owners. These criteria are met.

(.04) Professional Design:

- A. The applicant for all proposed Planned Developments shall certify that the professional services of the appropriate professionals have been utilized in the planning process for development.
- B. Appropriate professionals shall include, but not be limited to the following to provide the elements of the planning process set out in Section 4.139:
  - 1. An architect licensed by the State of Oregon;
  - 2. A landscape architect registered by the State of Oregon;
  - 3. An urban planner holding full membership in the American Institute of Certified Planners, or a professional planner with prior experience representing clients before the Development Review Board, Planning Commission, or City Council; or
  - 4. A registered engineer or a land surveyor licensed by the State of Oregon.
- C. One of the professional consultants chosen by the applicant from either 1, 2, or 3, above, shall be designated to be responsible for conferring with the planning staff with respect to the concept and details of the plan.
- D. The selection of the professional coordinator of the design team will not limit the owner or the developer in consulting with the planning staff.

**Response:** The Applicant has selected a professional design team, AKS Engineering & Forestry, LLC (AKS), which includes registered civil engineers, certified planners, registered land surveyors, and licensed landscape architects. Each member of the professional design team has been certified or licensed by their corresponding professional board or agency. Glen Southerland, AICP, is the point of contact for planning staff with respect to the concept and details of the plan. These criteria are met.

(.05) Planned Development Permit Process:

- A. All parcels of land exceeding two acres in size that are to be used for residential, commercial or industrial development, shall, prior to the issuance of any building permit:
  - 1. Be zoned for planned development;
  - 2. Obtain a planned development permit; and
  - 3. Obtain Development Review Board, or, on appeal, City Council approval.

**Response:** The subject site is ±2 acres in size and is proposed for residential development. This application includes a Zoning Map Amendment to apply RN zoning to the site, Planned

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Development Stage I application, and Planned Development Stage II application. This criterion is met.

- B. Zone change and amendment to the zoning map are governed by the applicable provisions of the Zoning Sections, inclusive of Section 4.197.

**Response:** The requested Zoning Map Amendment is subject to the applicable provisions of the Zoning Sections and 4.197. These provisions are addressed further in the narrative. This criterion is met.

- C. Development Review Board approval is governed by Sections 4.400 to 4.450

- D. All planned developments require a planned development permit. The planned development permit review and approval process consists of the following multiple stages, the last two or three of which can be combined at the request of the applicant:

1. Pre-application conference with Planning Department;
2. Preliminary (Stage I) review by the Development Review Board or the Planning Director for properties within the Coffee Creek Industrial Design Overlay District. When a zone change is necessary, application for such change shall be made simultaneously with an application for preliminary approval; and
3. Final (Stage II) review by the Development Review Board or the Planning Director for properties within the Coffee Creek Industrial Design Overlay District.
4. In the case of a zone change and zone boundary amendment, City Council approval is required to authorize a Stage I preliminary plan except for properties within the Coffee Creek Industrial Design Overlay District, which may receive separate zone map amendment approvals.

**Response:** A pre-application conference was held with the Planning Department on September 15, 2022. Concurrent Zoning Map Amendment, and Stage I and Stage II Planned Development permit applications (and a number of additional concurrent applications) have been submitted for review by the Development Review Board. These criteria are met.

[...]

(.07) *Preliminary Approval (Stage One):*

- A. Applications for preliminary approval for planned developments shall:

1. Be made by the owner of all affected property or the owner's authorized agent; and
2. Be filed on a form prescribed by the City Planning Department and filed with said Department.
3. Set forth the professional coordinator and professional design team as provided in subsection (.04), above.
4. State whether the development will include mixed land uses, and if so, what uses and in what proportions and locations.

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**Response:** This submittal includes all of the above information.

- B. The application shall include conceptual and quantitatively accurate representations of the entire development sufficient to judge the scope, size, and impact of the development on the community; and, in addition to the requirements set forth in Section 4.035, shall be accompanied by the following information:
1. A boundary survey or a certified boundary description by a registered engineer or licensed surveyor.
  2. Topographic information as set forth in Section 4.035.
  3. A tabulation of the land area to be devoted to various uses, and a calculation of the average residential density per net acre. Developments within the RN zone shall show how the proposed number of units complies with the applicable maximum and minimum provisions of the RN zone.
  4. A stage development schedule demonstrating that the developer intends receive Stage II approval within two years of receiving Stage I approval, and to commence construction within two years after the approval of the final development plan, and will proceed diligently to completion; unless a phased development schedule has been approved; in which case adherence to that schedule shall be considered to constitute diligent pursuit of project completion.
  5. A commitment by the applicant to provide in the Final Approval (Stage II) a performance bond or other acceptable security for the capital improvements required by the project.
  6. If it is proposed that the final development plan will be executed in stages, a schedule thereof shall be provided.
  7. Statement of anticipated waivers from any of the applicable site development standards.

**Response:** A boundary survey including topographic information is provided in the Preliminary Existing Conditions Plan (Exhibit A). A tabulation of land area and residential density is included in Table 1 within this written narrative. Stage I and Stage II approvals are being requested concurrently, and a stage development schedule is not proposed.

[...]

(.09) *Final Approval (Stage Two):*

- A. Unless an extension has been granted by the Development Review Board or Planning Director, as applicable, within two years after the approval or modified approval of a preliminary development plan (Stage I), the applicant shall file with the City Planning Department a final plan for the entire development or when submission in stages has been authorized pursuant to Section 4.035 for the first unit of the development, a public hearing shall be held on each such application as provided in Section 4.013. As provided in Section 4.134, an application for a Stage II approval within the Coffee Creek Industrial Design Overlay District may be considered by the Planning Director without a public hearing as a Class II Administrative Review as provided in Section 4.035(.03).

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**Response:** A Stage II application has been submitted concurrently with the Stage I application.

- B. The Development Review Board or Planning Director, as applicable, shall determine whether the proposal conforms to the permit criteria set forth in this Code, and shall approve, conditionally approve, or disapprove the application.
- C. The final plan shall conform in all major respects with the approved preliminary development plan, and shall include all information included in the preliminary plan plus the following:
  - 1. The location of water, sewerage and drainage facilities;
  - 2. Preliminary building and landscaping plans and elevations, sufficient to indicate the general character of the development;
  - 3. The general type and location of signs;
  - 4. Topographic information as set forth in Section 4.035;
  - 5. A map indicating the types and locations of all proposed uses; and
  - 6. A grading plan.

**Response:** The required information is included as follows in the Petras Homes Subdivision Planned Unit Development (PUD) Preliminary Plans (Exhibit A):

- 1. Preliminary Composite Utility Plan
- 2. Preliminary Landscape Plan
- 3. Preliminary Grading and Erosion Control Measures

Preliminary conceptual building elevations are included as Exhibit M. Sign locations are not included as part of this application.

- D. The final plan shall be sufficiently detailed to indicate fully the ultimate operation and appearance of the development or phase of development. However, Site Design Review is a separate and more detailed review of proposed design features, subject to the standards of Section 4.400.

**Response:** A concurrent Site Design Review of Open Space application has been submitted. Section 4.400 Site Design Review criteria are addressed in the narrative.

- E. Copies of legal documents required by the Development Review Board or Planning Director, as applicable, for dedication or reservation of public facilities, or for the creation of a non-profit homeowner's association, shall also be submitted.

**Response:** Draft covenants, conditions, & restrictions (CC&Rs) are included as Exhibit I.

[...]

- J. A planned development permit may be granted by the Development Review Board or Planning Director, as applicable, only if it is found that the development conforms to all the following criteria, as well as to the Planned Development Regulations in Section 4.140:
  - 1. The location, design, size and uses, both separately and as a whole, are consistent with the Comprehensive Plan, and with any other applicable plan, development map or Ordinance adopted by the City Council.

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**Response:** The site is located within the Frog Pond West master planned area of the Frog Pond community. The *Frog Pond West Master Plan* has been incorporated into the Comprehensive Plan and designates the site for single-family residential use. Consistency with the Comprehensive Plan is addressed earlier in the narrative. The RN zoning district is identified as the implementing zone for the Residential Neighborhood (RN) Comprehensive Plan designation; this zone requires that all development within it be approved as a Planned Development.

2. That the location, design, size and uses are such that traffic generated by the development at the most probable used intersection(s) can be accommodated safely and without congestion in excess of Level of Service D, as defined in the Highway Capacity Manual published by the National Highway Research Board, on existing or immediately planned arterial or collector streets and will, in the case of commercial or industrial developments, avoid traversing local streets. Immediately planned arterial and collector streets are those listed in the City's adopted Capital Improvement Program, for which funding has been approved or committed, and that are scheduled for completion within two years of occupancy of the development or four year if they are an associated crossing, interchange, or approach street improvement to Interstate 5.
  - a. In determining levels of Service D, the City shall hire a traffic engineer at the applicant's expense who shall prepare a written report containing the following minimum information for consideration by the Development Review Board:
    - i. An estimate of the amount of traffic generated by the proposed development, the likely routes of travel of the estimated generated traffic, and the source(s) of information of the estimate of the traffic generated and the likely routes of travel;
    - ii. What impact the estimate generated traffic will have on existing level of service including traffic generated by (1) the development itself, (2) all existing developments, (3) Stage II developments approved but not yet built, and (4) all developments that have vested traffic generation rights under section 4.140(.10), through the most probable used intersection(s), including state and county intersections, at the time of peak level of traffic. This analysis shall be conducted for each direction of travel if backup from other intersections will interfere with intersection operations.
  - b. The following are exempt from meeting the Level of Service D criteria standard:
    - i. A planned development or expansion thereof which generates three new p.m. peak hour traffic trips or less;
    - ii. A planned development or expansion thereof which provides an essential governmental service.

- c. Traffic generated by development exempted under this subsection on or after Ordinance No. 463 was enacted shall not be counted in determining levels of service for any future applicant.
- d. Exemptions under 'b' of this subsection shall not exempt the development or expansion from payment of system development charges or other applicable regulations.
- e. In no case will development be permitted that creates an aggregate level of traffic at LOS "F".

**Response:** DKS Associates has conducted a TIS to evaluate traffic impacts from the proposed project. It addresses the provisions above. Please refer to the TIS (Exhibit E) for additional detail demonstrating that the project meets the above criteria. These criteria are met.

- 3. That the location, design, size and uses are such that the residents or establishments to be accommodated will be adequately served by existing or immediately planned facilities and services.

**Response:** The site will be adequately served by public facilities and services, including utilities. The project will construct transportation infrastructure with site development and will dedicate 21.5 feet of public right-of-way width to SW Frog Pond Lane and 12 feet of public right-of-way to SW Stafford Road for future widening and improvement. Therefore, this criterion is met.

(.10) Adherence to Approved Plans, Modification.

- A. Adherence to Approved Plan and Modification Thereof: The applicant shall agree in writing to be bound, for her/himself and her/his successors in interest, by the conditions prescribed for approval of a development. The approved final plan and stage development schedule shall control the issuance of all building permits and shall restrict the nature, location and design of all uses. Minor changes in an approved preliminary or final development plan may be approved by the Director of Planning if such changes are consistent with the purposes and general character of the development plan. All other modifications, including extension or revision of the stage development schedule, shall be processed in the same manner as the original application and shall be subject to the same procedural requirements.
- B. In the event of a failure to comply with the approved plan or any prescribed condition of approval, including failure to comply with the stage development schedule, the Development Review Board may, after notice and hearing, revoke a Planned Development permit. General economic conditions that affect all in a similar manner may be considered as a basis for an extension of a development schedule. The determination of the Board shall become final 30 days after the date of decision unless appealed to the City Council.
- C. Approved plans and non-conforming status with updated zoning and development standards.
  - 1. Approved plans are the basis of legal conforming status of development except where one of the following occurs, at

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which point, the approved planned development becomes legally non-conforming:

- a. the zoning of land within the plan area has been changed since adoption of the plan; or
  - b. the zoning standards for the zone under which it was approved have been substantially modified (50 percent or more of the regulatory standards have been modified as determined by the Planning Director); or
  - c. the City Council declared all planned developments in a certain zone or zones to be legal non-conforming as part of an ordinance to update or replace zoning standards; or
  - d. the City Council declared, by a stand-alone ordinance, planned developments in a certain zone not complying with current standards to be legal non-conforming. The City Council may, in an ordinance establishing non-conforming status of a planned development, declare the entire planned development to be non-conforming or declare certain standards established in the planned development to be non-conforming (i.e., lot coverage, setbacks, stormwater standards).
2. If one of the conditions of subsection 1. is met, development that is consistent with the approved plan, but not complying with current zoning standards, shall be considered legal non-conforming and subject to the standards of Sections 4.189 thru 4.192.
  3. In no case shall a planned development approved within the previous 24 months, or under a time-extension under WC Section 4.023, be considered non-conforming; but automatically will become non-conforming after 24-months, and the end of any extensions, if it otherwise would qualify as legally non-conforming or is so declared pursuant to this subsection.
- D. The following are exempt from established residential density requirements beyond one unit per lot.
1. Accessory Dwelling Units.
  2. Duplexes.
  3. Triplexes.
  4. Quadplexes.
  5. Cluster housing.
- E. For new townhouses in existing residential planned developments in residential zones, the allowed density shall be the lesser of: (1) Four times the maximum net density for the lot(s) or parcel(s) established in the approved plan, or (2) 25 units per acre.
- F. Notwithstanding Subsection C. above, single-family residential development built consistent with an approved master plan in the Planned Development Commercial or Planned Development Industrial zones prior to November 18, 2021 shall continue to be legal

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conforming uses. However, all lots within these master plans that allow for detached single-family must also allow all middle housing types with density exemptions and allowances consistent with D. and E. above. In addition, any lot coverage maximums established in the master plans less than those listed in Table 2 of Subsection 4.124(.07) are superseded by lot coverage standards in that table.

**Response:** These standards are understood.

- (.11) *Early Vesting of Traffic Generation.* Applicants with Stage I or Master Plan approvals occurring after June 2, 2003 may apply to vest the right to use available transportation capacity at the intersections of Wilsonville Road with Boone's Ferry Road and with Town Center Loop West, and/or the I-5 interchange. Vesting for properties with such approvals shall occur upon execution of a vesting agreement satisfactory to the City, which agreement shall include a proposed development schedule or phasing plan and either provide for the payment of any and all Supplemental Street SDCs or provide other means of financing public improvements. Vesting for properties pending such approvals shall occur upon such agreement and the date the approvals are final.

The number of trips vested is subject to modification based upon updated traffic analysis associated with subsequent development approvals for the property. A reduction in vested trips shall attend repayment of vesting fees by the City. An increase in available vested trips shall occur upon payment of necessary vesting fees.

Vesting shall remain valid and run with the property, unless an approval that is necessary for vesting to occur is terminated or a vesting agreement is terminated. If the vested right to use certain trips is lost or terminated, as determined by the Community Development Director with the concurrence of City Council, such trips shall be made available to other development upon City repayment, without interest, of associated vesting fees.

**Response:** No early vesting of traffic generation is requested. This standard is not applicable.

#### GENERAL DEVELOPMENT REGULATIONS

##### Section 4.154 ON-SITE PEDESTRIAN ACCESS AND CIRCULATION

###### (.01) On-site Pedestrian Access and Circulation

- A. The purpose of this section is to implement the pedestrian access and connectivity policies of the Transportation System Plan. It is intended to provide for safe, reasonably direct, and convenient pedestrian access and circulation.
- B. Standards. Development shall conform to all of the following standards:
1. *Continuous Pathway System.* A pedestrian pathway system shall extend throughout the development site and connect to adjacent sidewalks, and to all future phases of the development, as applicable.

**Response:** The project design proposes sidewalks along the frontages of all lots, providing a continuous pathway system throughout the community. In addition to the sidewalks, pedestrian pathways are proposed within Tracts A, C, and D, providing convenient connections and recreational opportunities in the open-space area. While future phases are not planned as part of the Petras Homes Subdivision, these pathways and sidewalks



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provide easy connection to adjacent development, planned schools, and planned parks via adjacent local streets. These criteria are met.

2. *Safe, Direct, and Convenient.* Pathways within developments shall provide safe, reasonably direct, and convenient connections between primary building entrances and all adjacent parking areas, recreational areas/playgrounds, and public rights-of-way and crosswalks based on all of the following criteria:
  - a. Pedestrian pathways are designed primarily for pedestrian safety and convenience, meaning they are free from hazards and provide a reasonably smooth and consistent surface.
  - b. The pathway is reasonably direct. A pathway is reasonably direct when it follows a route between destinations that does not involve a significant amount of unnecessary out-of-direction travel.
  - c. The pathway connects to all primary building entrances and is consistent with the Americans with Disabilities Act (ADA) requirements.
  - d. All parking lots larger than three acres in size shall provide an internal bicycle and pedestrian pathway pursuant to Section 4.155(.03)B.3.d.

**Response:** The on-site pedestrian access and circulation system is generally consistent with *Frog Pond West Master Plan* Figure 18, Street Demonstration Plan. It provides safe, direct, and convenient connections both internally and to the surrounding street network.

3. *Vehicle/Pathway Separation.* Except as required for crosswalks, per subsection 4, below, where a pathway abuts a driveway or street it shall be vertically or horizontally separated from the vehicular lane. For example, a pathway may be vertically raised six inches above the abutting travel lane, or horizontally separated by a row of bollards.

**Response:** The proposed design vertically and/or horizontally separates all sidewalks and pathways from vehicle travel lanes except for private driveways and crosswalks.

4. *Crosswalks.* Where a pathway crosses a parking area or driveway, it shall be clearly marked with contrasting paint or paving materials (e.g., pavers, light-color concrete inlay between asphalt, or similar contrast).

**Response:** The proposed pathway within Tracts A and C is planned to cross a private alley, not a parking area or driveway. This standard is not applicable.

5. *Pathway Width and Surface.* Primary pathways shall be constructed of concrete, asphalt, brick/masonry pavers, or other durable surface, and not less than five feet wide. Secondary pathways and pedestrian trails may have an alternative surface except as otherwise required by the ADA.

**Response:** As shown on the Preliminary Street Plan (Exhibit A), the pedestrian pathways are planned to be paved and are each 5 feet wide. This criterion is met.

6. All pathways shall be clearly marked with appropriate standard signs.

**Response:** The pedestrian pathways will be signed as required.

Section 4.155 GENERAL REGULATIONS - PARKING, LOADING AND BICYCLE PARKING

[...]

(.02) General Provisions:

[...]

(.03) Minimum and Maximum Off-Street Parking Requirements:

- G. Tables 5 shall be used to determine the minimum and maximum parking standards for various land uses. The minimum number of required parking spaces shown on Tables 5 shall be determined by rounding to the nearest whole parking space. For example, a use containing 500 square feet, in an area where the standard is one space for each 400 square feet of floor area, is required to provide one off-street parking space. If the same use contained more than 600 square feet, a second parking space would be required. Structured parking and on-street parking are exempted from the parking maximums in Table 5.

(.04) Bicycle Parking:

A. Required Bicycle Parking - General Provisions.

1. The required minimum number of bicycle parking spaces for each use category is shown in Table 5, Parking Standards.

[...]

Table 5: Parking Standards			
USE	PARKING MINIMUMS	PARKING MAXIMUMS	BICYCLE MINIMUMS
a. Residential			
1. Single-family dwelling units, middle housing, as well as multiple-family dwelling units of nine or fewer units	1 per dwelling unit. <sup>1,2</sup> 2 spaces are encouraged for dwelling units over 1000 square feet <sup>3</sup>	No Limit	Multiple-family dwelling units Min. of 2

NOTES:

- <sup>1</sup> No additional off-street parking is required for a triplex or quadplex created through the addition to, or conversion of, an existing single-family detached dwelling.
- <sup>2</sup> Garages (except for parking structures in the Town Center) do not count towards minimum parking unless all the requirements of Subsection 4.155 (.02) Q. are met.
- <sup>3</sup> No permit for single-family dwelling units, middle housing, or multiple-family dwelling units of nine or fewer units shall be denied based on only providing one parking space per unit.

**Response:** Table 5 requires that single-family units provide one parking space per dwelling unit. There is no maximum number listed. Each lot will accommodate a single-family home with a two-car garage and a driveway. Dimensional standards will be reviewed during building permit submittal.

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Table 5 states that there is no minimum bicycle parking requirement for single-family homes. These criteria are met.

**Section 4.167 GENERAL REGULATIONS - ACCESS, INGRESS AND EGRESS**

- (.01) Each access onto streets or private drives shall be at defined points as approved by the City and shall be consistent with the public's health, safety and general welfare. Such defined points of access shall be approved at the time of issuance of a building permit if not previously determined in the development permit.

**Response:** Driveways will be shown on construction drawings and will be approved at the time of building permit issuance.

**Section 4.171 PROTECTION OF NATURAL FEATURES AND OTHER RESOURCES**

(.02) General Terrain Preparation:

- A. All developments shall be planned, designed, constructed and maintained with maximum regard to natural terrain features and topography, especially hillside areas, floodplains, and other significant landforms.
- B. All grading, filling and excavating done in connection with any development shall be in accordance with the Uniform Building Code
- C. In addition to any permits required under the Uniform Building Code, all developments shall be planned, designed, constructed and maintained so as to:
  - 1. Limit the extent of disturbance of soils and site by grading, excavation and other land alterations.
  - 2. Avoid substantial probabilities of: (1) accelerated erosion; (2) pollution, contamination, or siltation of lakes, rivers, streams and wetlands; (3) damage to vegetation; (4) injury to wildlife and fish habitats.
  - 3. Minimize the removal of trees and other native vegetation that stabilize hillsides, retain moisture, reduce erosion, siltation and nutrient runoff, and preserve the natural scenic character.

**Response:** The site has been planned and designed to avoid the natural features on the site. As demonstrated within the Preliminary Plans (Exhibit A), grading, filling, and excavating will be conducted in accordance with the Uniform Building Code. The site will be protected with erosion control measures. These criteria are met.

- (.03) **Hillsides:** All developments proposed on slopes greater than 25% shall be limited to the extent that:

[...]

**Response:** The project site does not contain slopes greater than 25 percent. These standards do not apply.

(.04) **Trees and Wooded Areas.**

- A. All developments shall be planned, designed, constructed and maintained so that:

1. Existing vegetation is not disturbed, injured, or removed prior to site development and prior to an approved plan for circulation, parking and structure location.
  2. Existing wooded areas, significant clumps/groves of trees and vegetation, and all trees with a diameter at breast height of six inches or greater shall be incorporated into the development plan and protected wherever feasible.
  3. Existing trees are preserved within any right-of-way when such trees are suitably located, healthy, and when approved grading allows.
- B. Trees and woodland areas to be retained shall be protected during site preparation and construction according to City Public Works design specifications, by:
1. Avoiding disturbance of the roots by grading and/or compacting activity.
  2. Providing for drainage and water and air filtration to the roots of trees which will be covered with impermeable surfaces.
  3. Requiring, if necessary, the advisory expertise of a registered arborist/horticulturist both during and after site preparation.
  4. Requiring, if necessary, a special maintenance, management program to insure survival of specific woodland areas of specimen trees or individual heritage status trees.

**Response:** The project involves the removal of existing filbert trees on the site. Per 4.600.40(.01)E, the removal of filbert trees does not require a tree removal permit application; therefore, an arborist has not provided a report on the retention or protection of these trees.

(.07) Standards for Earth Movement Hazard Areas:

- A. No development or grading shall be allowed in areas of land movement, slump or earth flow, and mud or debris flow, except under one of the following conditions:
1. Stabilization of the identified hazardous condition based on established and proven engineering techniques which ensure protection of public and private property. Appropriate conditions of approval may be attached by the City.
  2. An engineering geologic study approved by the City establishing that the site is stable for the proposed use and development. The study shall include the following:
    - a. Index map.
    - b. Project description, to include: location; topography, drainage, vegetation; discussion of previous work; and discussion of field exploration methods.
    - c. Site geology, to include: site geologic map; description of bedrock and superficial materials including artificial fill; location of any faults, folds,

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etc.; and structural data including bedding, jointing, and shear zones.

- d. Discussion and analysis of any slope stability problems.
  - e. Discussion of any off-site geologic conditions that may pose a potential hazard to the site or that may be affected by on-site development.
  - f. Suitability of site for proposed development from geologic standpoint.
  - g. Specific recommendations for cut slope stability, seepage and drainage control, or other design criteria to mitigate geologic hazards.
  - h. Supportive data, to include: cross sections showing subsurface structure; graphic logs of subsurface explorations; results of laboratory tests; and references.
  - i. Signature and certification number of engineering geologist registered in the State of Oregon.
  - j. Additional information or analyses as necessary to evaluate the site.
- B. Vegetative cover shall be maintained or established for stability and erosion control purposes.
- C. Diversion of storm water into these areas shall be prohibited.
- D. The principal source of information for determining earth movement hazards is the State Department of Geology and Mineral Industries (DOGAMI) Bulletin 99 and any subsequent bulletins and accompanying maps. Approved site specific engineering geologic studies shall be used to identify the extent and severity of the hazardous conditions on the site, and to update the earth movement hazards database.

**Response:** Geotechnical investigation has been completed for the subject property, and no earth movement hazards have been identified. See Exhibit H for the geotechnical report. These standards do not apply to this application.

(.08) Standards for Soil Hazard Areas:

- A. Appropriate siting and design safeguards shall insure structural stability and proper drainage of foundation and crawl space areas for development on land with any of the following soil conditions: wet or high water table; high shrink-swell capability; compressible or organic; and shallow depth-to-bedrock.
- B. The principal source of information for determining soil hazards is the State DOGAMI Bulletin 99 and any subsequent bulletins and accompanying maps. Approved site-specific soil studies shall be used to identify the extent and severity of the hazardous conditions on the site, and to update the soil hazards database accordingly.

**Response:** A geotechnical investigation has been completed for the subject property, and no soil hazard areas have been identified. See Exhibit H for the geotechnical report. These criteria are met.

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(.09) Historic Protection: Purpose:

- A. To preserve structures, sites, objects, and areas within the City of Wilsonville having historic, cultural, or archaeological significance.

**Response:** No historic, cultural, or archaeological items have been identified on the site.

Section 4.175 PUBLIC SAFETY AND CRIME PREVENTION.

- (.01) All developments shall be designed to deter crime and ensure public safety.
- (.02) Addressing and directional signing shall be designed to assure identification of all buildings and structures by emergency response personnel, as well as the general public.
- (.03) Areas vulnerable to crime shall be designed to allow surveillance. Parking and loading areas shall be designed for access by police in the course of routine patrol duties.
- (.04) Exterior lighting shall be designed and oriented to discourage crime.

**Response:** The Frog Pond – Petras Homes Subdivision community has been designed to deter crime and ensure public safety. Streets and pedestrian connections will be lit for visibility and safety. Homes will be oriented toward these streets or open spaces to provide visibility that will deter crime. All dwellings will be addressed per building and Fire Department requirements to allow identification for emergency response personnel. No parking and loading areas are proposed. Proposed lighting of local streets and pedestrian paths will be accomplished in accordance with the standards of the *Frog Pond Master Plan*. Dwellings will have exterior porch lighting, which will support public streetlights to provide safety and visibility. These criteria are met.

Section 4.176 LANDSCAPING, SCREENING, AND BUFFERING

(.02) Landscaping and Screening Standards.

[...]

C. General Landscaping Standard.

1. Intent. The General Landscaping Standard is a landscape treatment for areas that are generally open. It is intended to be applied in situations where distance is used as the principal means of separating uses or developments and landscaping is required to enhance the intervening space. Landscaping may include a mixture of ground cover, evergreen and deciduous shrubs, and coniferous and deciduous trees.
2. Required materials. Shrubs and trees, other than street trees, may be grouped. Ground cover plants must fully cover the remainder of the landscaped area (see Figure 21: General Landscaping). The General Landscaping Standard has two different requirements for trees and shrubs:
  - a. Where the landscaped area is less than 30 feet deep, one tree is required for every 30 linear feet.
  - b. Where the landscaped area is 30 feet deep or greater, one tree is required for every 800 square feet and two high shrubs or three low shrubs are required for every 400 square feet.

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**Response:** This project consists of a single-family residential neighborhood subject to the General Landscaping Standard. Landscaping meeting these standards will be provided at the time of building permit submittal; these criteria will be met at such time.

Proposed landscaping within open-space tracts is detailed as part of the included Preliminary Landscaping Plan (Exhibit A). Tract E is subject to the Low Screen Landscaping Standard as outlined below.

**D. Low Screen Landscaping Standard.**

[...]

2. **Required materials.** The Low Screen Landscaping Standard requires sufficient low shrubs to form a continuous screen three (3) feet high and 95% opaque, year-round. In addition, one tree is required for every 30 linear feet of landscaped area, or as otherwise required to provide a tree canopy over the landscaped area. Ground cover plants must fully cover the remainder of the landscaped area. A three (3) foot high masonry wall or a berm may be substituted for the shrubs, but the trees and ground cover plants are still required. When applied along street lot lines, the screen or wall is to be placed along the interior side of the landscaped area. (See Figure 22: Low Screen Landscaping).

**Response:** The Low Screen Landscape Standard will be applied in Tract E along SW Stafford Road, with landscaping consisting of low shrubs and ornamental plants at the foundation of the brick wall to offer variety and visual interest. Please refer to the Preliminary Landscape Plan (Exhibit A) for further details.

[...]

**I. Partially Sight-Obscuring Fence Standard:**

1. **Intent.** The Partially Sight-Obscuring Fence Standard is intended to provide a tall, but not totally blocked, visual separation. The standard is applied where a low level of screening is adequate to soften the impact of one use or development on another, and where some visibility between abutting areas is preferred over a total visual screen. It can be applied in conjunction with landscape plantings or applied in areas where landscape plantings are not necessary and where nonresidential uses are involved.
2. **Required materials.** Partially Sight-Obscuring Fence Standard are to be at least six feet high and at least 50 percent sight-obscuring. Fences may be made of wood (other than plywood or particle-board), metal, bricks, masonry or other permanent materials (see Figure 27: Partially Sight-Obscuring Fence).

**Response:** A 4-foot-high brick wall with a 2-foot-high wrought iron top will be provided along SW Stafford Road, in compliance with the *Frog Pond West Master Plan*.

- (.03) **Landscape Area.** Not less than fifteen percent (15%) of the total lot area, shall be landscaped with vegetative plant materials. The ten percent (10%) parking area landscaping required by section 4.155.03(B)(1) is included in the fifteen percent (15%) total lot landscaping requirement. Landscaping shall be

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located in at least three separate and distinct areas of the lot, one of which must be in the contiguous frontage area. Planting areas shall be encouraged adjacent to structures. Landscaping shall be used to define, soften or screen the appearance of buildings and off-street parking areas. Materials to be installed shall achieve a balance between various plant forms, textures, and heights. The installation of native plant materials shall be used whenever practicable. (For recommendations refer to the Native Plant List maintained by the City of Wilsonville).

**Response:** Landscaping on individual private lots will be reviewed at the time of building permit submittal. The Preliminary Landscape Plan included in Exhibit A illustrates the location and type of landscaping within public rights-of-way and open-space tracts. This criterion is met.

(.06) Plant Materials.

- A. Shrubs and Ground Cover. All required ground cover plants and shrubs must be of sufficient size and number to meet these standards within three (3) years of planting. Non-horticultural plastic sheeting or other impermeable surface shall not be placed under mulch. Native topsoil shall be preserved and reused to the extent feasible. Surface mulch or bark dust are to be fully raked into soil of appropriate depth, sufficient to control erosion, and are confined to areas around plantings. Areas exhibiting only surface mulch, compost or barkdust are not to be used as substitutes for plant areas.
1. Shrubs. All shrubs shall be well branched and typical of their type as described in current AAN Standards and shall be equal to or better than 2-gallon containers and 10" to 12" spread.
  2. Ground cover. Shall be equal to or better than the following depending on the type of plant materials used: gallon containers spaced at 4 feet on center minimum, 4" pot spaced 2 feet on center minimum, 2-1/4" pots spaced at 18 inch on center minimum. No bare root planting shall be permitted. Ground cover shall be sufficient to cover at least 80% of the bare soil in required landscape areas within three (3) years of planting. Where wildflower seeds are designated for use as a ground cover, the City may require annual re-seeding as necessary.
  3. Turf or lawn in non-residential developments. Shall not be used to cover more than ten percent (10%) of the landscaped area, unless specifically approved based on a finding that, due to site conditions and availability of water, a larger percentage of turf or lawn area is appropriate. Use of lawn fertilizer shall be discouraged. Irrigation drainage runoff from lawns shall be retained within lawn areas.
  4. Plant materials under trees or large shrubs. Appropriate plant materials shall be installed beneath the canopies of trees and large shrubs to avoid the appearance of bare ground in those locations.
  5. Integrate compost-amended topsoil in all areas to be landscaped, including lawns, to help detain runoff, reduce irrigation and fertilizer needs, and create a sustainable, low-maintenance landscape.



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**Response:** The Preliminary Landscape Plan (Exhibit A) demonstrates compliance with these requirements. These criteria are met.

- B. **Trees.** All trees shall be well-branched and typical of their type as described in current American Association of Nurserymen (AAN) Standards and shall be balled and burlapped. The trees shall be grouped as follows:
1. Primary trees which define, outline or enclose major spaces, such as Oak, Maple, Linden, and Seedless Ash, shall be a minimum of 2" caliper.
  2. Secondary trees which define, outline or enclose interior areas, such as Columnar Red Maple, Flowering Pear, Flame Ash, and Honeylocust, shall be a minimum of 1-3/4" to 2" caliper.
  3. Accent trees which, are used to add color, variation and accent to architectural features, such as Flowering Pear and Kousa Dogwood, shall be 1-3/4" minimum caliper.
  4. Large conifer trees such as Douglas Fir or Deodar Cedar shall be installed at a minimum height of eight (8) feet.
  5. Medium-sized conifers such as Shore Pine, Western Red Cedar or Mountain Hemlock shall be installed at a minimum height of five to six (5 to 6) feet.

**Response:** The Preliminary Landscape Plan (Exhibit A) addresses these requirements, as applicable. These criteria are met.

- D. **Street Trees.** In order to provide a diversity of species, the Development Review Board may require a mix of street trees throughout a development. Unless the Board waives the requirement for reasons supported by a finding in the record, different types of street trees shall be required for adjoining blocks in a development.
1. All trees shall be standard base grafted, well branched and typical of their type as described in current AAN Standards and shall be balled and burlapped (b&b). Street trees shall be planted at sizes in accordance with the following standards:
    - a. Arterial streets - 3" minimum caliper
    - b. Collector streets - 2" minimum caliper.
    - c. Local streets or residential private access drives - 1-3/4" minimum caliper.
    - d. Accent or median tree -1-3/4" minimum caliper.

**Response:** The project has frontage on SW Frog Pond Lane, which is classified as a Collector – Gateway Street; SW Stafford Road, classified as an arterial street; and SW Windflower Street, classified as a local street. As shown on the Preliminary Landscape Plan (Exhibit A), the project complies with the above street tree requirements and street trees are planned to be a minimum caliper of 2 inches at the time of planting. These criteria are met.

2. The following trees and varieties thereof are considered satisfactory street trees in most circumstances; however, other varieties and species are encouraged and will be considered:
  - a. Trees over 50 feet mature height: *Quercus garryana* (Native Oregon White Oak), *Quercus rubra*

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borealis (Red Oak), Acer Macrophyllum (Native Big Leaf Maple), Acer nigrum (Green Column Black Maple), Fraxinus americanus (White Ash), Fraxinus pennsylvannica 'Marshall' (Marshall Seedless Green Ash), Quercus coccinea (Scarlet Oak), Quercus pulustris (Pin Oak), Tilia americana (American Linden).

b. Trees under 50 feet mature height: Acer rubrum (Red Sunset Maple), Cornus nuttallii (Native Pacific Dogwood), Gleditsia triacanthos (Honey Locust), Pyrus calleryana 'Bradford' (Bradford Pear), Tilia cordata (Little Leaf Linden), Fraxinus oxycarpa (Flame Ash).

c. Other street tree species. Other species may be specified for use in certain situations. For instance, evergreen species may be specified where year-round color is desirable and no adverse effect on solar access is anticipated. Water-loving species may be specified in low locations where wet soil conditions are anticipated.

**Response:** Street trees have been selected in accordance with Figure 43, Street Tree Plan, and Table 2, Street Tree List of the *Frog Pond West Master Plan*. The selected street tree species are Chinese pistache, Skyline Honeylocust, and Columnar Tulip Poplar—species listed within the *Frog Pond West Master Plan*. These criteria are met.

**E. Types of Plant Species.**

1. Existing landscaping or native vegetation may be used to meet these standards, if protected and maintained during the construction phase of the development and if the plant species do not include any that have been listed by the City as prohibited. The existing native and nonnative vegetation to be incorporated into the landscaping shall be identified.
2. Selection of plant materials. Landscape materials shall be selected and sited to produce hardy and drought-tolerant landscaping. Selection shall be based on soil characteristics, maintenance requirements, exposure to sun and wind, slope and contours of the site, and compatibility with other vegetation that will remain on the site. Suggested species lists for street trees, shrubs and groundcovers shall be provided by the City of Wilsonville.
3. Prohibited plant materials. The City may establish a list of plants that are prohibited in landscaped areas. Plants may be prohibited because they are potentially damaging to sidewalks, roads, underground utilities, drainage improvements, or foundations, or because they are known to be invasive to native vegetation.

**Response:** As shown on the Preliminary Landscape Plan (Exhibit A), the proposed landscape materials include a mix of native trees, shrubs, and groundcovers. No prohibited plant materials are proposed. These criteria are met.

**F. Tree Credit.**

Existing trees that are in good health as certified by an arborist and are not disturbed during construction may count for landscaping tree

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credit as follows (measured at four and one-half feet above grade and rounded to the nearest inch):

Existing trunk diameter	Number of Tree Credits
18 to 24 inches in diameter	3 tree credits
25 to 31 inches in diameter	4 tree credits
32 inches or greater	5 tree credits

1. It shall be the responsibility of the owner to use reasonable care to maintain preserved trees. Trees preserved under this section may only be removed if an application for removal permit under Section 4.610.10(01)(H) has been approved. Required mitigation for removal shall be replacement with the number of trees credited to the preserved and removed tree.
2. Within five years of occupancy and upon notice from the City, the property owner shall replace any preserved tree that cannot be maintained due to disease or damage, or hazard or nuisance as defined in Chapter 6 of this code. The notice shall be based on complete information provided by an arborist. Replacement with the number of trees credited shall occur within one (1) growing season of notice.

**Response:** As shown on the Preliminary Landscape Plan (Exhibit A), no qualifying trees are located on the property; therefore, no credits are claimed.

(.07) Installation and Maintenance.

- A. Installation. Plant materials shall be installed to current industry standards and shall be properly staked to assure survival. Support devices (guy wires, etc.) shall not be allowed to interfere with normal pedestrian or vehicular movement.

**Response:** Note 3 on Sheet P-15 of the Preliminary Plans (Exhibit A) specifies that plant materials are planned to be installed to industry best practices. This criterion is met.

- B. Maintenance. Maintenance of landscaped areas is the on-going responsibility of the property owner. Any landscaping installed to meet the requirements of this Code, or any condition of approval established by a City decision-making body acting on an application, shall be continuously maintained in a healthy, vital and acceptable manner. Plants that die are to be replaced in kind, within one growing season, unless appropriate substitute species are approved by the City. Failure to maintain landscaping as required in this Section shall constitute a violation of this Code for which appropriate legal remedies, including the revocation of any applicable land development permits, may result.
- C. Irrigation. The intent of this standard is to assure that plants will survive the critical establishment period when they are most vulnerable due to a lack of watering and also to assure that water is not wasted through unnecessary or inefficient irrigation. Approved irrigation system plans shall specify one of the following:
  1. A permanent, built-in, irrigation system with an automatic controller. Either a spray or drip irrigation system, or a combination of the two, may be specified.

2. A permanent or temporary system designed by a landscape architect licensed to practice in the State of Oregon, sufficient to assure that the plants will become established and drought-tolerant.
  3. Other irrigation system specified by a licensed professional in the field of landscape architecture or irrigation system design.
  4. A temporary permit issued for a period of one year, after which an inspection shall be conducted to assure that the plants have become established. Any plants that have died, or that appear to the Planning Director to not be thriving, shall be appropriately replaced within one growing season. An inspection fee and a maintenance bond or other security sufficient to cover all costs of replacing the plant materials shall be provided, to the satisfaction of the Community Development Director. Additionally, the applicant shall provide the City with a written license or easement to enter the property and cause any failing plant materials to be replaced.
- D. Protection. All required landscape areas, including all trees and shrubs, shall be protected from potential damage by conflicting uses or activities including vehicle parking and the storage of materials.

**Response:** As detailed in Note 6 of the Preliminary Landscape Plan (Exhibit A), all landscape areas will be watered by a permanent underground irrigation system. These criteria are met.

- (.09) Landscape Plans. Landscape plans shall be submitted showing all existing and proposed landscape areas. Plans must be drawn to scale and show the type, installation size, number and placement of materials. Plans shall include a plant material list. Plants are to be identified by both their scientific and common names. The condition of any existing plants and the proposed method of irrigation are also to be indicated. Landscape plans shall divide all landscape areas into the following categories based on projected water consumption for irrigation:
- A. High water usage areas (+/- two (2) inches per week): small convoluted lawns, lawns under existing trees, annual and perennial flower beds, and temperamental shrubs;
  - B. Moderate water usage areas (+/- one (1) inch per week): large lawn areas, average water-using shrubs, and trees;
  - C. Low water usage areas (Less than one (1) inch per week, or gallons per hour): seeded fieldgrass, swales, native plantings, drought-tolerant shrubs, and ornamental grasses or drip irrigated areas.
  - D. Interim or unique water usage areas: areas with temporary seeding, aquatic plants, erosion control areas, areas with temporary irrigation systems, and areas with special water-saving features or water harvesting irrigation capabilities. These categories shall be noted in general on the plan and on the plant material list.

**Response:** A Preliminary Landscape Plan is included within the Frog Pond – Petras Homes Subdivision PUD Preliminary Plans (Exhibit A). Individual lot landscaping will be proposed at the time of building permit submittal. These criteria are met.

- (.10) Completion of Landscaping. The installation of plant materials may be deferred for a period of time specified by the Board or Planning Director

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acting on an application, in order to avoid hot summer or cold winter periods, or in response to water shortages. In these cases, a temporary permit shall be issued, following the same procedures specified in subsection (.07)(C)(3), above, regarding temporary irrigation systems. No final Certificate of Occupancy shall be granted until an adequate bond or other security is posted for the completion of the landscaping, and the City is given written authorization to enter the property and install the required landscaping, in the event that the required landscaping has not been installed. The form of such written authorization shall be submitted to the City Attorney for review.

**Response:** No deferral is requested at this time but may be requested in the future, subject to the scenarios above. This requirement is understood.

- (.11) **Street Trees Not Typically Part of Site Landscaping.** Street trees are not subject to the requirements of this Section and are not counted toward the required standards of this Section. Except, however, that the Development Review Board may, by granting a waiver or variance, allow for special landscaping within the right-of-way to compensate for a lack of appropriate on-site locations for landscaping. See subsection (.06), above, regarding street trees.

**Response:** No waiver or variance for on-site landscaping is requested. This standard is not applicable.

- (.12) **Mitigation and Restoration Plantings.** A mitigation plan is to be approved by the City's Development Review Board before the destruction, damage, or removal of any existing native plants. Plantings intended to mitigate the loss of native vegetation are subject to the following standards. Where these standards conflict with other requirements of this Code, the standards of this Section shall take precedence. The desired effect of this section is to preserve existing native vegetation.
- A. **Plant Sources.** Plant materials are to be native and are subject to approval by the City. They are to be non-clonal in origin; seed source is to be as local as possible, and plants must be nursery propagated or taken from a pre-approved transplantation area. All of these requirements are to be addressed in any proposed mitigation plan.
  - B. **Plant Materials.** The mitigation plan shall specify the types and installation sizes of plant materials to be used for restoration. Practices such as the use of pesticides, fungicides, and fertilizers shall not be employed in mitigation areas unless specifically authorized and approved.
  - C. **Installation.** Install native plants in suitable soil conditions. Plant materials are to be supported only when necessary because of extreme winds at the site. Where support is necessary, all stakes, guy wires or other measures are to be removed as soon as the plants can support themselves. Protect from animal and fowl predation and foraging until establishment.
  - D. **Irrigation.** Permanent irrigation systems are generally not appropriate in restoration situations, and manual or temporary watering of new plantings is often necessary. The mitigation plan shall specify the method and frequency of manual watering, including any that may be necessary after the first growing season.
  - E. **Monitoring and Reporting.** Monitoring of native landscape areas is the on-going responsibility of the property owner. Plants that die are to be replaced in kind and quantity within one year. Written proof of

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the survival of all plants shall be required to be submitted to the City's Planning Department one year after the planting is completed.

**Response:** The site is currently in agricultural use, and site plantings consist primarily of grass and a small, abandoned grove of filbert trees. The existing vegetation will be removed for site development, specifically to accommodate the planned street network and desired lot pattern. These criteria are met.

Section 4.177 **STREET IMPROVEMENT STANDARDS**

(.01) Development and related public facility improvements shall comply with the standards in this section, the Wilsonville Public Works Standards, and the Transportation System Plan, in rough proportion to the potential impacts of the development. Such improvements shall be constructed at the time of development or as provided by Section 4.140, except as modified or waived by the City Engineer for reasons of safety or traffic operations.

**Response:** The proposed public facility improvements are designed to comply with the standards in this section, the Wilsonville Public Works Standards, and the TSP as modified by the *Frog Pond West Master Plan* and as approved by the City Engineer. Final approval will occur with review and issuance of the Public Works construction permit.

The development will construct the remaining width of Frog Pond Lane and the bicycle/pedestrian facilities associated with it. Local streets within the project will be constructed as part of the public improvements of the project and will meet the City's public improvement standards. Facilities associated with SW Stafford Road will be constructed by the City as part of a larger project.

Please refer to the Preliminary Street Plan (Exhibit A) for the proposed street improvements. The project will provide payment of required in-lieu fees for transportation impacts on specified off-site transportation improvements. This criterion is met.

(.02) **Street Design Standards.**

A. All street improvements and intersections shall provide for the continuation of streets through specific developments to adjoining properties or subdivisions.

1. Development shall be required to provide existing or future connections to adjacent sites through the use of access easements where applicable. Such easements shall be required in addition to required public street dedications as required in Section 4.236(.04).

**Response:** The development proposes completion of the previously approved adjacent street projects in substantial compliance with the Frog Pond West Street Demonstration Plan. This criterion is met.

B. The City Engineer shall make the final determination regarding right-of-way and street element widths using the ranges provided in Chapter 3 of the Transportation System Plan and the additional street design standards in the Public Works Standards.

**Response:** The proposed streets are designed to the standards of the *Frog Pond West Master Plan* and meet the requirements of the TSP and Public Works Standards. This criterion is met.

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C. Rights-of-way.

1. Prior to issuance of a Certificate of Occupancy Building permits or as a part of the recordation of a final plat, the City shall require dedication of rights-of-way in accordance with the Transportation System Plan. All dedications shall be recorded with the County Assessor's Office.
2. The City shall also require a waiver of remonstrance against formation of a local improvement district, and all non-remonstrances shall be recorded in the County Recorder's Office as well as the City's Lien Docket, prior to issuance of a Certificate of Occupancy Building Permit or as a part of the recordation of a final plat.
3. In order to allow for potential future widening, a special setback requirement shall be maintained adjacent to all arterial streets. The minimum setback shall be 55 feet from the centerline or 25 feet from the right-of-way designated on the Master Plan, whichever is greater.

**Response:**

The site abuts SW Frog Pond Lane to the south. The project will dedicate 21.5 feet of right-of-way to the northern edge of the SW Frog Pond Lane right-of-way, which will increase the right-of-way to 42.5 feet. The project will also dedicate 12 feet of right-of-way to the western edge of SW Stafford Road, increasing the total width of the right-of-way to 72 feet adjacent to the project. The tentative subdivision plat shows right-of-way dedication.

A waiver of remonstrance will be issued prior to the recordation of a final plat. The project is not adjacent to arterial streets; therefore, a special setback requirement is not required. These criteria are met.

- D. Dead-end Streets. New dead-end streets or cul-de-sacs shall not exceed 200 feet in length, unless the adjoining land contains barriers such as existing buildings, railroads or freeways, or environmental constraints such as steep slopes, or major streams or rivers, that prevent future street extension and connection. A central landscaped island with rainwater management and infiltration are encouraged in cul-de-sac design. No more than 25 dwelling units shall take access to a new dead-end or cul-de-sac street unless it is determined that the traffic impacts on adjacent streets will not exceed those from a development of 25 or fewer units. All other dimensional standards of dead-end streets shall be governed by the Public Works Standards. Notification that the street is planned for future extension shall be posted on the dead-end street.

**Response:**

The street network has been designed per the *Frog Pond West Master Plan* Street Demonstration Plan. Permanent dead-end streets have not been proposed by the Applicant; therefore, this standard does not apply.

E. Corner or clear vision area.

1. A clear vision area which meets the Public Works Standards shall be maintained on each corner of property at the intersection of any two streets, a street and a railroad or a street and a driveway. However, the following items shall be exempt from meeting this requirement: a. Light and utility poles with a diameter less than 12 inches.

- b. Trees less than 6" d.b.h., approved as a part of the Stage II Site Design, or administrative review.
- c. Except as allowed by b., above, an existing tree, trimmed to the trunk, 10 feet above the curb.
- d. Official warning or street sign.
- e. Natural contours where the natural elevations are such that there can be no crossvisibility at the intersection and necessary excavation would result in an unreasonable hardship on the property owner or deteriorate the quality of the site.

**Response:** Clear-vision areas will be maintained at the corner of each property. These criteria are met.

- F. Vertical clearance - a minimum clearance of 12 feet above the pavement surface shall be maintained over all streets and access drives.

**Response:** Vertical clearances will be maintained at all streets and access drives. This criterion is met.

- G. Interim improvement standard. It is anticipated that all existing streets, except those in new subdivisions, will require complete reconstruction to support urban level traffic volumes. However, in most cases, existing and short-term projected traffic volumes do not warrant improvements to full Master Plan standards. Therefore, unless otherwise specified by the Development Review Board, the following interim standards shall apply.

1. Arterials - 24 foot paved, with standard sub-base. Asphalt overlays are generally considered unacceptable, but may be considered as an interim improvement based on the recommendations of the City Engineer, regarding adequate structural quality to support an overlay.
2. Half-streets are generally considered unacceptable. However, where the Development Review Board finds it essential to allow for reasonable development, a half-street may be approved. Whenever a half-street improvement is approved, it shall conform to the requirements in the Public Works Standards:
3. When considered appropriate in conjunction with other anticipated or scheduled street improvements, the City Engineer may approve street improvements with a single asphalt lift. However, adequate provision must be made for interim storm drainage, pavement transitions at seams and the scheduling of the second lift through the Capital Improvements Plan.

**Response:** This project is a new subdivision located northwest of the intersection of SW Frog Pond Lane and SW Stafford Road. With improvements related to Frog Pond Ridge, located on the southern edge of SW Frog Pond Lane, the street will be improved to its planned full width. Right-of-way dedication for the western edge of SW Stafford Road will allow the Arterial to be improved to the interim width of 72 feet. The applicable criteria are met.

- (.03) Sidewalks. Sidewalks shall be provided on the public street frontage of all development. Sidewalks shall generally be constructed within the dedicated



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public right-of-way, but may be located outside of the right-of-way within a public easement with the approval of the City Engineer.

- A. Sidewalk widths shall include a minimum through zone of at least five feet. The through zone may be reduced pursuant to variance procedures in Section 4.196, a waiver pursuant to Section 4.118, or by authority of the City Engineer for reasons of traffic operations, efficiency, or safety.
- B. Within a Planned Development, the Development Review Board may approve a sidewalk on only one side. If the sidewalk is permitted on just one side of the street, the owners will be required to sign an agreement to an assessment in the future to construct the other sidewalk if the City Council decides it is necessary.

**Response:** As shown on the Preliminary Street Plan (Exhibit A), all sidewalks adjacent to the proposed development are at least 5 feet wide. In those instances where they are located outside of the right-of-way to accommodate stormwater swales, a public sidewalk easement is proposed, as shown on the Preliminary Dimensioned PUD Plan and Preliminary Street Cross-Sections within Exhibit A. No adjustments are requested; therefore, these criteria are met.

- (.04) **Bicycle Facilities.** Bicycle facilities shall be provided to implement the Transportation System Plan, and may include on-street and off-street bike lanes, shared lanes, bike boulevards, and cycle tracks. The design of on-street bicycle facilities will vary according to the functional classification and the average daily traffic of the facility.

**Response:** As shown on the Preliminary Street Plan (Exhibit A), the proposed street cross-sections comply with the street classifications and cross-sections identified in the *Frog Pond West Master Plan*. The SW Frog Pond Lane cross-section includes buffered bike lanes; bikes will share the vehicular lane with vehicles on local streets. SW Stafford Road improvements will be completed by the City at a later date and are planned to consist of buffered bicycle lanes per Figure 21 of the *Frog Pond West Master Plan*. Therefore, these criteria are met.

- (.05) **Multiuse Pathways.** Pathways may be in addition to, or in lieu of, a public street. Paths that are in addition to a public street shall generally run parallel to that street, and shall be designed in accordance with the Public Works Standards or as specified by the City Engineer. Paths that are in lieu of a public street shall be considered in areas only where no other public street connection options are feasible and are subject to the following standards.
  - A. Paths shall be located to provide a reasonably direct connection between likely pedestrian and bicyclist destinations. Additional standards relating to entry points, maximum length, visibility, and path lighting are provided in the Public Works Standards.
  - B. To ensure ongoing access to and maintenance of pedestrian/bicycle paths, the City Engineer will require dedication of the path to the public and acceptance of the path by the City as public right-of-way; or creation of a public access easement over the path.

**Response:** Two pedestrian connections are proposed within the community. A pedestrian trail through the Tract A and C open spaces connects the SW Windflower Street and residential neighborhood to the SW Frog Pond Lane right-of-way. A pathway within the Tract D open

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space connects SW Windflower Street to the SW Stafford Road right-of-way and future improvements. Please see responses to WDC Section 4.127(.10) above for more details.

(.06) Transit Improvements

Development on sites that are adjacent to or incorporate major transit streets shall provide improvements as described in this section to any bus stop located along the site's frontage, unless waived by the City Engineer for reasons of safety or traffic operations. Transit facilities include bus stops, shelters, and related facilities. Required transit facility improvements may include the dedication of land or the provision of a public easement.[...]

**Response:** The site is not adjacent to transit routes. These standards are not applicable.

(.07) Residential Private Access Drives. Residential Private Access Drives shall meet the following standards:

A. Residential Private Access Drives shall provide primary vehicular access to no more than four (4) dwelling units, excluding accessory dwelling units.

**Response:** Private access drives are not proposed. Each dwelling unit will gain street access via a private alley within Tract B; therefore, this standard does not apply.

(.08) Access Drive and Driveway Approach Development Standards.

A. An access drive to any proposed development shall be designed to provide a clear travel lane free from any obstructions.

B. Access drive travel lanes shall be constructed with a hard surface capable of carrying a 23-ton load.

C. Where emergency vehicle access is required, approaches and driveways shall be designed and constructed to accommodate emergency vehicle apparatus and shall conform to applicable fire protection requirements. The City may restrict parking, require signage, or require other public safety improvements pursuant to the recommendations of an emergency service provider.

D. Secondary or emergency access lanes may be improved to a minimum 12 feet with an all-weather surface as approved by the Fire District. All fire lanes shall be dedicated easements.

E. Minimum access requirements shall be adjusted commensurate with the intended function of the site based on vehicle types and traffic generation.

F. The number of approaches on higher classification streets (e.g., collector and arterial streets) shall be minimized; where practicable, access shall be taken first from a lower classification street.

G. The City may limit the number or location of connections to a street, or impose access restrictions where the roadway authority requires mitigation to alleviate safety or traffic operations concerns.

H. The City may require a driveway to extend to one or more edges of a parcel and be designed to allow for future extension and inter-parcel circulation as adjacent properties develop. The City may also require the owner(s) of the subject site to record an access easement for future joint use of the approach and driveway as the adjacent property(ies) develop(s).

- I. Driveways shall accommodate all projected vehicular traffic on-site without vehicles stacking or backing up onto a street.
- J. Driveways shall be designed so that vehicle areas, including but not limited to drive-up and drive-through facilities and vehicle storage and service areas, do not obstruct any public right-of-way.
- K. Approaches and driveways shall not be wider than necessary to safely accommodate projected peak hour trips and turning movements, and shall be designed to minimize crossing distances for pedestrians.
- L. As it deems necessary for pedestrian safety, the City, in consultation with the roadway authority, may require traffic-calming features, such as speed tables, textured driveway surfaces, curb extensions, signage or traffic control devices, or other features, be installed on or in the vicinity of a site.
- M. Approaches and driveways shall be located and designed to allow for safe maneuvering in and around loading areas, while avoiding conflicts with pedestrians, parking, landscaping, and buildings.
- N. Where a proposed driveway crosses a culvert or drainage ditch, the City may require the developer to install a culvert extending under and beyond the edges of the driveway on both sides of it, pursuant applicable Public Works standards.
- O. Except as otherwise required by the applicable roadway authority or waived by the City Engineer, temporary driveways providing access to a construction site or staging area shall be paved or graveled to prevent tracking of mud onto adjacent paved streets.

**Response:** As shown on the Preliminary Street Plan (Exhibit A), the project meets the above Code requirements, as applicable.

- P. Unless constrained by topography, natural resources, rail lines, freeways, existing or planned or approved development, or easements or covenants, driveways proposed as part of a residential or mixed-use development shall meet local street spacing standards and shall be constructed to align with existing or planned streets, if the driveway.
  - 1. Intersects with a public street that is controlled, or is to be controlled in the planning period, by a traffic signal;
  - 2. Intersects with an existing or planned arterial or collector street; or
  - 3. Would be an extension of an existing or planned local street, or of another major driveway.

**Response:** As shown on the Preliminary Street Plan (Exhibit A), project streets are designed to meet local spacing standards. These criteria are met.

(.09) Minimum street intersection spacing standards.

- A. New streets shall intersect at existing street intersections so that centerlines are not offset. Where existing streets adjacent to a proposed development do not align properly, conditions shall be imposed on the development to provide for proper alignment.
- B. Minimum intersection spacing standards are provided in Transportation System Plan Table 3-2.

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**Response:** SW Stafford Road, an arterial, is planned to intersect with SW Frog Pond Lane, a collector. The project proposes to expand SW Windflower Street to its full width north of the project site. Centerlines are not planned to be offset and are properly aligned.

Per Table 3-2 of the TSP, there are no minimum access spacing standards along local streets. Access is permitted to each individual lot fronting a local street; however, shared access via a private alley has been proposed. Individual lot accesses are not proposed on SW Stafford Road, SW Frog Pond Lane, or SW Windflower Street. These criteria are met.

- (.10) Exceptions and Adjustments. The City may approve adjustments to the spacing standards of subsections (.08) and (.09) above through a Class II process, or as a waiver per Section 4.118(.03)(A.), where an existing connection to a City street does not meet the standards of the roadway authority, the proposed development moves in the direction of code compliance, and mitigation measures alleviate all traffic operations and safety concerns. Mitigation measures may include consolidated access (removal of one access), joint use driveways (more than one property uses same access), directional limitations (e.g., one-way), turning restrictions (e.g., right in/out only), or other mitigation.

**Response:** No exceptions or adjustments are requested. This standard does not apply.

Section 4.180    **EXCEPTIONS AND MODIFICATIONS - PROJECTIONS INTO REQUIRED YARDS**

- (.01) Certain non-structural architectural features are permitted to project into required yards or courts, without requiring the approval of a Variance or Reduced Setback Agreement, as follows:
  - A.    Into any required yard:
    - 1.    Architectural features may project into the required yard not more than two (2) inches for each foot of required setback.
    - 2.    Architectural features on buildings within the Coffee Creek Industrial Design Overlay District shall be subject to the applicable requirements in Section 4.134. :
    - 3.    Open, unenclosed fire escapes may project a distance not exceeding forty-eight (48) inches.
  - B.    Into any required yard, adjoining a street or tract with a private drive:
    - 1.    Architectural features may project a distance not exceeding forty (40) inches.
    - 2.    An uncovered porch, terrace, or patio extending no more than two and one-half (2 1/2) feet above the finished elevation may extend within three (3) feet of an interior side lot line, or within ten (10) feet of a front lot line or of an exterior side lot line.

**Response:** No buildings are proposed with this application. Compliance with this section will be reviewed during a subsequent permit submittal; therefore, these standards are not applicable at this time.

Section 4.181    **EXCEPTIONS & MODIFICATIONS - HEIGHT LIMITS.**

Except as stipulated in Sections 4.800 through 4.804, height limitations specified elsewhere in this Code shall not apply to barns, silos or other farm buildings or structures on farms; to church spires; belfries; cupolas; and domes; monuments; water

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towers; windmills; chimneys; smokestacks; fire and hose towers; flag poles; above-ground electric transmission, distribution, communication and signal lines, towers and poles; and properly screened mechanical and elevator structures.

**Response:** No listed structures are proposed at this time. Architectural features of the proposed dwellings are shown within Exhibit M. Compliance with this section will be reviewed during a subsequent permit submittal. At this time, this standard does not apply.

Section 4.182 EXCEPTIONS AND MODIFICATIONS - SETBACK MODIFICATIONS

In any residential zone where the average depth of at least two (2) existing front yards on adjoining lots or within one hundred fifty (150) feet of the lot in question and within the same block front is less or greater than the minimum or maximum front yard depth prescribed elsewhere in this Code, the required depth of the front yard on such lot shall be modified. In such case, the front yard depth shall not be less than the average depth, nor more than the greater depth, of existing front yards on at least two (2) adjoining lots within one hundred and fifty (150) feet. In the case of a corner lot, the depth of the front yard may be reduced to that of the lot immediately adjoining, provided, however, that the depth of a front yard on any corner lot shall be at least ten (10) feet.

**Response:** No setback modifications are requested. Compliance with this section will be reviewed during a subsequent permit submittal. This standard does not apply.

[...]

Section 4.197 ZONE CHANGES AND AMENDMENTS TO THIS CODE – PROCEDURES

(.01) The following procedure shall be followed in applying for an amendment to the text of this Chapter: [...]

**Response:** No zoning text amendments are proposed. This procedure is not applicable.

B. All other quasi-judicial zone map amendments shall be reviewed by the Development Review Board to make a recommendation to City Council and all legislative zone map amendments shall be reviewed by the Planning Commission to make a recommendation to City Council.

C. In recommending approval or denial of a proposed zone map amendment, the Planning Commission or Development Review Board shall at a minimum, adopt findings addressing the following criteria:

1. That the application before the Commission or Board was submitted in accordance with the procedures set forth in Section 4.008, Section 4.125 (.18)(B)(2) or, in the case of a Planned Development, Section 4.140; and

**Response:** The Zone Map Amendment is being requested concurrent with a Planned Development. The application has been submitted in accordance with the procedures set forth in Section 4.140. This criterion is met.

2. That the proposed amendment is consistent with the Comprehensive Plan map designation and substantially complies with the applicable goals, policies and objectives, set forth in the Comprehensive Plan text; and

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**Response:** Concurrent with the adoption of the *Frog Pond West Master Plan*, the City added a new zoning district, Residential Neighborhood (RN), intended for application to the Master Plan area. The Applicant is requesting that ±2.02 acres of unincorporated land be annexed to the City of Wilsonville and the RN zoning district applied to that territory. The applicable goals, policies, and objectives of the Comprehensive Plan text are addressed earlier in the narrative. This criterion is met.

3. In the event that the subject property, or any portion thereof, is designated as "Residential" on the City's Comprehensive Plan Map; specific findings shall be made addressing substantial compliance with Implementation Measures 4.1.4.b, d, e, q, and x of Wilsonville's Comprehensive Plan text; and

**Response:** Compliance with the applicable Implementation Measures is addressed earlier within this written narrative. This criterion is met.

4. That the existing primary public facilities, i.e., roads and sidewalks, water, sewer and storm sewer are available and are of adequate size to serve the proposed development; or, that adequate facilities can be provided in conjunction with project development. The Planning Commission and Development Review Board shall utilize any and all means to ensure that all primary facilities are available and are adequately sized; and

**Response:** As addressed elsewhere in this written narrative, the project will extend roads and sidewalks, water, sewer, and storm drains to serve residents of the project. This criterion is met.

5. That the proposed development does not have a significant adverse effect upon Significant Resource Overlay Zone areas, an identified natural hazard, or an identified geologic hazard. When Significant Resource Overlay Zone areas or natural hazard, and/or geologic hazard are located on or abut the proposed development, the Planning Commission or Development Review Board shall use appropriate measures to mitigate and significantly reduce conflicts between the development and identified hazard or Significant Resource Overlay Zone and

**Response:** The subject site does not contain SROZ areas, identified natural hazards, or identified geologic hazards. This standard does not apply.

6. That the applicant is committed to a development schedule demonstrating that development of the property is reasonably expected to commence within two (2) years of the initial approval of the zone change; and

**Response:** The zone change request is being submitted concurrently with a Planned Development, Subdivision, and Site Plan Review application. The Applicant plans to develop the property in a timely manner within two years of the initial approval of the zone change, as feasible. Therefore, this criterion is met.

7. That the proposed development and use(s) can be developed in compliance with the applicable development

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standards or appropriate conditions are attached that ensure that the project development substantially conforms to the applicable development standards.

**Response:** This project is a single-family neighborhood, in accordance with the *Frog Pond West Master Plan*. Compliance with the applicable development standards of the RN zoning district is addressed earlier narrative. This criterion is met.

8. Adequate public facilities, services, and transportation networks are in place, or are planned to be provided concurrently with the development of the property. The applicant shall demonstrate compliance with the Transportation Planning Rule, specifically by addressing whether the proposed amendment has a significant effect on the transportation system pursuant to OAR 660012-0060. A Traffic Impact Analysis (TIA) shall be prepared pursuant to the requirements in Section 4.133.05.(01).

**Response:** Adequate public facilities, services, and transportation networks are in place, or are planned to be provided concurrently with the construction of the project. The Applicant will extend sewer and water infrastructure and will provide storm drainage facilities to serve the project.

A TIA was prepared by DKS Associates at the direction of the City of Wilsonville. Compliance with the TPR is included in the *Frog Pond Area Plan* and assumes full development of the Frog Pond area. The *Frog Pond Area Plan* determined that the anticipated development within Frog Pond would comply with the TPR. This criterion is met.

(.05) In cases where a property owner or other applicant has requested a change in zoning and the City Council has approved the change subject to conditions, the owner or applicant shall sign a statement accepting, and agreeing to complete the conditions of approval before the zoning shall be changed.

[...]

**Response:** This project meets the applicable criteria as described above. The Applicant will sign the statement accepting and agreeing to complete the conditions of approval, as required by this section.

#### LAND DIVISIONS

##### Section 4.210 APPLICATION PROCEDURE

(.01) Pre-application conference. Prior to submission of a tentative condominium, partition, or subdivision plat, a person proposing to divide land in the City shall contact the Planning Department to arrange a pre-application conference as set forth in Section 4.010.

**Response:** The Applicant held a pre-application conference with City staff on September 15, 2022. This criterion is met.

B. Tentative Plat Submission. The purpose of the Tentative Plat is to present a study of the proposed subdivision to the Planning Department and Development Review Board and to receive approval or recommendations for revisions before preparation of a final Plat.

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The design and layout of this plan plat shall meet the guidelines and requirements set forth in this Code. The Tentative Plat shall be submitted to the Planning Department with the following information:

1. Site development application form completed and signed by the owner of the land or a letter of authorization signed by the owner. A preliminary title report or other proof of ownership is to be included with the application form.
2. Application fees as established by resolution of the City Council.
3. Ten (10) copies and one (1) sepia or suitable reproducible tracing of the Tentative Plat shall be submitted with the application. Paper size shall be eighteen inch (18") by twenty-four inch (24"), or such other size as may be specified by the City Engineer.
4. Name of the subdivision. No subdivision name shall duplicate or resemble the name of any other subdivision in Clackamas or Washington County. Names may be checked through the county offices.
5. Names, addresses, and telephone numbers of the owners and applicants, and engineer or surveyor.
6. Date, north point and scale of drawing.
7. Location of the subject property by Section, Township, and Range.
8. Legal road access to subject property shall be indicated as City, County, or other public roads.
9. Vicinity map showing the relationship to the nearest major highway or street.
10. Lots: Dimensions of all lots, minimum lot size, average lot size, and proposed lot and block numbers.
11. Gross acreage in proposed plat.
12. Proposed uses of the property, including sites, if any, for multi-family dwellings, shopping centers, churches, industries, parks, and playgrounds or other public or semi-public uses.
13. Improvements: Statement of the improvements to be made or installed including streets, private drives, sidewalks, lighting, tree planting, and times such improvements are to be made or completed.
14. Trees. Locations, types, sizes, and general conditions of all existing trees, as required in Section 4.600.
15. Utilities such as electrical, gas, telephone, on and abutting the tract.
16. Easements: Approximate width, location, and purpose of all existing and proposed easements on, and known easements abutting the tract.
17. Deed Restrictions: Outline of proposed deed restrictions, if any.



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18. **Written Statement:** Information which is not practical to be shown on the maps may be shown in separate statements accompanying the Tentative Plat.
  19. If the subdivision is to be a "Planned Development," a copy of the proposed Home Owners Association By-Laws must be submitted at the time of submission of the application. The Tentative Plat shall be considered as the Stage I Preliminary Plan. The proposed By-Laws must address the maintenance of any parks, common areas, or facilities.
  20. Any plat bordering a stream or river shall indicate areas subject to flooding and shall comply with the provisions of Section 4.172.
  21. Proposed use or treatment of any property designated as open space by the City of Wilsonville.
  22. A list of the names and addresses of the owners of all properties within 250 feet of the subject property, printed on self-adhesive mailing labels. The list shall be taken from the latest available property ownership records of the Assessor's office of the affected county.
  23. A completed "liens and assessments" form, provided by the City Finance Department.
  24. Locations of all areas designated as a Significant Resource Overlay Zone by the City, as well as any wetlands shall be shown on the tentative plat.
  25. Locations of all existing and proposed utilities, including but not limited to domestic water, sanitary sewer, storm drainage, and any private utilities crossing or intended to serve the site. Any plans to phase the construction or use of utilities shall be indicated. [Amended by Ord. 682, 9/9/10]
  26. A traffic study, prepared under contract with the City, shall be submitted as part of the tentative plat application process, unless specifically waived by the Community Development Director.

**Response:** The application materials include all of the information required in Subsection 4.210(.01)B. These criteria are met.

- D. **Land division phases to be shown.** Where the applicant intends to develop the land in phases, the schedule of such phasing shall be presented for review at the time of the tentative plat. In acting on an application for tentative plat approval, the Planning Director or Development Review Board may set time limits for the completion of the phasing schedule which, if not met, shall result in an expiration of the tentative plat approval.

**Response:** The Applicant is not proposing a phased development. This standard does not apply to the application.

- E. **Remainder tracts to be shown as lots or parcels.** Tentative plats shall clearly show all affected property as part of the application for land division. All remainder tracts, regardless of size, shall be shown and counted among the parcels or lots of the division.

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**Response:** The proposed subdivision does not create remainder tracts. The tentative plat accounts for all land within the plat area as lots, tracts, or rights-of-way. This standard does not apply.

Section 4.232 **EXPEDITED LAND DIVISIONS AND MIDDLE HOUSING LAND DIVISIONS.**

- (.01) Applicants for subdivisions or land partitions may request that their applications be processed as expedited land divisions, pursuant to ORS 197. In order to be processed as an expedited land division, each such request must be filed in writing at the time that the application is filed.
- (.02) Additional to the relevant standards and criteria applying to partitions and subdivisions, applications for expedited land divisions shall only be approved where the subject property is in a residential zone and the application includes no requests for waivers or variances from the standards applying to land divisions in the zone.

**Response:** These standards related to expedited land divisions are understood but not applicable due to the need for other concurrent land use decisions.

- (.03) An applicant for a land division may process the land division as a Middle Housing land division if all the following are met:
  - A. The proposed land division is occupied by Middle Housing or an Accessory Dwelling Unit and the associated primary dwelling;

**Response:** Each Middle Housing Land Division involves a parent lot with a duplex to be divided into two child lots. This criterion is met.

- B. Separate utilities are provided for each dwelling unit within the land division;

**Response:** The Petras Homes Subdivision project envisions 10 paired, attached single-family residences and one detached single-family residence for a total of 21 dwelling units. Each dwelling unit will be provided with separate utilities per the Preliminary Composite Utility Plans (Sheet P-09) contained within Exhibit A. This criterion is met.

- C. Easements are provided for each dwelling unit for:
  - 1. Locating, accessing, replacing and servicing all utilities;
  - 2. Pedestrian access from each dwelling unit to a street or private drive;
  - 3. Any common areas or shared building elements;
  - 4. Any dedicated driveways or parking; and
  - 5. Any dedicated common area.

**Response:** Each dwelling unit has been planned with any necessary easements to provide for the listed residential functions. These criteria are met.

- D. Evidence demonstrates how buildings or structures on a resulting middle housing land division unit will comply with applicable building codes provisions relating to new property lines and, notwithstanding the creation of new middle housing land division units, how structures or buildings located on the newly created middle housing land division units will comply with the Oregon residential specialty code.

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**Response:** The proposed project will comply with the applicable building code provisions related to new dwelling units and property lines. This criterion is met.

- E. Notes are added to the final plat indicating the following:
  - 1. Further division of the resulting middle housing land division units is prohibited;
  - 2. The approval of the middle housing land division is pursuant to ORS 92.010 to 92.192, as applicable.

**Response:** The final plat will contain language indicating that further division of the Middle Housing units is prohibited and that the Middle Housing Land Division complies with the applicable provisions of ORS 92.010 to 92.192. Therefore, these criteria are met.

- F. The Middle Housing Land Division is not used to create separate units of land for a two, three, or four-Unit Cluster Housing development on either of the following:
  - 1. On land otherwise divisible through a partition or subdivision to create lots for detached single-family homes; or
  - 2. On lots in subdivisions or partitions recorded in the prior 24 month period unless the average size of the resulting land division units, determined by adding the areas of land division units and dividing by the number of land division units, is 60 percent or less of the minimum lot size in the zone.

**Response:** Cluster Housing units have not been planned as part of this application. These standards do not apply.

(.04) Provisions of Middle Housing Land Divisions:

- 1. A Middle Housing Land Division creates separate units of land for each dwelling unit in a Middle Housing development that could otherwise be built on the lot without a land division or to create a separate unit of land for an Accessory Dwelling Unit.

**Response:** The proposed Middle Housing Land Division creates separate units of land for each dwelling unit. In this case, a duplex on a legal parent lot is divided into two separate dwelling units on two separate units of land. This criterion is met.

- 2. Following a Middle Housing Land Division, the units of land resulting from a Middle Housing Land Division shall collectively be considered a single lot, along with the parent lot, for all but platting and property transfer purposes under City code and state rules and statutes, including, but not limited to, the following purposes:
  - A. Lot standards such as size, setback, lot coverage, and lot width and depth;

**Response:** Each proposed parent lot meets the applicable lot standards including lot size, setbacks, lot coverage, and lot width and depth, as explained within the written narrative responses related to Section 4.127. This criterion is met.

- B. Definition of unit types (e.g., a two-Unit Cluster Housing development where each unit is on its own land division unit through a Middle Housing Land Division would still be

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considered two-Unit Cluster Housing rather than single-family units; a duplex would still be considered a duplex rather than townhouses);

**Response:** The proposed duplexes will still be considered duplexes following Middle Housing Land Division. This criterion is met.

C. Allowance of number of Middle Housing units and Accessory Dwelling Units;

**Response:** The proposed number of dwelling units is acceptable by the standards of the City of Wilsonville Development Code and *Frog Pond West Master Plan*. This criterion is met.

D. Compliance with Middle Housing rules and statutes in ORS 197 and OAR 660-046.

**Response:** The proposed Middle Housing Land Divisions comply with the applicable rules and statutes of ORS 197 and OAR 660-046. This criterion is met.

3. Middle Housing Land Division Units, the units of land resulting from a Middle Housing Division, shall:

A. Have exactly one dwelling unit (except for tracts for common space), and

B. Not be further divisible.

**Response:** Following the proposed Middle Housing Land Divisions, each child lot will contain exactly one dwelling unit and will be noted as ineligible for further division on the final plat. These criteria are met.

(.05) Procedures and Requirements for Expedited Land Divisions and Middle Housing Land Divisions.

A. Expedited Land Divisions and Middle Housing Land Divisions for new middle housing, shall be subject to the same procedures and requirements as conventional land divisions, with the following exceptions:

1. The Planning Director shall have the authority to approve, conditionally approve, or deny tentative plat applications through the Administrative Review procedures of Section 4.035. The Director shall not refer an application for an expedited land division to the Development Review Board for hearing and the Board shall not have the authority to call up the decision of the Director for review.

2. The Director shall render a decision on an expedited land division within 30 days of a complete filing, unless a time extension has been requested by the applicant.

3. Appeals of the decisions of the Director on expedited land divisions shall be heard by a referee who has been retained by the City for the purpose of considering such appeals. Decisions of the referee shall be final and the City Council shall not have the authority to call up such decisions for review.

4. The referee shall render a decision on an expedited land division or middle housing land division appeal within 63

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days of a complete filing, unless a time extension has been requested by the applicant.

- B. Middle Housing Land Division occupied by existing middle housing or an Accessory Dwelling Unit and the associated primary dwelling shall be subject to the same procedures and requirements as partitions.
- C. For either process described in A. and B., an applicant may submit multiple tentative middle housing land divisions within the same recorded subdivision or partition plat as a single application.
- D. Notwithstanding Subsections A. and B. above, an applicant may elect to have one or more tentative middle housing land divisions reviewed concurrently with the tentative plat of a subdivision subject to review by the Development Review Board. Such tentative middle housing land divisions shall be shown on separate sheet(s) than the tentative subdivision plat and be clearly identified as being created from one or more lots created by the subdivision.

**Response:** These standards are understood. The proposed Middle Housing Land Divisions meet the applicable requirements and are submitted concurrently with the subdivision tentative plat. Middle Housing Land Divisions are shown on Sheet P-07 of the Preliminary Plans (Exhibit A), separate from the tentative subdivision plat. These criteria, as applicable, are met.

Section 4.236 GENERAL REQUIREMENTS – STREETS.

- (.01) Conformity to the Transportation System Plan. Land divisions shall conform to and be in harmony with the Transportation Systems Plan, the Bicycle and Pedestrian Master Plan, and the Parks and Recreation Master Plan.

**Response:** As confirmed by the TIS, the proposed street plan conforms to the Transportation System Plan and the *Frog Pond West Master Plan*. Per Figure 16 of the *Frog Pond West Master Plan*, the site is bound to the east and south by Framework Streets (SW Stafford Road and SW Frog Pond Lane). The development will construct improvements to adjacent SW Frog Pond Lane and SW Windflower Street. SW Stafford Road facilities will be constructed as part of a future City project. The plans comply with the applicable master plans for the area.

- (.02) Relation to Adjoining Street System.

- A. A land division shall provide for the continuation of the principal streets existing in the adjoining area, or of their proper projection when adjoining property is not developed, and shall be of a width not less than the minimum requirements for streets set forth in these regulations. Where, in the opinion of the Planning Director or Development Review Board, topographic conditions make such continuation or conformity impractical, an exception may be made. In cases where the Board or Planning Commission has adopted a plan or plat of a neighborhood or area of which the proposed land division is a part, the subdivision shall conform to such adopted neighborhood or area plan.

**Response:** As shown on the Preliminary Street Plan (Exhibit A), the proposed street network is designed for future continuation and is generally consistent with the *Frog Pond West Master Plan*. Therefore, this criterion is met.

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- B. Where the plat submitted covers only a part of the applicant's tract, a sketch of the prospective future street system of the unsubmitted part shall be furnished and the street system of the part submitted shall be considered in the light of adjustments and connections with the street system of the part not submitted.

**Response:** The submitted tentative plat covers the entirety of the Applicant's tracts. This standard does not apply.

- C. At any time when an applicant proposes a land division and the Comprehensive Plan would allow for the proposed lots to be further divided, the city may require an arrangement of lots and streets such as to permit a later resubdivision in conformity to the street plans and other requirements specified in these regulations.

**Response:** The proposed lots follow the minimum lot size standards for the R-5 designation. Conformity with street plans and other requirements is addressed within this written narrative. This criterion is met.

- (.03) All streets shall conform to the standards set forth in Section 4.177 and the block size requirements of the zone.

**Response:** Compliance with the standards of Section 4.177 is addressed earlier in the narrative. The proposed development conforms with the street plan outlined within the *Frog Pond West Master Plan*. This criterion is met.

- (.04) **Creation of Easements:** The Planning Director or Development Review Board may approve an easement to be established without full compliance with these regulations, provided such an easement is the only reasonable method by which a portion of a lot large enough to allow partitioning into two (2) parcels may be provided with vehicular access and adequate utilities. If the proposed lot is large enough to divide into more than two (2) parcels, a street dedication may be required.

**Response:** The Applicant is not requesting street easements; therefore, this standard does not apply.

- (.05) **Topography:** The layout of streets shall give suitable recognition to surrounding topographical conditions in accordance with the purpose of these regulations.

**Response:** The street layout recognizes topographical conditions. No adjustments to the proposed street network are necessary; therefore, this criterion is met.

- (.06) **Reserve Strips:** The Planning Director or Development Review Board may require the applicant to create a reserve strip controlling the access to a street. Said strip is to be placed under the jurisdiction of the City Council, when the Director or Board determine that a strip is necessary:

- A. To prevent access to abutting land at the end of a street in order to assure the proper extension of the street pattern and the orderly development of land lying beyond the street; or
- B. To prevent access to the side of a street on the side where additional width is required to meet the right-of-way standards established by the City; or
- C. To prevent access to land abutting a street of the land division but not within the tract or parcel of land being divided; or
- D. To prevent access to land unsuitable for building development.

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**Response:** The project does not include reserve strips, as immediately adjacent properties have received approval and construction is in progress. This standard does not apply to the application.

(.07) **Future Expansion of Street:** When necessary to give access to, or permit a satisfactory future division of, adjoining land, streets shall be extended to the boundary of the land division and the resulting dead-end street may be approved without a turn-around. Reserve strips and street plugs shall be required to preserve the objective of street extension. Notification that the street is planned for future extension shall be posted on the stub street.

**Response:** Future extensions of streets have not been planned as part of adjacent subdivisions; therefore, this project does not propose to provide such streets. Additional right-of-way has been provided for the widening of adjacent streets as necessary. This standard is met.

(.08) **Existing Streets:** Whenever existing streets adjacent to or within a tract are of inadequate width, additional right-of-way shall conform to the designated width in this Code or in the Transportation Systems Plan.

**Response:** The project will dedicate 21.5 feet of right-of-way to Frog Pond Lane as well as 12 feet for the expansion of SW Stafford Road. The resulting streets are of adequate width and are anticipated to meet City standards. This criterion is met.

(.09) **Street Names:** No street names will be used which will duplicate or be confused with the names of existing streets, except for extensions of existing streets. Street names and numbers shall conform to the established name system in the City, and shall be subject to the approval of the City Engineer.

**Response:** Streets adjacent to the project area have established street names. This standard does not apply.

Section 4.237 **GENERAL REQUIREMENTS – OTHER.**

(.01) **Blocks:**

- A. The length, width, and shape of blocks shall be designed with due regard to providing adequate building sites for the use contemplated, consideration of needs for convenient access, circulation, control, and safety of pedestrian, bicycle, and motor vehicle traffic, and recognition of limitations and opportunities of topography.
- B. **Sizes:** Blocks shall not exceed the sizes and lengths specified for the zone in which they are located unless topographical conditions or other physical constraints necessitate larger blocks. Larger blocks shall only be approved where specific findings are made justifying the size, shape, and configuration.

**Response:** The length, width, and shape of blocks within the development have been designed to accommodate the established layout of the *Frog Pond West Master Plan* and comply with the standards of Section 4.177. These standards are addressed above. The site is located within the RN zoning district and is also subject to the block, access, and connectivity standards of Section 4.127(.10). Those standards are addressed above. The placement of streets within the Petras Homes Subdivision development and the blocks formed allow for the creation of lots that meet the standards of the pertinent sub-districts. These criteria are met.

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(.02) Easements:

- A. Utility lines. Easements for sanitary or storm sewers, drainage, water mains, electrical lines or other public utilities shall be dedicated wherever necessary. Easements shall be provided consistent with the City's Public Works Standards, as specified by the City Engineer or Planning Director. All of the public utility lines within and adjacent to the site shall be installed within the public right-of-way or easement; with underground services extending to the private parcel constructed in conformance to the City's Public Works Standards. All franchise utilities shall be installed within a public utility easement. All utilities shall have appropriate easements for construction and maintenance purposes.
- B. Water courses. Where a land division is traversed by a water course, drainage way, channel or stream, there shall be provided a storm water easement or drainage right-of-way conforming substantially with the lines of the water course, and such further width as will be adequate for the purposes of conveying storm water and allowing for maintenance of the facility or channel. Streets or parkways parallel to water courses may be required.

**Response:** Public utilities are placed within public rights-of-way or within public utility easements (PUEs). The tentative plat shows a public access and utility easement (PAUE) over the private alleys and tracts. Public and private utilities are expected to be constructed within public rights-of-way or within the provided utility easements. Water courses are not located on the subject properties. Therefore, the applicable criteria are met.

(.03) Pedestrian and bicycle pathways. An improved public pathway shall be required to transverse the block near its middle if that block exceeds the length standards of the zone in which it is located.

- A. Pathways shall be required to connect to cul-de-sacs or to pass through unusually shaped blocks.
- B. Pathways required by this subsection shall have a minimum width of ten (10) feet unless they are found to be unnecessary for bicycle traffic, in which case they are to have a minimum width of six (6) feet.

**Response:** The proposed block extends those previously approved by the Frog Pond Crossing development and is limited by the access requirements related to SW Frog Pond Lane and SW Stafford Road. As such, pathways are planned to connect SW Windflower Street and SW Frog Pond Lane as well as SW Windflower Street and SW Stafford Road. Planned pathways meet the minimum standard and are 10 feet in width. These criteria are met.

(.04) Tree planting. Tree planting plans for a land division must be submitted to the Planning Director and receive the approval of the Director or Development Review Board before the planting is begun. Easements or other documents shall be provided, guaranteeing the City the right to enter the site and plant, remove, or maintain approved street trees that are located on private property.

**Response:** Proposed tree planting is shown on the Preliminary Landscape Plan (Exhibit A). Proposed street trees are located within public right-of-way planter strips and additional easements are not required.

(.05) Lot Size and shape. The lot size, width, shape and orientation shall be appropriate for the location of the land division and for the type of



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development and use contemplated. Lots shall meet the requirements of the zone where they are located.

- A. In areas that are not served by public sewer, an on-site sewage disposal permit is required from the City. If the soil structure is adverse to on-site sewage disposal, no development shall be permitted until sewer service can be provided.
- B. Where property is zoned or deeded for business or industrial use, other lot widths and areas may be permitted at the discretion of the Development Review Board. Depth and width of properties reserved or laid out for commercial and industrial purposes shall be adequate to provide for the off-street service and parking facilities required by the type of use and development contemplated.
- C. In approving an application for a Planned Development, the Development Review Board may waive the requirements of this section and lot size, shape, and density shall conform to the Planned Development conditions of approval.

**Response:** The proposed lot sizes, widths, and shapes are appropriate for the site and comply with the standards of the RN zoning district and the R-5 designation as well as the general expectations of the *Frog Pond West Master Plan*. The site is served by public sewer, and no on-site sewage disposal is proposed. The property is zoned for residential use and is subject to an application for Planned Development. The site is designated RN and is subject to the standards of that zoning district upon annexation. Please refer to the response under WDC Section 4.127(.08). These criteria are met.

(.06) Access. The division of land shall be such that each lot shall have a minimum frontage on a street or private drive, as specified in the standards of the relative zoning districts. This minimum frontage requirement shall apply with the following exceptions:

- A. A lot on the outer radius of a curved street or tract with a private drive, or facing the circular end of a cul-de-sac shall have frontage of not less than twenty-five (25) feet upon a street or tract with a private drive, measured on the arc.
- B. The Development Review Board may waive lot frontage requirements where in its judgment the waiver of frontage requirements will not have the effect of nullifying the intent and purpose of this regulation or if the Board determines that another standard is appropriate because of the characteristics of the overall development.

**Response:** The minimum lot width in the Neighborhood (RN) zoning district R-5 subdistrict is 35 feet. As shown on the Preliminary Subdivision Plan (Exhibit A), the parent lots meet the dimensional standards. Please refer to the response to Section 4.127, addressing the standards of the RN zoning district, previously within the narrative.

A waiver to minimum street frontage standards is requested. Lots 4 through 6 are proposed to front Tract D and be accessed via a private alley within Tract B. The development is subject to both the street layout created by adjacent subdivisions and the standards of the Frog Pond West neighborhood, which require a continuous wall on SW Stafford Road, preventing pedestrian connections to the Stafford Road right-of-way. The

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proposed layout permits usable pedestrian connections while also maintaining the planned look of the Frog Pond West neighborhood and the existing street layout.

(.07) **Through lots.** Through lots shall be avoided except where essential to provide separation of residential development from major traffic arteries or adjacent non-residential activity or to overcome specific disadvantages of topography and orientation. A planting screen easement of at least ten (10) feet, across which there shall be no access, may be required along the line of lots abutting such a traffic artery or other disadvantageous use. Through lots with planting screens shall have a minimum average depth of one hundred (100) feet. The Development Review Board may require assurance that such screened areas be maintained as specified in Section 4.176.

**Response:** No through lots are proposed. This standard is not applicable.

(.08) **Lot side lines.** The side lines of lots, as far as practicable for the purpose of the proposed development, shall run at right angles to the street or tract with a private drive upon which the lots face.

**Response:** Planned side-lot lines run at right angles to the street or the tract upon which they face. This criterion is met.

(.09) **Large lot land divisions.** In dividing tracts which at some future time are likely to be re-divided, the location of lot lines and other details of the layout shall be such that re-division may readily take place without violating the requirements of these regulations and without interfering with the orderly development of streets. Restriction of buildings within future street locations shall be made a matter of record if the Development Review Board considers it necessary.

**Response:** No future development tracts are proposed in this application; therefore, this standard does not apply.

(.10) **Building line.** The Planning Director or Development Review Board may establish special building setbacks to allow for the future re-division or other development of the property or for other reasons specified in the findings supporting the decision. If special building setback lines are established for the land division, they shall be shown on the final plat.

**Response:** No special building setbacks are proposed; therefore, this standard does not apply.

(.11) **Build-to line.** The Planning Director or Development Review Board may establish special build-to lines for the development, as specified in the findings and conditions of approval for the decision. If special build-to lines are established for the land division, they shall be shown on the final plat.

**Response:** There are no maximum setbacks or build-to lines required or proposed; therefore, this standard does not apply.

(.12) **Land for public purposes.** The Planning Director or Development Review Board may require property to be reserved for public acquisition, or irrevocably offered for dedication, for a specified period of time.

**Response:** The City has not identified any requirements for property to be reserved for public acquisition. The development will dedicate right-of-way for the public street network. This criterion is met.

(.13) **Corner lots.** Lots on street intersections shall have a corner radius of not less than ten (10) feet.

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**Response:** As shown on the Preliminary Street Plan (Exhibit A), lots on street intersections are planned to have corner radii of at least 10 feet. This criterion is met.

**Section 4.250 LOTS OF RECORD**

All lots of record that have been legally created prior to the adoption of this ordinance shall be considered to be legal lots. Tax lots created by the County Assessor are not necessarily legal lots of record.

**Response:** The application contains documents confirming that the properties are legal lots of record. This criterion is met.

**Section 4.262 IMPROVEMENTS - REQUIREMENTS**

(.01) **Streets.** Streets within or partially within the development shall be graded for the entire right-of-way width, constructed and surfaced in accordance with the Transportation Systems Plan and City Public Works Standards. Existing streets which abut the development shall be graded, constructed, reconstructed, surfaced or repaired as determined by the City Engineer.

(.02) **Curbs.** Curbs shall be constructed in accordance with standards adopted by the City.

(.03) **Sidewalks.** Sidewalks shall be constructed in accordance with standards adopted by the City.

**Response:** As shown on the Preliminary Street Plan (Exhibit A), streets will be graded, constructed, and surfaced according to the TSP, the cross-sections incorporated into the *Frog Pond West Master Plan*, and the City's Public Works Standards as modified by the City Engineer. These criteria are met.

(.04) **Sanitary sewers.** When the development is within two hundred (200) feet of an existing public sewer main, sanitary sewers shall be installed to serve each lot or parcel in accordance with standards adopted by the City. When the development is more than two hundred (200) feet from an existing public sewer main, the City Engineer may approve an alternate sewage disposal system.

**Response:** As shown on the Preliminary Composite Utility Plan (Exhibit A), the project connects to existing public sanitary sewer mains adjacent to the site within the SW Frog Pond Lane right-of-way. The proposed sanitary sewer serves each lot in accordance with standards adopted by the City; therefore, this criterion is met.

(.05) **Drainage.** Storm drainage, including detention or retention systems, shall be provided as determined by the City Engineer.

**Response:** Per the Preliminary Stormwater Report (Exhibit G) and as demonstrated within the Preliminary Plans (Exhibit A), storm drainage systems are being provided as outlined in the City's Public Works Standards. This criterion is met.

(.06) **Underground utility and service facilities.** All new utilities shall be subject to the standards of Section 4.300 (Underground Utilities). The developer shall make all necessary arrangements with the serving utility to provide the underground services in conformance with the City's Public Works Standards.

**Response:** The standards of Section 4.300 are addressed earlier in the narrative. This criterion is met.

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(.07) **Streetlight standards.** Streetlight standards shall be installed in accordance with regulations adopted by the City.

**Response:** Proposed streetlight locations are shown on the Preliminary Composite Utility Plan sheet (P-09) within the Preliminary Plans (Exhibit A). Streetlights will be installed per the *Frog Pond West Master Plan* and regulations adopted by the City. This criterion will be met during construction.

(.08) **Street signs.** Street name signs shall be installed at all street intersections and dead-end signs at the entrance to all dead-end streets and cul-de-sacs in accordance with standards adopted by the City. Other signs may be required by the City Engineer.

**Response:** Street signs will be installed per City standards. This criterion will be met upon sign installation.

(.09) **Monuments.** Monuments shall be placed at all lot and block corners, angle points, points of curves in streets, at intermediate points and shall be of such material, size and length as required by State Law. Any monuments that are disturbed before all improvements are completed by the developer and accepted by the City shall be replaced to conform to the requirements of State Law.

**Response:** Monuments will be placed per state, Clackamas County, and City requirements. This criterion will be met.

(.10) **Water.** Water mains and fire hydrants shall be installed to serve each lot in accordance with City standards.

**Response:** Water mains and fire hydrants are proposed to serve each lot in accordance with City and Fire Department standards. Please refer to the Preliminary Composite Utility Plan (Exhibit A) for more information. This criterion will be met upon the installation of water mains and fire hydrants.

#### UNDERGROUND UTILITIES.

##### Section 4.300 GENERAL

(.02) After the effective date of this Code, the approval of any development of land within the City will be upon the express condition that all new utility lines, including but not limited to those required for power, communication, street lighting, gas, cable television services and related facilities, shall be placed underground.

(.03) The construction of underground utilities shall be subject to the City's Public Works Standards and shall meet applicable requirements for erosion control and other environmental protection.

**Response:** The project is subject to the requirements of this section.

##### Section 4.320 REQUIREMENTS

(.01) The developer or subdivider shall be responsible for and make all necessary arrangements with the serving utility to provide the underground services (including cost of rearranging any existing overhead facilities). All such underground facilities as described shall be constructed in compliance with the rules and regulations of the Public Utility Commission of the State of Oregon relating to the installation and safety of underground lines, plant, system, equipment and apparatus.

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- (.02) The location of the buried facilities shall conform to standards supplied to the subdivider by the City. The City also reserves the right to approve location of all surface-mounted transformers.
  - (.03) Interior easements (back lot lines) will only be used for storm or sanitary sewers, and front easements will be used for other utilities unless different locations are approved by the City Engineer. Easements satisfactory to the serving utilities shall be provided by the developer and shall be set forth on the plat.

**Response:** As demonstrated within the Preliminary Plans (Exhibit A), new utilities will be installed underground in accordance with City and other agency requirements. New interior storm and sanitary sewer easements will be utilized for planned connections within the alley tract. Existing utilities adjacent to the site will be relocated as needed. These criteria are met.

#### SITE DESIGN REVIEW

##### Section 4.421 CRITERIA AND APPLICATION OF DESIGN STANDARDS

- (.01) The following standards shall be utilized by the Board in reviewing the plans, drawings, sketches and other documents required for Site Design Review. These standards are intended to provide a frame of reference for the applicant in the development of site and building plans as well as a method of review for the Board. These standards shall not be regarded as inflexible requirements. They are not intended to discourage creativity, invention and innovation. The specifications of one or more particular architectural styles is not included in these standards. (Even in the Boones Ferry Overlay Zone, a range of architectural styles will be encouraged.)
  - A. **Preservation of Landscape.** The landscape shall be preserved in its natural state, insofar as practicable, by minimizing tree and soils removal, and any grade changes shall be in keeping with the general appearance of neighboring developed areas.

**Response:** As it was previously used for agriculture, the site is not in a “natural state” and is relatively flat. The project involves minimal fill and removal and will result in a developed area generally consistent with the surrounding areas. This criterion is met.

- B. **Relation of Proposed Buildings to Environment.** Proposed structures shall be located and designed to assure harmony with the natural environment, including protection of steep slopes, vegetation and other naturally sensitive areas for wildlife habitat and shall provide proper buffering from less intensive uses in accordance with Sections 4.171 and 4.139 and 4.139.5. The achievement of such relationship may include the enclosure of space in conjunction with other existing buildings or other proposed buildings and the creation of focal points with respect to avenues of approach, street access or relationships to natural features such as vegetation or topography.

**Response:** As previously stated, the site does not possess natural features of note. The proposed layout of the planned development considers the grade of the site and surrounding streets and subdivisions. Existing wetlands on the site are not considered significant and will be mitigated in accordance with their jurisdictional status. This requirement is met.

- C. **Drives, Parking and Circulation.** With respect to vehicular and pedestrian circulation, including walkways, interior drives and parking, special attention shall be given to location and number of

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access points, general interior circulation, separation of pedestrian and vehicular traffic, and arrangement of parking areas that are safe and convenient and, insofar as practicable, do not detract from the design of proposed buildings and structures and the neighboring properties.

**Response:** The drives, parking, and circulation within the development are subject to the requirements of the RN zoning district, the Planned Development overlay, and Land Division requirements and are not subject to Site Design Review. This standard is not applicable.

D. Surface Water Drainage. Special attention shall be given to proper site surface drainage so that removal of surface waters will not adversely affect neighboring properties of the public storm drainage system.

**Response:** Please refer to Exhibit G for the Preliminary Stormwater Report. The Preliminary Street Plan (Exhibit A) shows the location of low impact development approaches (LIDA) facilities within the planter strips of the public streets and the stormwater facility within Tract C. These facilities have been designed with proper consideration of adjacent properties and the public storm drainage system. This criterion is met.

E. Utility Service. Any utility installations above ground shall be located so as to have a harmonious relation to neighboring properties and site. The proposed method of sanitary and storm sewage disposal from all buildings shall be indicated.

**Response:** As shown on the Preliminary Composite Utility Plan (Exhibit A), each dwelling will be served by utilities installed underground. Existing utilities adjacent to the site will be relocated as needed. Sanitary sewage disposal and storm sewage disposal are shown on the indicated plan. This criterion is met.

(.02) The standards of review outlined in Sections (a) through (g) above shall also apply to all accessory buildings, structures, exterior signs and other site features, however related to the major buildings or structures.

**Response:** This application does not include accessory buildings or exterior signs. This standard does not apply.

(.04) Conditional application. The Planning Director, Planning Commission, Development Review Board or City Council may, as a Condition of Approval for a zone change, subdivision, land partition, variance, conditional use, or other land use action, require conformance to the site development standards set forth in this Section.

**Response:** This application includes a Zone Change and Planned Development, among other applications, and includes responses to the site development standards of those sections. Per City staff, the project elements subject to Site Design Review and the standards of this chapter are tracts and their landscaping as well as landscaping within the public right-of-way. Conformance with the applicable standards is shown; therefore, this criterion is met.

(.05) The Board may attach certain development or use conditions in granting an approval that are determined necessary to insure the proper and efficient functioning of the development, consistent with the intent of the Comprehensive Plan, allowed densities and the requirements of this Code. In making this determination of compliance and attaching conditions, the Board

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shall, however, consider the effects of this action on the availability and cost of needed housing. The provisions of this section shall not be used in such a manner that additional conditions either singularly or accumulatively have the effect of unnecessarily increasing the cost of housing or effectively excluding a needed housing type.

**Response:** This single-family community has been designed in accordance with the *Frog Pond West Master Plan*, which is part of, and consistent with, the Comprehensive Plan. The site plan is consistent with the allowable number of homes and other requirements established by the *Frog Pond West Master Plan* and the implementing RN zoning district. No additional conditions are needed to ensure that the project remains consistent with the City's adopted policies. This criterion is met.

(.06) The Board or Planning Director may require that certain paints or colors of materials be used in approving applications. Such requirements shall only be applied when site development or other land use applications are being reviewed by the City.

A. Where the conditions of approval for a development permit specify that certain paints or colors of materials be used, the use of those paints or colors shall be binding upon the applicant. No Certificate of Occupancy shall be granted until compliance with such conditions has been verified.

B. Subsequent changes to the color of a structure shall not be subject to City review unless the conditions of approval under which the original colors were set included a condition requiring a subsequent review before the colors could be changed.

**Response:** This project is an attached single-family community. Colors and materials have not been identified in the design standards of the *Frog Pond West Master Plan*. It is anticipated that building elevations, including paint and material colors, will be evaluated at the time of building permit review; however, example home elevations and floor plans have been provided as part of Exhibit M. As applicable, these criteria are met.

Section 4.440 PROCEDURE

(.01) Submission of Documents. A prospective applicant for a building or other permit who is subject to site design review shall submit to the Planning Department, in addition to the requirements of Section 4.035, the following:

A. A site plan, drawn to scale, showing the proposed layout of all structures and other improvements including, where appropriate, driveways, pedestrian walks, landscaped areas, fences, walls, offstreet parking and loading areas, and railroad tracks. The site plan shall indicate the location of entrances and exits and direction of traffic flow into and out of off-street parking and loading areas, the location of each parking space and each loading berth and areas of turning and maneuvering vehicles. The site plan shall indicate how utility service and drainage are to be provided.

**Response:** The Preliminary Plans (Exhibit A) provide the information listed above, as applicable. This criterion is met.

B. A Landscape Plan, drawn to scale, showing the location and design of landscaped areas, the variety and sizes of trees and plant materials to be planted on the site, the location and design of landscaped areas, the varieties, by scientific and common name, and sizes of trees and

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plant materials to be retained or planted on the site, other pertinent landscape features, and irrigation systems required to maintain trees and plant materials. An inventory, drawn at the same scale as the Site Plan, of existing trees of 4" caliper or more is required. However, when large areas of trees are proposed to be retained undisturbed, only a survey identifying the location and size of all perimeter trees in the mass is necessary.

**Response:** A Preliminary Landscape Plan (Exhibit A) is included with this application. The plans provide the information required; therefore, this criterion is met.

- C. Architectural drawings or sketches, drawn to scale, including floor plans, in sufficient detail to permit computation of yard requirements and showing all elevations of the proposed structures and other improvements as they will appear on completion of construction. Floor plans shall also be provided in sufficient detail to permit computation of yard requirements based on the relationship of indoor versus outdoor living area, and to evaluate the floor plan's effect on the exterior design of the building through the placement and configuration of windows and doors.

**Response:** Example building elevations and floor plans are included as Exhibit M. This criterion is met.

- D. A Color Board displaying specifications as to type, color, and texture of exterior surfaces of proposed structures. Also, a phased development schedule if the development is constructed in stages.
- E. A sign Plan, drawn to scale, showing the location, size, design, material, color and methods of illumination of all exterior signs.
- F. The required application fee.

**Response:** A color board is not included, as the exterior dwelling design will be evaluated at the time of building permit review. No signs are proposed at this time. The required application fee has been submitted with this application. These criteria are met.

## TREE PRESERVATION AND PROTECTION

### Section 4.600.30 TREE REMOVAL PERMIT REQUIRED

- (.01) Requirement Established. No person shall remove any tree without first obtaining a Tree Removal Permit (TRP) as required by this subchapter.
- (.02) Tree Removal Permits will be reviewed according to the standards provided for in this subchapter, in addition to all other applicable requirements of Chapter 4.
- (.03) Although tree activities in the Willamette River Greenway are governed by WC 4.500 - 4.514, the application materials required to apply for a conditional use shall be the same as those required for a Type B or C permit under this subchapter, along with any additional materials that may be required by the Planning Department. An application for a Tree Removal Permit under this section shall be reviewed by the Development Review Board.

**Response:** The property does not include any trees that fall under the requirements of WC 4.600.

## ANNEXATIONS AND URBAN GROWTH BOUNDARY AMENDMENTS

### Section 4.700 PROCEDURES RELATING TO THE PROCESSING OF REQUESTS FOR ANNEXATION AND URBAN GROWTH BOUNDARY AMENDMENTS.



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(.01) The City of Wilsonville is located within the Portland Metropolitan Area, and is therefore subject to regional government requirements affecting changes to the city limits and changes to the Urban Growth Boundary (UGB) around Wilsonville. The City has the authority to annex properties as prescribed in State law, but the City's role in determining the UGB is primarily advisory to Metro, as provided in Oregon Revised Statutes. The following procedures will be used to aid the City Council in formulating recommendations to those regional entities.

A. Proponents of such changes shall provide the Planning Director with all necessary maps and written information to allow for review by city decision-makers. The Planning Director, after consultation with the City Attorney, will determine whether each given request is quasi-judicial or legislative in nature and will make the necessary arrangements for review based upon that determination.

**Response:** The Applicant has provided the required information. The Planning Director has determined that the annexation request is subject to quasi-judicial review. This criterion is met.

B. Written information submitted with each request shall include an analysis of the relationship between the proposal and the City's Comprehensive Plan, applicable statutes, as well as the Statewide Planning Goals and any officially adopted regional plan that may be applicable.

**Response:** Please refer to the responses addressing compliance with the relevant Statewide Planning Goals, City of Wilsonville Comprehensive Plan goals, *Frog Pond West Master Plan*, and applicable sections of the City of Wilsonville Development Code. This criterion is met.

#### **IV. Conclusion**

The required findings have been made and this written narrative and accompanying documentation demonstrate that the application is consistent with the applicable standards of the City of Wilsonville. The evidence in the record is substantial and supports approval of the application. Therefore, the Applicant respectfully requests that the City approve these Consolidated Land Use Applications.

## **Exhibit B: Land Use Application Forms & Annexation Petitions**


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## PETITION FOR ANNEXATION

We, the undersigned owner(s) of the property described in **Exhibit A** and/or elector(s) residing at the referenced location(s), hereby petition for, and give consent to, Annexation of said property to the City of Wilsonville:

**NOTE: This petition may be signed by any qualified persons even though they may not know their property description or precinct number.**

SIGNATURE	PRINTED NAME	I AM A: *			PROPERTY ADDRESS	PROPERTY DESCRIPTION				PRECINCT #	DATE
		PO	RV	OV		LOT #	¼ SEC	T	R		
	ADRIAN PETERS	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	No Situs Wilsonville, OR 97070	200	12	3S	1W	323	10/24/22

\* PO - Property Owner  
 RV - Registered Voter  
 OV - Property Owner & Registered Voter

## **Exhibit C: Ownership Information**

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1433 SW 6th Ave.  
(503)646-4444

**OWNERSHIP AND ENCUMBRANCES REPORT WITH GENERAL INDEX LIENS**  
Informational Report of Ownership and Monetary and Non-Monetary Encumbrances

**To ("Customer"):** Adrian Petras  
3673 SW Homesteader Road  
West Linn, OR 97068

**Customer Ref.:** \_\_\_\_\_  
**Order No.:** 36262201197  
**Effective Date:** January 30, 2023 at 08:00 AM  
**Charge:** \$250.00

The information contained in this report is furnished by Ticor Title Company of Oregon (the "Company") as a real property information service based on the records and indices maintained by the Company for the county identified below. THIS IS NOT TITLE INSURANCE OR A PRELIMINARY TITLE REPORT FOR, OR COMMITMENT FOR, TITLE INSURANCE. No examination has been made of the title to the herein described property, other than as specifically set forth herein. Liability for any loss arising from errors and/or omissions is limited to the lesser of the charge or the actual loss, and the Company will have no greater liability by reason of this report. THIS REPORT IS SUBJECT TO THE LIMITATIONS OF LIABILITY STATED BELOW, WHICH LIMITATIONS OF LIABILITY ARE A PART OF THIS REPORT.

**THIS REPORT INCLUDES MONETARY AND NON-MONETARY ENCUMBRANCES.**

**Part One - Ownership and Property Description**

**Owner.** The apparent vested owner of property ("the Property") as of the Effective Date is:

Adrian Petras and Ana Campean as tenants by the entirety

**Premises.** The Property is:

**(a) Street Address:**

No Situs, Wilsonville, OR 97070

**(b) Legal Description:**

SEE EXHIBIT "A" ATTACHED HERETO AND MADE A PART HEREOF

**Part Two - Encumbrances**

**Encumbrances.** As of the Effective Date, the Property appears subject to the following monetary and non-monetary encumbrances of record, not necessarily listed in order of priority, including liens specific to the subject property and general index liens (liens that are not property specific but affect any real property of the named person in the same county):

**EXCEPTIONS**

Note: Property taxes for the fiscal year shown below are paid in full.

Fiscal Year:	2022-2023
Amount:	\$3,513.81
Levy Code:	003-028
Account No.:	00805677
Map No.:	31W12D000200

1. Rights of the public to any portion of the Land lying within the area commonly known as Frogpond Lane and Stafford Road.
2. [Intentionally Deleted]
3. Please be advised that our search did not disclose any open Deeds of Trust of record.

**End of Reported Information**

There will be additional charges for additional information or copies. For questions or additional requests, contact:

Aaron Merkel  
503-336-9173  
aaron.merkel@titlegroup.fntg.com

Ticor Title Company of Oregon  
1433 SW 6th Ave.  
Portland, OR 97201

**EXHIBIT "A"**  
Legal Description

A tract of land situated in the Southeast one-quarter of Section 12, Township 3 South, Range 1 West of the Willamette Meridian, in the County of Clackamas and State of Oregon, being more particularly described as follows:

Commencing at a 3 ¼ inch diameter brass monument marking the Southeast corner of said Section 12; thence North 00°04'48" East along the East line of said Section 12 a distance of 1749.00 feet; thence leaving said East line, South 89°48'48" West a distance of 30.00 feet to the true point of beginning, said point being on the Northerly right of way line of Frogpond Lane (County Road No. 2362); thence South 89°48'48" West along said Northerly right of way line a distance of 365.00 feet to a set 5/8-inch iron rod with yellow plastic cap stamped "Andy Paris and Assoc. Inc."; thence leaving said right of way line, North 00°04'48" East parallel with the East line of said Section 12 a distance of 241.00 feet to a set 5/8-inch rod with yellow plastic cap stamped "Andy Paris and Assoc., Inc." thence North 89°48'48" East a distance of 365.00 feet to a set 5/8-inch iron rod with yellow plastic cap stamped "Andy Paris and Assoc., Inc." on the Westerly right of way line of Stafford Road (Market Road No. 12); thence South 00°04'48" West along said Westerly right of way line a distance of 241.00 feet to the trust point of beginning.

**LIMITATIONS OF LIABILITY**

"CUSTOMER" REFERS TO THE RECIPIENT OF THIS REPORT.

CUSTOMER EXPRESSLY AGREES AND ACKNOWLEDGES THAT IT IS EXTREMELY DIFFICULT, IF NOT IMPOSSIBLE, TO DETERMINE THE EXTENT OF LOSS WHICH COULD ARISE FROM ERRORS OR OMISSIONS IN, OR THE COMPANY'S NEGLIGENCE IN PRODUCING, THE REQUESTED REPORT, HEREIN "THE REPORT." CUSTOMER RECOGNIZES THAT THE FEE CHARGED IS NOMINAL IN RELATION TO THE POTENTIAL LIABILITY WHICH COULD ARISE FROM SUCH ERRORS OR OMISSIONS OR NEGLIGENCE. THEREFORE, CUSTOMER UNDERSTANDS THAT THE COMPANY IS NOT WILLING TO PROCEED IN THE PREPARATION AND ISSUANCE OF THE REPORT UNLESS THE COMPANY'S LIABILITY IS STRICTLY LIMITED. CUSTOMER AGREES WITH THE PROPRIETY OF SUCH LIMITATION AND AGREES TO BE BOUND BY ITS TERMS

THE LIMITATIONS ARE AS FOLLOWS AND THE LIMITATIONS WILL SURVIVE THE CONTRACT:

ONLY MATTERS IDENTIFIED IN THIS REPORT AS THE SUBJECT OF THE REPORT ARE WITHIN ITS SCOPE. ALL OTHER MATTERS ARE OUTSIDE THE SCOPE OF THE REPORT.

CUSTOMER AGREES, AS PART OF THE CONSIDERATION FOR THE ISSUANCE OF THE REPORT AND TO THE FULLEST EXTENT PERMITTED BY LAW, TO LIMIT THE LIABILITY OF THE COMPANY, ITS LICENSORS, AGENTS, SUPPLIERS, RESELLERS, SERVICE PROVIDERS, CONTENT PROVIDERS AND ALL OTHER SUBSCRIBERS OR SUPPLIERS, SUBSIDIARIES, AFFILIATES, EMPLOYEES, AND SUBCONTRACTORS FOR ANY AND ALL CLAIMS, LIABILITIES, CAUSES OF ACTION, LOSSES, COSTS, DAMAGES AND EXPENSES OF ANY NATURE WHATSOEVER, INCLUDING ATTORNEY'S FEES, HOWEVER ALLEGED OR ARISING, INCLUDING BUT NOT LIMITED TO THOSE ARISING FROM BREACH OF CONTRACT, NEGLIGENCE, THE COMPANY'S OWN FAULT AND/OR NEGLIGENCE, ERRORS, OMISSIONS, STRICT LIABILITY, BREACH OF WARRANTY, EQUITY, THE COMMON LAW, STATUTE OR ANY OTHER THEORY OF RECOVERY, OR FROM ANY PERSON'S USE, MISUSE, OR INABILITY TO USE THE REPORT OR ANY OF THE MATERIALS CONTAINED THEREIN OR PRODUCED, **SO THAT THE TOTAL AGGREGATE LIABILITY OF THE COMPANY AND ITS AGENTS, SUBSIDIARIES, AFFILIATES, EMPLOYEES, AND SUBCONTRACTORS SHALL NOT IN ANY EVENT EXCEED THE COMPANY'S TOTAL FEE FOR THE REPORT.**

CUSTOMER AGREES THAT THE FOREGOING LIMITATION ON LIABILITY IS A TERM MATERIAL TO THE PRICE THE CUSTOMER IS PAYING, WHICH PRICE IS LOWER THAN WOULD OTHERWISE BE OFFERED TO THE CUSTOMER WITHOUT SAID TERM. CUSTOMER RECOGNIZES THAT THE COMPANY WOULD NOT ISSUE THE REPORT BUT FOR THIS CUSTOMER AGREEMENT, AS PART OF THE CONSIDERATION GIVEN FOR THE REPORT, TO THE FOREGOING LIMITATION OF LIABILITY AND THAT ANY SUCH LIABILITY IS CONDITIONED AND PREDICATED UPON THE FULL AND TIMELY PAYMENT OF THE COMPANY'S INVOICE FOR THE REPORT.

THE REPORT IS LIMITED IN SCOPE AND IS NOT AN ABSTRACT OF TITLE, TITLE OPINION, PRELIMINARY TITLE REPORT, TITLE REPORT, COMMITMENT TO ISSUE TITLE INSURANCE, OR A TITLE POLICY, AND SHOULD NOT BE RELIED UPON AS SUCH. THE REPORT DOES NOT PROVIDE OR OFFER ANY TITLE INSURANCE, LIABILITY COVERAGE OR ERRORS AND OMISSIONS COVERAGE. THE REPORT IS NOT TO BE RELIED UPON AS A REPRESENTATION OF THE STATUS OF TITLE TO THE PROPERTY. THE COMPANY MAKES NO REPRESENTATIONS AS TO THE REPORT'S ACCURACY, DISCLAIMS ANY WARRANTY AS TO THE REPORT, ASSUMES NO DUTIES TO CUSTOMER, DOES NOT INTEND FOR CUSTOMER TO RELY ON THE REPORT, AND ASSUMES NO LIABILITY FOR ANY LOSS OCCURRING BY REASON OF RELIANCE ON THE REPORT OR OTHERWISE.



IF CUSTOMER (A) HAS OR WILL HAVE AN INSURABLE INTEREST IN THE SUBJECT REAL PROPERTY, (B) DOES NOT WISH TO LIMIT LIABILITY AS STATED HEREIN AND (C) DESIRES THAT ADDITIONAL LIABILITY BE ASSUMED BY THE COMPANY, THEN CUSTOMER MAY REQUEST AND PURCHASE A POLICY OF TITLE INSURANCE, A BINDER, OR A COMMITMENT TO ISSUE A POLICY OF TITLE INSURANCE. NO ASSURANCE IS GIVEN AS TO THE INSURABILITY OF THE TITLE OR STATUS OF TITLE. CUSTOMER EXPRESSLY AGREES AND ACKNOWLEDGES IT HAS AN INDEPENDENT DUTY TO ENSURE AND/OR RESEARCH THE ACCURACY OF ANY INFORMATION OBTAINED FROM THE COMPANY OR ANY PRODUCT OR SERVICE PURCHASED.

NO THIRD PARTY IS PERMITTED TO USE OR RELY UPON THE INFORMATION SET FORTH IN THE REPORT, AND NO LIABILITY TO ANY THIRD PARTY IS UNDERTAKEN BY THE COMPANY.

CUSTOMER AGREES THAT, TO THE FULLEST EXTENT PERMITTED BY LAW, IN NO EVENT WILL THE COMPANY, ITS LICENSORS, AGENTS, SUPPLIERS, RESELLERS, SERVICE PROVIDERS, CONTENT PROVIDERS, AND ALL OTHER SUBSCRIBERS OR SUPPLIERS, SUBSIDIARIES, AFFILIATES, EMPLOYEES AND SUBCONTRACTORS BE LIABLE FOR CONSEQUENTIAL, INCIDENTAL, INDIRECT, PUNITIVE, EXEMPLARY, OR SPECIAL DAMAGES, OR LOSS OF PROFITS, REVENUE, INCOME, SAVINGS, DATA, BUSINESS, OPPORTUNITY, OR GOODWILL, PAIN AND SUFFERING, EMOTIONAL DISTRESS, NON-OPERATION OR INCREASED EXPENSE OF OPERATION, BUSINESS INTERRUPTION OR DELAY, COST OF CAPITAL, OR COST OF REPLACEMENT PRODUCTS OR SERVICES, REGARDLESS OF WHETHER SUCH LIABILITY IS BASED ON BREACH OF CONTRACT, TORT, NEGLIGENCE, THE COMPANY'S OWN FAULT AND/OR NEGLIGENCE, STRICT LIABILITY, BREACH OF WARRANTIES, FAILURE OF ESSENTIAL PURPOSE, OR OTHERWISE AND WHETHER CAUSED BY NEGLIGENCE, ERRORS, OMISSIONS, STRICT LIABILITY, BREACH OF CONTRACT, BREACH OF WARRANTY, THE COMPANY'S OWN FAULT AND/OR NEGLIGENCE OR ANY OTHER CAUSE WHATSOEVER, AND EVEN IF THE COMPANY HAS BEEN ADVISED OF THE LIKELIHOOD OF SUCH DAMAGES OR KNEW OR SHOULD HAVE KNOWN OF THE POSSIBILITY FOR SUCH DAMAGES.

END OF THE LIMITATIONS OF LIABILITY

RECORDING REQUESTED BY:

GRANTOR:  
Oleta M. Anderson and James L. Byer not as  
tenants in common but with rights of survivorship  
2034 Columbia Blvd #103  
St. Helens, OR 97051

GRANTEE:  
Adrian Petras and Ana Campean as tenants by  
the entirety  
19674 Wildwood Dr.  
West Linn, OR 97068

SEND TAX STATEMENTS TO:  
Adrian Petras and Ana Campean  
**19674 Wildwood Dr  
West Linn, OR 97068**

AFTER RECORDING RETURN TO:  
Adrian Petras and Ana Campean  
19674 Wildwood Dr  
West Linn, OR 97068

Escrow No: 3626074510NT1-TTPOR45

Vacant Land  
Wilsonville, OR 97070

SPACE ABOVE THIS LINE FOR RECORDER'S USE

**STATUTORY WARRANTY DEED**

Oleta M. Anderson and James L. Byer not as tenants in common but with rights of survivorship, Grantor,  
conveys and warrants to

Adrian Petras and Ana Campean as tenants by the entirety, Grantee, the following described real  
property, free and clear of encumbrances except as specifically set forth below, situated in the County of  
Clackamas, State of Oregon:

A tract of land situated in the Southeast one-quarter of Section 12, Township 3 South, Range 1  
West of the Willamette Meridian, Clackamas County, Oregon, being more particularly described  
as follows:

Commencing at a 3-1/4-inch diameter brass monument marking the Southeast corner of said  
Section 12; thence North 00° 04' 48" East along the East line of said Section 12 a distance of  
1749.00 feet; thence leaving said East line, South 89° 48' 48" West a distance of 30.00 feet to the  
true point of beginning, said point being on the Northerly right of way line of Frogpond Land  
(County Road No. 2362); thence South 89° 48' 48" West along said Northerly right of way line a  
distance of 365.00 feet to a set 5/8-inch iron rod with yellow plastic cap stamped "Andy Paris and  
Assoc. Inc."; thence leaving said right of way line, North 00° 04' 48" East parallel with the East line  
of said Section 12 a distance of 241.00 feet to a set 5/8-inch iron rod with yellow plastic cap  
stamped "Andy Paris and Assoc., Inc."; thence North 89° 48' 48" East a distance of 365.00 feet to  
a set 5/8-inch iron rod with yellow plastic cap stamped "Andy Paris and Assoc., Inc." on the  
Westerly right of way line of Stafford Road (Market Road No. 12); thence South 00° 04' 48" West  
along said Westerly right of way line a distance of 241.00 feet to the true point of beginning.

THE TRUE AND ACTUAL CONSIDERATION FOR THIS CONVEYANCE IS \$320,000.00. (See  
ORS 93.030)

3626074510NT1-TTPOR45  
Deed (Warranty-Statutory)

Recorded by TICOR TITLE 3626074510NT1

**Subject to and excepting:**

Covenants, Conditions, Restrictions, Reservations, set back lines, Power of Special Districts, and easements of Record, if any.

BEFORE SIGNING OR ACCEPTING THIS INSTRUMENT, THE PERSON TRANSFERRING FEE TITLE SHOULD INQUIRE ABOUT THE PERSON'S RIGHTS, IF ANY, UNDER ORS 195.300, 195.301 AND 195.305 TO 195.336 AND SECTIONS 5 TO 11, CHAPTER 424, OREGON LAWS 2007, SECTIONS 2 TO 9 AND 17, CHAPTER 855, OREGON LAWS 2009, AND SECTIONS 2 TO 7, CHAPTER 8, OREGON LAWS 2010. THIS INSTRUMENT DOES NOT ALLOW USE OF THE PROPERTY DESCRIBED IN THIS INSTRUMENT IN VIOLATION OF APPLICABLE LAND USE LAWS AND REGULATIONS. BEFORE SIGNING OR ACCEPTING THIS INSTRUMENT, THE PERSON ACQUIRING FEE TITLE TO THE PROPERTY SHOULD CHECK WITH THE APPROPRIATE CITY OR COUNTY PLANNING DEPARTMENT TO VERIFY THAT THE UNIT OF LAND BEING TRANSFERRED IS A LAWFULLY ESTABLISHED LOT OR PARCEL, AS DEFINED IN ORS 92.010 OR 215.010, TO VERIFY THE APPROVED USES OF THE LOT OR PARCEL, TO DETERMINE ANY LIMITS ON LAWSUITS AGAINST FARMING OR FOREST PRACTICES, AS DEFINED IN ORS 30.930, AND TO INQUIRE ABOUT THE RIGHTS OF NEIGHBORING PROPERTY OWNERS, IF ANY, UNDER ORS 195.300, 195.301 AND 195.305 TO 195.336 AND SECTIONS 5 TO 11, CHAPTER 424, OREGON LAWS 2007, SECTIONS 2 TO 9 AND 17, CHAPTER 855, OREGON LAWS 2009, AND SECTIONS 2 TO 7, CHAPTER 8, OREGON LAWS 2010.

DATED: 3/25/15

*Oleta M. Anderson By  
James L. Byer Her Attorney  
in Fact*  
\_\_\_\_\_  
Oleta M. Anderson, by James L. Byer, her Attorney  
in Fact  
*James L. Byer*  
\_\_\_\_\_  
James L. Byer

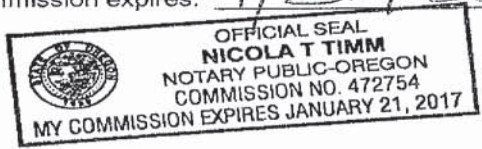
State of OREGON  
COUNTY of Clackamas

This instrument was acknowledged before me on 3/25, 2015

by James L. Byer and Olet M. Anderson, by her Power of Attorney James L. Byer

*(Signature)*  
\_\_\_\_\_  
Notary Public - State of Oregon

My commission expires: 1/21/2017



After Recording Return to:  
Venture Properties  
4320 Galewood Suite 100  
Lake Oswego, OR 97035

Clackamas County Official Records	<b>2022-043361</b>
Sherry Hall, County Clerk	08/02/2022 03:26:02 PM
D-ER                      Cnt=1 Stn=73 LESLIE	
\$15.00 \$16.00 \$10.00 \$20.00 \$62.00	<b>\$123.00</b>

**TERMINATION OF DECLARATION**

This termination agreement (the "Termination of Declaration") is made and entered into as of ~~May~~ 8<sup>th</sup>, 2022, (the "Effective Date"), by and between Paul C. and Janene P. Chaney Revocable Living Trust ("Declarant") and Adrian Petras and Ana Campean ("Owner"). Declarant and Owner are sometimes referred to herein individually as the "Party" or collectively as the "Parties."

**RECITALS**

- A. On October 19, 2010, Declarant recorded a Declaration of Water Well Agreement & Easement as document 2010-065847 in the Clackamas County Official Records. (the "Agreement");
- B. Pursuant to the Agreement, Declarant created an Agreement to provide water to the existing structure and accessory structures located at 27227 SW Stafford Road, Wilsonville, Oregon 97070 from a well located on Tax Lot 200 Assessor's Map No. 3S 1W 12D (the ("Well Property") which was at the time was also owned by Declarant;
- C. The Well Property is now owned by Adrian Petras and Ana Campean ("Owners") who as such are subject to the terms of the Agreement;
- D. The Parties have mutually agreed to terminate the Agreement, subject to the terms of Section 4 4.1 of the Agreement.

NOW, THEREFORE, in consideration of the foregoing promises and the mutual covenants contained herein, the Parties, intending to be legally bound, agree as follows:

**TERMINATION OF THE AGREEMENT**

- 1. The Parties mutually agree to terminate the Agreement as of the Effective Date and, as a result of such termination, the Parties hereby acknowledge and agree that, except as expressly provided for, under this Termination Agreement, their respective rights and obligations under the Agreement are hereby terminated as of the Effective Date and that both Parties shall have no further liability to each other under the Agreement or with respect to the Agreement, except as expressly set forth in this Termination Agreement.

FIRST AMERICAN 261394A-40

IN WITNESS WHEREOF, the Parties have executed this Agreement as of the Effective Date.

**DECLARANT**

Paul C. Chaney and Janene Chaney Revocable Trust

Signature: *Paul C. Chaney*  
Paul C. Chaney, Co-Trustee

Signature: *Janene P. Chaney*  
Janene P. Chaney, Co-Trustee

Date: Aug 2 2022

Date: 8-2-22

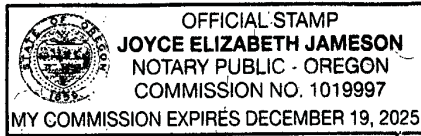
STATE OF OREGON )

) ss.

County of Clackamas )

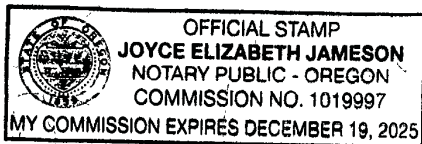
8.2, 2022

Personally appeared before me the above-named Paul C. Chaney, who, being duly sworn, did say that he is Paul C. Chaney Co-Trustee of the Paul C. and Janene P. Chaney Revocable Living Trust, and acknowledged the foregoing instrument to be its voluntary act and deed.



*[Signature]*  
Notary Public for Oregon  
My commission expires: 12.19.25

Personally appeared before me the above-named Janene P. Chaney, who, being duly sworn, did say that she is Janene P. Chaney Co-Trustee of the Paul C. and Janene P. Chaney Revocable Living Trust, and acknowledged the foregoing instrument to be its voluntary act and deed.



*[Signature]*  
Notary Public for Oregon  
My commission expires: 12.19.25

Date:

Date:

STATE OF OREGON )

) ss.

County of Clackamas )

\_\_\_\_\_ 2022

Personally appeared before me the above-named Paul C. Chaney, who, being duly sworn, did say that he is Paul C. Chaney Co-Trustee of the Paul C. and Janene P. Chaney Revocable Living Trust, and acknowledged the foregoing instrument to be its voluntary act and deed.

\_\_\_\_\_  
Notary Public for Oregon

My commission expires: \_\_\_\_\_

Personally appeared before me the above-named Janene P. Chaney, who, being duly sworn, did say that she is Janene P. Chaney Co-Trustee of the Paul C. and Janene P. Chaney Revocable Living Trust, and acknowledged the foregoing instrument to be its voluntary act and deed.

\_\_\_\_\_  
Notary Public for Oregon

My commission expires: \_\_\_\_\_

OWNER

Signature:

*[Signature]*  
Adrian Petras

Signature:

*[Signature]*  
Ana Campean Petras

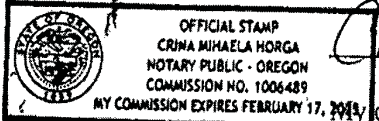
Date:

*5/17/22*  
State of Oregon  
County of Clackamas }

Date:

*5/17/2022*  
*[Signature]*

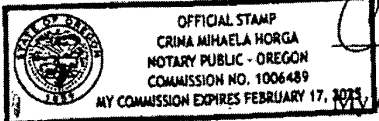
Personally appeared before me the above-named Adrian Petras, who, being duly sworn, did say that he is Adrian Petras and acknowledged the foregoing instrument to be his voluntary act and deed.



*Crina M. Horga*  
Notary Public for Oregon

commission expires: *2/17/2025*

State of Oregon  
County of Clackamas }  
Personally appeared before me the above-named Ana Campean, who, being duly sworn, did say that she is Ana Campean and acknowledged the foregoing instrument to be her voluntary act and deed.



*Crina M. Horga*  
Notary Public for Oregon

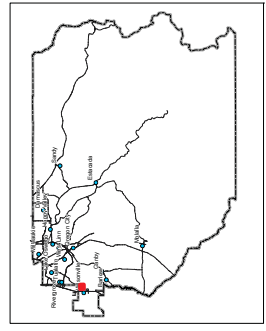
commission expires: *2/17/2025*

## **Exhibit D: Clackamas County Assessor's Map**

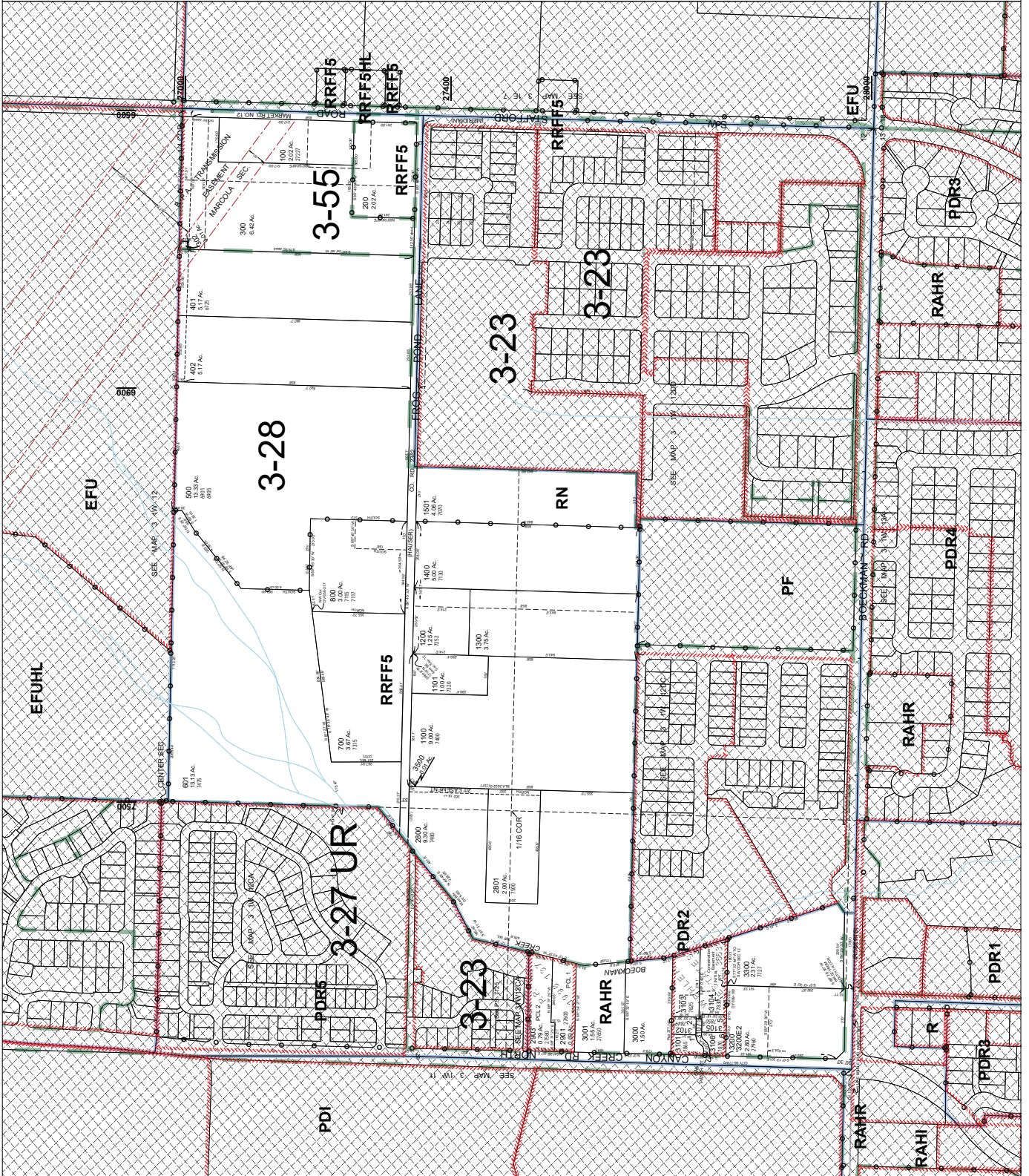
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Cancelled	Cancelled
900	2902
2301	604
1901	2900
1600	3200E3
400	1902
1900	1903
3400	2000
605	2001
602	2100
603	2201
2000SL	2202
2000EL	2200
3100	2300
1000	2400
600	2600
2500	2700
3300EL	2300
1800	201
301	1700
	1500



THIS MAP IS FOR ASSESSMENT  
PURPOSES ONLY





## **Exhibit E: Traffic Impact Study**

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# TECHNICAL MEMORANDUM

DATE: December 15, 2022

TO: Amy Pepper, PE | City of Wilsonville

FROM: Jenna Bogert, PE | DKS Associates  
Travis Larson, PE |DKS Associates



SUBJECT: Frog Pond West Petras Subdivision – Trip Generation Evaluation P21123-013

## INTRODUCTION

This memorandum evaluates the trip generation associated with the proposed Frog Pond West Petras housing development to be located off of Frog Pond Lane in Wilsonville, Oregon at Tax Lot 31W12D 00200. The developer desires to construct 22 single-family attached homes (11 paired townhouses) as part of the Frog Pond West Master Plan.<sup>1</sup> The property is in unincorporated Clackamas County but within the City’s Urban Growth Boundary (UGB) and will be annexed to the City of Wilsonville as part of the project.

The purpose of this memorandum is to provide the estimated vehicle trip generation for the proposed development and to evaluate the proposed site plan for potential safety issues and consistency with City planning documents.

The study area is shown in Figure 1, with the development located at the northwest corner of the Frog Pond Lane/Stafford Road intersection.



FIGURE 1: STUDY AREA

<sup>1</sup> Frog Pond West Master Plan, City of Wilsonville, Adopted July 2017.

## TRIP GENERATION

The Institute of Transportation Engineers (ITE) trip generation rates for Single-Family Attached Housing (215) were used to estimate the site's trip generation, which is based on the number of dwelling units in the development.<sup>2</sup> The lot is currently vacant with no pre-existing homes. As shown in Table 1, the proposed development is expected to generate a net total 9 PM peak hour trips (5 in, 4 out).

**TABLE 1: VEHICLE TRIP GENERATION**

LAND USE	ITE DESCRIPTION (CODE)	UNITS	PM PEAK TRIP RATE <sup>A</sup>	PM PEAK TRIPS			WEEKDAY
				IN	OUT	TOTAL	
NEW HOMES	SINGLE-FAMILY ATTACHED HOUSING (215)	22 Lots	0.41 trips/lot	5	4	9	117

<sup>A</sup> PM peak trip rate is back-calculated from the fitted curve equation

## PROJECT TRIP DISTRIBUTION

The project trips were distributed based on data from the Wilsonville Travel Demand Model and previous Frog Pond traffic analyses.<sup>3</sup> It is estimated that 50% of trips utilize Stafford Road to/from the north, 35% of trips utilize Boeckman Road to/from the west, 10% of trips utilize Wilsonville Road to/from the south, and 5% of trips utilize Advance Road to/from the east.

## PROJECT TRIPS THROUGH CITY OF WILSONVILLE INTERCHANGE AREAS

The project trips through the two City of Wilsonville I-5 interchange areas were estimated based on the trip generation and distribution assumptions. Approximately 10% (1 PM trip) of the project trips are expected to travel through the I-5/Wilsonville Road interchange area and 10% (1 PM trip) are expected to travel through the I-5/Elligsen Road interchange area.

## OPERATIONAL IMPACTS

It has been known and previously documented that the Stafford Road/Frog Pond Lane intersection is expected to fail to meet the City of Wilsonville's Level of Service (LOS) D operating standard as the Frog Pond West neighborhood develops. A traffic signal was the originally recommended intersection improvement here, but the Frog Pond East & South Master Plan was recently approved by City Council and alternate traffic control mitigations (minor-street turn restrictions) were identified as the preferred improvement for the intersection. The City has included the intersection improvements on the Capital Improvement Projects (CIP) list, for which the project is slated for funding in 2024/25-2025/26.

<sup>2</sup> Trip Generation Manual, 11th Edition, Institute of Transportation Engineers, 2021.

<sup>3</sup> Wilsonville Frog Pond West Oaks Subdivision, Transportation Impact Analysis, DKS Associates, November 2021.

## SITE REVIEW

This section reviews the provided site plan to determine consistency with the Frog Pond West Master Plan and alignment with the Wilsonville Development Code and Construction Standards.

### FROG POND WEST MASTER PLAN CONSISTENCY

The proposed street layout matches the framework plan as laid out in the Frog Pond West Master Plan.<sup>4</sup> The residential zoning and land use in the site plan also appear to be consistent with the Master Plan.<sup>5</sup> The development is located between Frog Pond Lane and Windflower Street, with vehicular access only on Windflower Street. The development will utilize streets and connections constructed by previous Frog Pond developments.

### STREETS

The Frog Pond West Master Plan provides the street type plan and required cross sections for all streets in the Frog Pond West neighborhood.<sup>6</sup> Homes will front Frog Pond Lane and Windflower Street, while Stafford Road runs adjacent to the property to the east. The developer will be responsible for building frontage improvements on Frog Pond Lane and Windflower Street along the subject property frontages per the Frog Pond West Master Plan cross section standards.

Frog Pond Lane will be a Gateway Collector with buffered bike lanes, sidewalks on both sides, and a landscaped median. Currently, Frog Pond Lane is a two-lane unimproved roadway with portions under construction as development occurs in the area. Windflower Street will be a local street, which includes on-street parking, sidewalks, planter strips, and a public utility easement. No dedicated bicycle facilities are required.

Additionally, the Frog Pond Area Plan identifies desired arterial urban improvements to Stafford Road. A combination of the Transportation System Development Charge and the Frog Pond Infrastructure Fee will be collected from the developer on cost per lot basis by the City to help fund the cost of the Stafford Road urban improvements, which will be built by the City.

Pedestrian and bicycle facilities and connectivity are sufficient when considering the greater Frog Pond West neighborhood and access to regional trails.

### PARKING

The proposed project is required to comply with the City Development Code for the number of vehicular parking spots and bicycle parking spaces that are provided on site.<sup>7</sup> For residential developments, one parking spot per dwelling unit is required. There is no minimum for bicycle

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<sup>4</sup> Figure 19, Frog Pond West Master Plan, City of Wilsonville, July 17, 2017.

<sup>5</sup> Figure 6 & Table 1, Frog Pond West Master Plan, City of Wilsonville, July 17, 2017.

<sup>6</sup> Figures 19-28, Frog Pond West Master Plan, City of Wilsonville, July 17, 2017.

<sup>7</sup> Table 5, Section 4.155, Wilsonville Development Code, updated March 2022.

parking. It is assumed that all home lots will have driveways that satisfy this vehicular parking requirement.

### **SITE CIRCULATION**

The proposed project provides adequate site circulation when considering the entirety of the Frog Pond West Master Plan. The proposed site will have access to Stafford Road via Frog Pond Lane and access to Boeckman Road via Willow Creek Drive.

### **ACCESS SPACING**

The proposed project is required to comply with access spacing requirements as laid out in the City Transportation System Plan.<sup>8</sup> A new alley/driveway is proposed with the development that will connect to Windflower Street, a local street, but no other new vehicular access points are proposed. There are no access spacing requirements for local streets.

### **SIGHT DISTANCE**

Adequate sight distance should be provided at the proposed alley/driveway. Objects (e.g., buildings, fences, walls, or vegetation) located near the intersections may inhibit sight distance for drivers attempting to turn out of a minor street onto the major street. Prior to occupancy, sight distance at any proposed access point or local street connection will need to be verified, documented, and stamped by a registered professional Civil or Traffic Engineer licensed in the State of Oregon to assure that buildings, signs, or landscaping does not restrict sight distance.

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<sup>8</sup> Table 3-2, Wilsonville Transportation System Plan, Amended November 2020.

## SUMMARY OF PROJECT IMPACTS

The key findings of the trip generation memo for the Frog Pond West Petras development are summarized below.

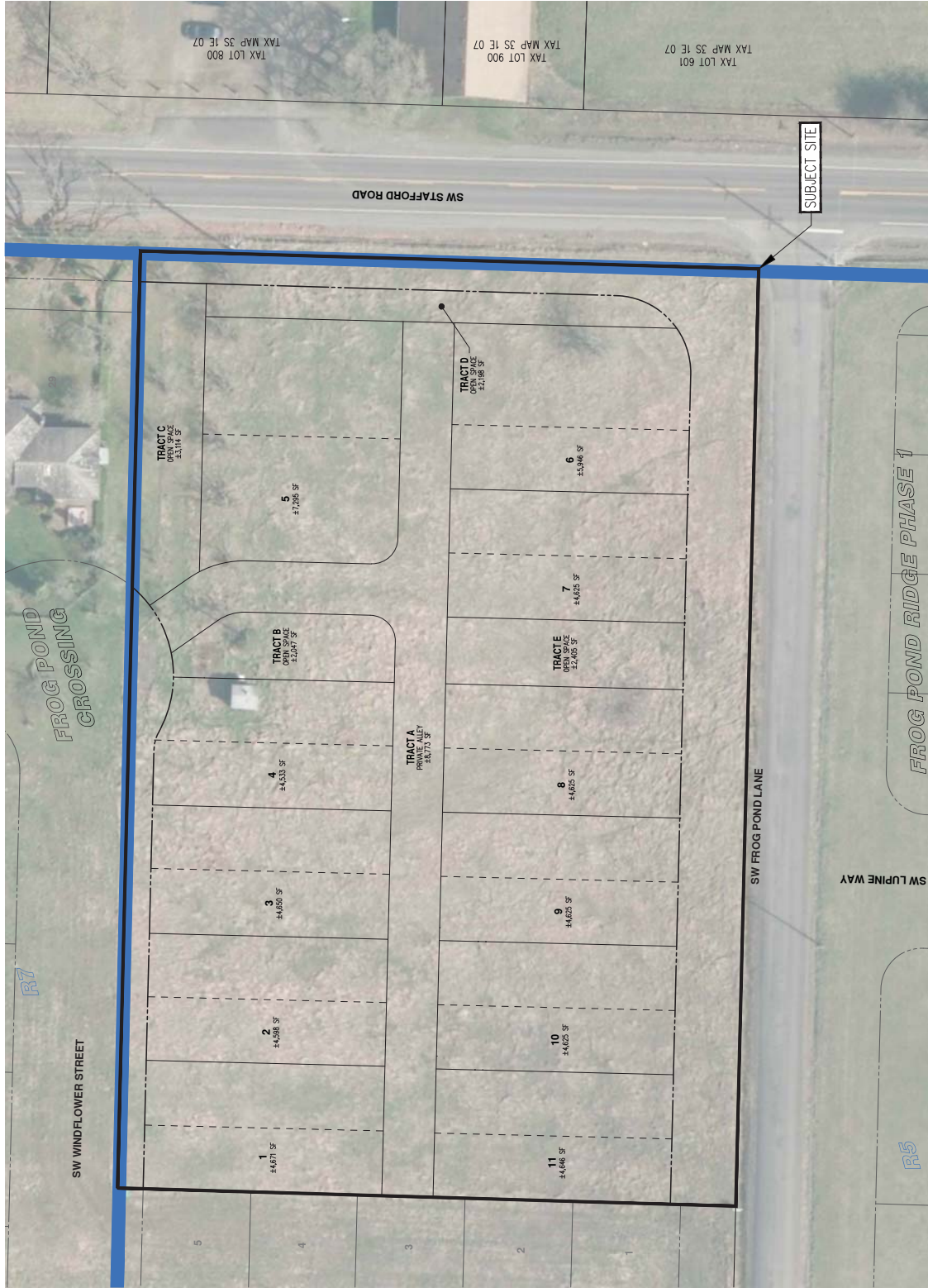
- The project will consist of 22 single-family attached home dwelling units (11 paired townhouses) as part of the Frog Pond West Master Plan. The parcel is currently vacant.
- The proposed development is expected to generate a net total of 9 PM peak hour trips (5 in, 4 out).
- Approximately one (10% of total site generated trips) trip is expected to travel through the I-5/Wilsonville Road interchange area and one (10% of total site generated trips) trip is expected to travel through the I-5/Elligsen Road interchange area.
- The development's site plan is consistent with the Frog Pond West Master Plan and meets applicable City of Wilsonville standards.
- Prior to occupancy, sight distance at any proposed access point or local street connection will need to be verified, documented, and stamped by a registered professional Civil or Traffic Engineer licensed in the State of Oregon to assure that buildings, signs, or landscaping does not restrict sight distance.

### **Attachments:**

- A. Site Plan

**A. SITE PLAN**

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- ASSUMPTIONS AND DISCLAIMERS:**
- PROPERTY LINES AND RIGHT-OF-WAY LINES ARE BASED ON GIS INFORMATION AND ARE CONSIDERED APPROXIMATE.
  - NO BOUNDARY OR TOPOGRAPHIC SURVEY HAS BEEN PERFORMED AT THE TIME.
  - PROPERTY PURPOSES AND DOES NOT REPRESENT A PROPERTY BOUNDARY SURVEY.
  - CONTOUR DATA IS PER LIDAR AND SHOULD BE CORROBORATED APPROXIMATE.

**RESIDENTIAL NEIGHBORHOOD (RNU) (R-5 SMALL LOT) DEVELOPMENT STANDARDS:**

- LOT DIMENSIONS: FAMILY LOT SIZE - 4,000 SF
- MIN. SINGLE FAMILY ATTACHED (TOWNHOME) BUILDING - 1,500 SF
- MIN. LOT DEPTH - 60'
- MIN. LOT WIDTH - 35'
- MIN. SIDE SETBACK - 5'
- FRONT - 12' - FRONT PORCH WAY EXTEND 5' INTO SETBACK
- SETBACK - 5'
- GARAGE - 18' - SETBACK FROM ALLEY MIN. 18' TO GARAGE DOOR FACING ALLEY
- FRONTAGE - 10' - MIN. FRONTAGE 10' OR MORES MIN. CORNER SIDE YARD SETBACKS TOTAL 20' WITH MIN. OF 10' ON OTHER LOTS. MIN. SIDE SETBACK IS 5' ON CORNER LOTS.
- ON LOTS WITH ALLEYS, REAR SETBACK SHALL BE MEASURED FROM THE REAR LOT LINE ABUTTING THE LOT COVERAGE
- MIN. LOT COVERAGE BY BUILDINGS: 80%
- FRONTAGE
- MAX. DENSITY - 11
- MAX. DENSITY - 14

**OPEN SPACE CALCULATIONS:**

- GROSS SITE AREA = 487,800 SF
- TOTAL GROSS AREA = 487,800 SF
- TOTAL OPEN SPACE AREA = 38,784 SF
- ROW DEDICATION = 114,600 SF
- NET DEVELOPABLE AREA = GROSS SITE AREA - TOTAL ALLEY AREA - TOTAL OPEN SPACE AREA - ROW DEDICATION
- NET DEVELOPABLE AREA = 272,816 SF
- NET DEVELOPABLE AREA = 264,748 SF
- NET DEVELOPABLE AREA = 254,748 SF
- MIN. OPEN SPACE = NET DEVELOPABLE AREA \* 10%
- MIN. OPEN SPACE = 25,474 SF \* 0.10 = 2,547 SF
- OPEN SPACE PROVIDED = 49,704 SF



PRELIMINARY SITE PLAN WITH AERIAL PHOTOGRAPH  
**PETRAS HOMES, LLC.**  
 TAX LOT 200 TAX MAP 3S 1W 12D





**City of Wilsonville  
Engineering Division**  
29799 SW Town Center Loop E  
Wilsonville, OR 97070  
pwpermits@ci.wilsonville.or.us

# Permit

Permit NO.: TS22-0012

Permit Type: **Traffic Impact Study**

Work Classification: **Traffic Impact Study**

Permit Status: **Issued**

Issue Date: **12/29/2022**

**Expiration: 12/29/2023**

**Location Address**

**Parcel Number**

**Project**

**31W12D 00200**

**Frog Pond Petras Subdivision**

**Contacts**

**Cody Street Applicant**  
12965 Southwest Herman Road UNIT 100 UNIT 100, Tualatin, OR 97062  
(503)563-6151 streetc@aks-eng.com

**MICHELLE SWARTOUT Applicant**  
12965 SW Herman Rd Ste 100, Tualatin, OR 97062  
swartoutm@aks-eng.com

**Gerald Gostynski Applicant**  
12965 SW Herman Road Suite 100 Suite 100, Tualatin, OR 97062  
(503)563-6151 gostynskij@aks-eng.com

**Curtis Eschman Applicant**  
12965 SW Herman Rd #100, Tualatin, OR 97062  
(503)563-6151 Eschmanc@aks-eng.com

**Description:** Traffic Impact Study

**Valuation:**           \$0.00          

**Total Sq Feet:**           0.00          

**Inspection Requests:**

ci.wilsonville.or.us/online-portal

Fees	Amount
Traffic Impact Study Fee	\$3,450.00
<b>Total:</b>	<b>\$3,450.00</b>

Payments	Amt Paid
<b>Total Fees</b>	<b>\$3,450.00</b>
Check # 1320	\$3,450.00
<b>Amount Due:</b>	<b>\$0.00</b>

The approval of this permit by the City of Wilsonville Engineering Division means that we have to the best of our ability reviewed the plans and other submitted information for reasonableness and compliance with minimum city published standards and specifications while also incorporating division policies. This approval does not supersede those standards and specifications, unless specifically varied by the City. Permit approval does not relieve the private engineer from responsibility for errors, omissions, or deficiencies made that was within their control.

<https://www.ci.wilsonville.or.us/conditions>

December 29, 2022

Issued By: Amy Pepper

Date

## **Exhibit F: Wetland Memo and Concurrence**

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# Petras Homes Subdivision Significant Resource Overlay Zone (SROZ) Map Verification

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**Date:** January 2023

**Prepared for:** Petras Homes LLC  
3673 SW Homesteader Road  
West Linn, Oregon 97068

**Prepared by:** AKS Engineering & Forestry, LLC  
Margret Harburg, Natural Resource Specialist  
Sonya Templeton, Wetland Scientist  
503.563.6151 | templetons@aks-eng.com

**Site Information:** Clackamas County Assessor's Map 3 1W 12D;  
Tax Lot 200 and portion of ROW  
Wilsonville, Oregon

**AKS Job Number:** 9338



12965 SW Herman Road, Suite 100  
Tualatin, OR 97062  
(503) 563-6151

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Wetland and Water Mapping .....	2
<b>Wetland Delineation</b> .....	<b>2</b>
Wetland A .....	2
Roadside Ditch 1 .....	3
<b>Adding Wetlands to SROZ</b> .....	<b>3</b>
<b>Report Preparer and Qualifications</b> .....	<b>4</b>
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## Figures

**Figure 1:** USGS Vicinity Map

**Figure 2:** Clackamas County Assessor’s Tax Map (3 1W 12D)

**Figure 3:** NRCS Soils Map

**Figure 4:** National Wetlands Inventory (NWI) Map

**Figure 5:** PHS Frog Pond and Advance Road Urban Growth Areas Map

**Figure 6:** Natural Resources Existing Conditions Map

## Appendices

**Appendix A:** Site Representative Photos

**Appendix B:** OFWAM Assessment for Water Quality and Hydrologic Control Functions

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## Introduction

AKS Engineering & Forestry, LLC (AKS) was contracted by Petras Homes LLC to prepare a Significant Resource Overlay Zone (SROZ) Map Verification for the Petras Homes Subdivision residential development project located on Tax Lot 200 of Clackamas County Assessor's Map 3 1W 12D, which is located on the northwest corner of the intersection of SW Frog Pond Lane and SW Stafford Road, Wilsonville, Oregon (Figures 1 and 2). The project site is located within the Frog Pond West Neighborhood of the Frog Pond Plan Area and was added to the City of Wilsonville Urban Growth Boundary in 2002.

The on-site boundary of one palustrine emergent (PEM) wetland (referred to as Wetland A) and one roadside ditch (referred to as Roadside Ditch 1) was delineated in the project area. Wetland A and the portion of the roadside ditch within Wetland A is likely to be determined jurisdictional to the Oregon Department of State Lands (DSL). A wetland delineation report has been submitted to DSL for concurrence. Wetland A and Roadside Ditch 1 are likely to be considered non-jurisdictional to the U.S. Army Corp of Engineers (USACE). A request for an Approved Jurisdictional Determination has been submitted to the USACE.

Wetland A is not mapped on the City of Wilsonville's (City) 2009 Significant Resource Overlay Zone (SROZ) Map and the wetland delineated on the project site does not meet any of the criteria listed under Section 4.139.10(.02) of the City of Wilsonville's (City) SROZ ordinance and is therefore not required to be added to the SROZ map as a significant wetland and does not require a vegetated corridor buffer.

The project will require complete fill to the on-site PEM wetland for the construction of a residential subdivision. The wetland will likely be considered jurisdictional to DSL, requiring a removal-fill permit for removal and/or fill from within the wetland exceeding 50 cubic yards.

This report documents Wetland A delineated on the project site does not meet requirements listed under Section 4.139.10(.02)A-D and therefore should not be added to the SROZ maps.

## Background Mapping and Site Information

The study area is undeveloped and consists of an open field dominant in field meadow-foxtail (*Alopecurus pratensis*; FAC) and colonial bentgrass (*Agrostis capallaris*; FAC) with scattered shrubs including Himalayan blackberry (*Rubus armeniacus*; FAC), English hawthorn (*Crataegus monogyna*; FAC) and non-native rose species (*Rosa spp.*; assumed FAC). A small shed is present in the north-central portion of the study area. Topography within the study area is generally flat (slopes less than 5 percent), with a subtle southerly slope and a slightly concave area in the vicinity of Wetland A mapped under this study. A roadside ditch (Roadside Ditch 1) is present along the southern boundary of the study area, parallel to SW Frog Pond Lane. The current land use consists of an open field. Rural residential land use is currently present surrounding the site, with the Frog Pond single-family residential community under construction to the south of Frog Pond Lane.

The following soil units are mapped within the project area, according to the Natural Resources Conservation Service (NRCS) Clackamas County Area Soil Survey Map (Figure 3 in Appendix A):

- Aloha silt loam (Unit 1A), 0 to 3 percent slopes; Non-hydric
- Woodburn silt loam (Unit 91B) 3 to 8 percent slopes; Non-hydric
- Huberly silt loam (Unit 2225A); 0 to 3 percent slopes; Hydric

---

## **Wetland and Water Mapping**

Wilsonville DSL Approved Local Wetland and Riparian Inventory Maps: The project site is not within the City of Wilsonville's 1998 Local Wetland or Riparian Corridor Inventory map boundaries.

National Wetland Inventory Map: According to the US Fish and Wildlife Service (USFWS) National Wetland Inventory (NWI) map, no wetlands are mapped in the project area (Figure 4).

City of Wilsonville Significant Resource Overlay Zone (SROZ) Map: There are no Significant Natural Resources mapped within the project site according to the City's 2009 SROZ Map.

Frog Pond and Advance Road Urban Growth Areas Map: According to Pacific Habitat Services (PHS) 2017 study for the Frog Pond and Advance Road Urban Growth Areas, one wetland (identified as Wetland 8) is mapped on the project site (Figure 5). Our study determined one smaller polygon of wetland is present on the site in the vicinity Wetland 8.

Metro's UGMFP Title 3 Water Quality Resource Map: According to Metro's mapping, no Title 3 resources are mapped on the site or immediately adjacent to the site.

## **Wetland Delineation**

The boundary of Wetland A and the centerline of the roadside ditch on the project site were delineated on March 8, 2022, by AKS Natural Resources Specialists Margret Harburg and Sonya Templeton. The boundary of Wetland A delineated on the project site is shown on Figure 6, Natural Resources Existing Conditions Map. Site Representative Photos are included in Appendix A. The wetland delineation report has been submitted to DSL for concurrence. A Non-Jurisdictional Determination is being submitted to USACE as well.

### **Wetland A**

Wetland A is a PEM wetland located in the south-central portion of the site. Wetland conditions do not extend off-site. The main hydrology sources for Wetland A are a seasonally high groundwater table and subsurface flow from the adjacent uplands. It is situated on a subtle slope where water moves freely through the wetland in one direction. Therefore, Wetland A belongs to the Slopes hydrogeomorphic (HGM) classification.

Wetland A is dominant in meadow-foxtail (FAC) and colonial bentgrass (FAC) with lesser amounts of lamp rush (*Juncus effusus*; FACW) as documented at Plots 2, 3, 5, and 7. Soils in the wetland are low chroma (chroma of 2 or less) displaying common distinct and prominent redoximorphic features, meeting hydric soil indicator F6 (Redox Dark Surface). Soils also display a depleted matrix within 10 or 12 inches of the soil surface, meeting hydric soil indicator F3 (Depleted Matrix) or A11 (Depleted Below Dark Surface). Saturation was observed within the upper 12 inches below ground surface at all wetland plots during the March 2022 site visit, meeting hydrology indicator A3 (Saturation). A ground water table was observed at all wetland plots below 12 inches of the soil surface.

The wetland boundary was delineated based on a slight change in landform, from a subtle concave depression in the wetland to a slightly higher elevation with convex landform in the upland. This change in topography coincides with a change in the vegetation community. There was a greater amount of creeping lamp rush (FACW) present in the wetland in comparison to the surrounding upland. The adjacent upland lacked hydric soils and indicators of wetland hydrology, as documented at paired upland Plots 1, 4, 6, 8, and 9.

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### Roadside Ditch 1

A roadside ditch was documented along the south boundary of the site along SW Frog Pond Lane and continues off-site to the west. A portion of the roadside ditch is located within the southern edge of Wetland A. Roadside Ditch 1 is approximately one foot wide with six-inch-tall banks with scattered gravels throughout. No flow was present in Roadside Ditch 1 during the March 2022 site visit. The ditch hydrology is ephemeral, fed by roadside and upland runoff. Roadside Ditch 1 is vegetated, dominant in common panic grass (*Panicum capillare*; FAC) and meadow-foxtail (FAC). The portion present within Wetland A was also subdominant in leafy-bract American-aster (*Symphotrichum subspicatum*; FACW). Roadside Ditch 1 lacks a defined ordinary high water mark (OHWM).

### Adding Wetlands to SROZ

Wetland A delineated on the project site is not mapped on the City's SROZ Map and does not meet any of the criteria listed under Section 4.139.10(.02)A-D of Wilsonville's SROZ ordinance:

#### Wilsonville Development Code

##### Section 4.139.10 Development Review Board (DRB) Process

(.02) Adding Wetlands. Except for water quality or storm water detention facilities, the City shall initiate amendments to the Significant Resource Overlay Zone maps to add wetlands when the City receives significant evidence that a wetland meets any one of the following criteria:

A. The wetland is fed by surface flows, sheet flows or precipitation, and has evidence of flooding during the growing season, and has 60 percent or greater vegetated cover, and is over one-half acre in size; or the wetland qualifies as having intact water quality function under the 1996 Oregon Freshwater Wetland Assessment Methodology; or

**Response:** Wetland A is primarily fed by subsurface lateral flow and is not fed by surface or sheet flows. The wetland does not flood during the growing season; it is only seasonally saturated. There was no evidence of prolonged inundation (no algal matting, unvegetated bare areas, or soil cracking) during our early spring site visit (March 2022). Wetland A in the project area is 0.16 acre in size. In addition to being less than one-half acre in size, Wetland A does not have an intact water quality control function according to the 1996 Oregon Freshwater Assessment Methodology (OFWAM) (Appendix B).

B. The wetland is in the Metro Title 3 Flood Management Area as corrected by the most current FEMA Flood Insurance Rate Maps, and has evidence of flooding during the growing season, and is five acres or more in size, and has a restricted outlet or no outlet; or the wetland qualifies as having intact hydrologic control function under the 1996 Oregon Freshwater Wetland Assessment Methodology; or

**Response:** Wetland A delineated on the site is not mapped within a current Federal Emergency Management Agency (FEMA) Flood Management Area according to Metro Title 3 mapping and most recent FEMA Flood Insurance Rate Map. The wetland does not flood during the growing season, is less than five acres in size and lacks an outlet to waters. According to OFWAM, Wetland A does not have an intact hydrologic control function (see OFWAM worksheets included in Appendix B).

C. The wetland or a portion of the wetland is within a horizontal distance of less than one - fourth mile from a water body which meets the Department of Environmental Quality definition of water quality limited water body in OAR Chapter 340, Division 41 (1996).

---

**Response:** Wetland A on the project site is located greater than ¼-mile from from an Oregon Department of Environmental Quality (DEQ) water-quality limited listed water body Willow Creek is the closest water-quality limited water body, which is located just over a quarter mile from the project site.

D. Created or restored wetlands that meet the requirements of Section 4.139.10(.02) shall be added to the Significant Resource Overlay Zone. [Added by Ord. # 674 11/16/09]

**Response:** Wetland A on the project site was not created or restored under requirements of Section 4.139.10 (.02) of City's SROZ ordinance.

Since Wetland A delineated on the site does not meet any of the above criteria, it is locally non-significant and does not require a Vegetated Corridor or Impact Area setbacks.

### Report Preparer and Qualifications



Margret Harburg  
Natural Resources Specialist  
Report Preparation and Fieldwork



Sonya Templeton  
Wetland Scientist  
Fieldwork and Report QA/QC

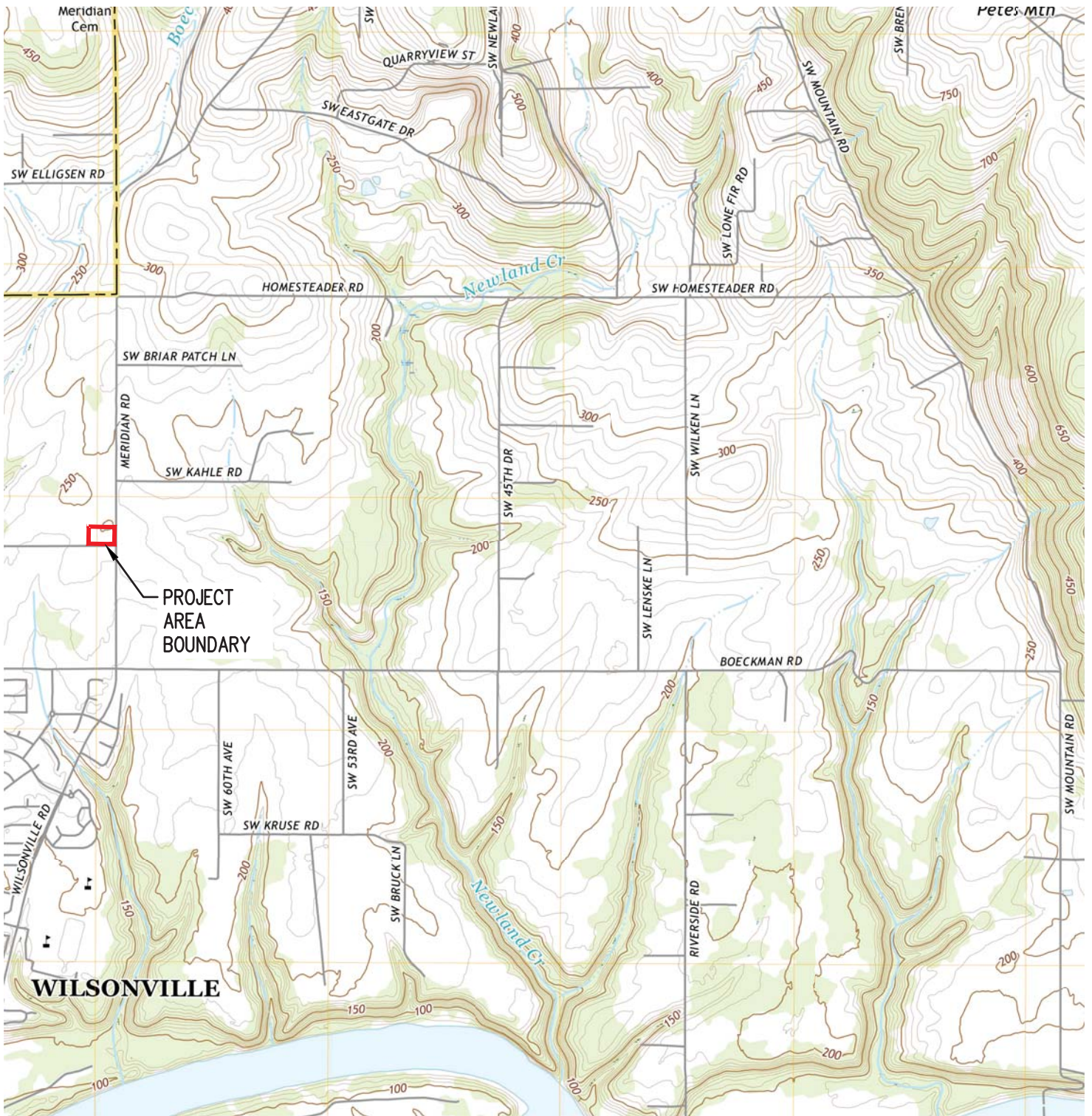
Sonya Templeton is a wetland scientist with 5 years of experience delineating wetlands and waters, conducting wetland and stream function and value assessments and preparing natural resource assessments throughout Oregon.



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USGS 7.5' TOPOGRAPHIC SERIES  
 QUADRANGLE: CANBY, OR (2020)

DATE: 01/30/2023

**USGS VICINITY MAP**  
**PETRAS HOME SUBDIVISION SROZ MAP VERIFICATION**

AKS ENGINEERING & FORESTRY, LLC  
 12965 SW HERMAN RD, STE 100  
 TUALATIN, OR 97062  
 503.563.6151 WWW.AKS-ENG.COM

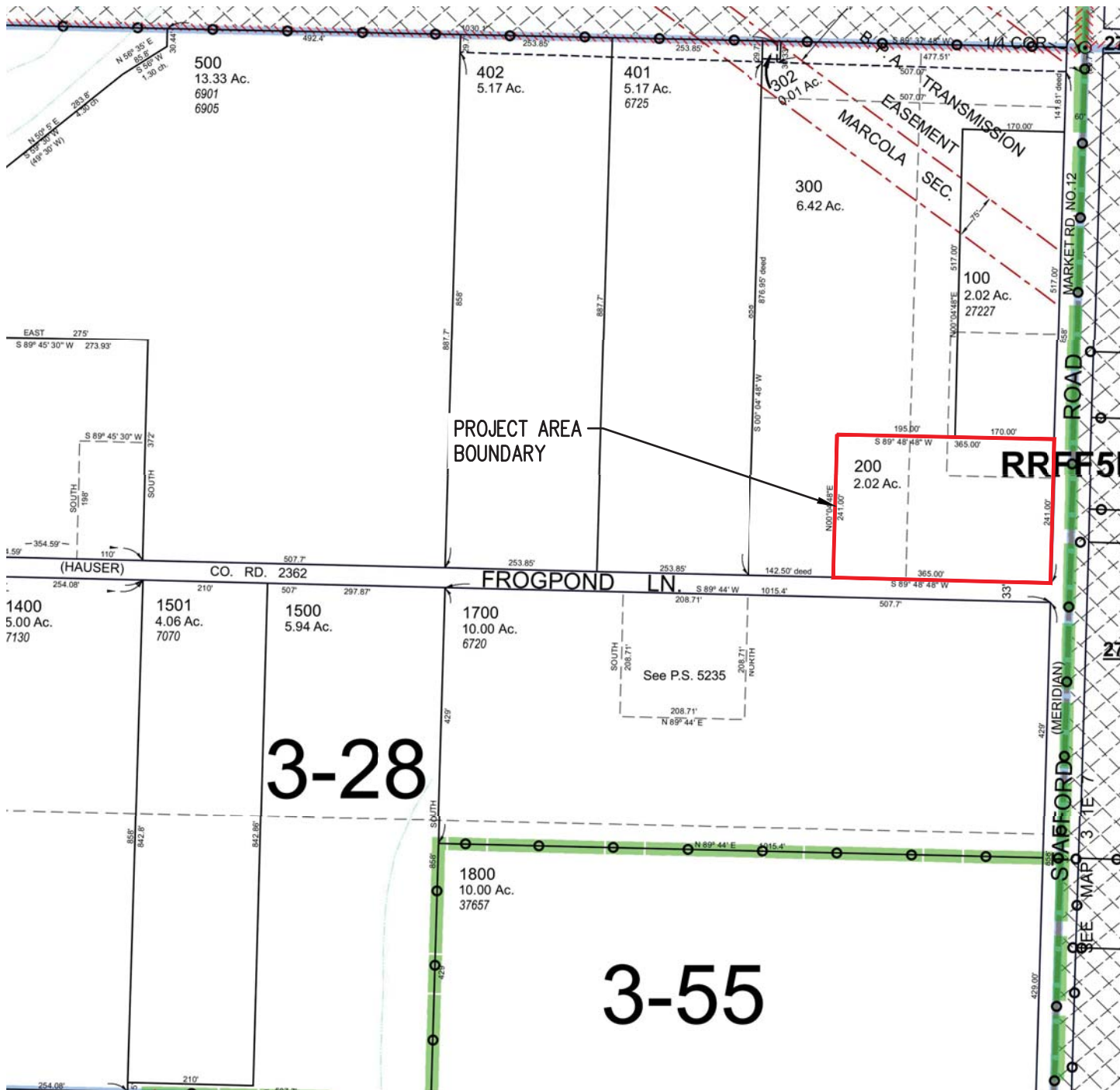


FIGURE  
**1**

DRWN: GPM  
 CHKD: RAS  
 AKS JOB:  
 9338

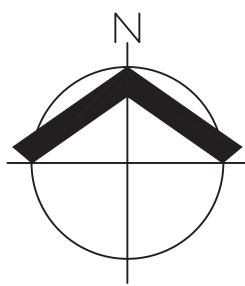
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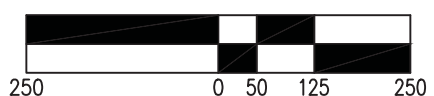


3-28

3-55



SCALE: 1" = 250 FEET



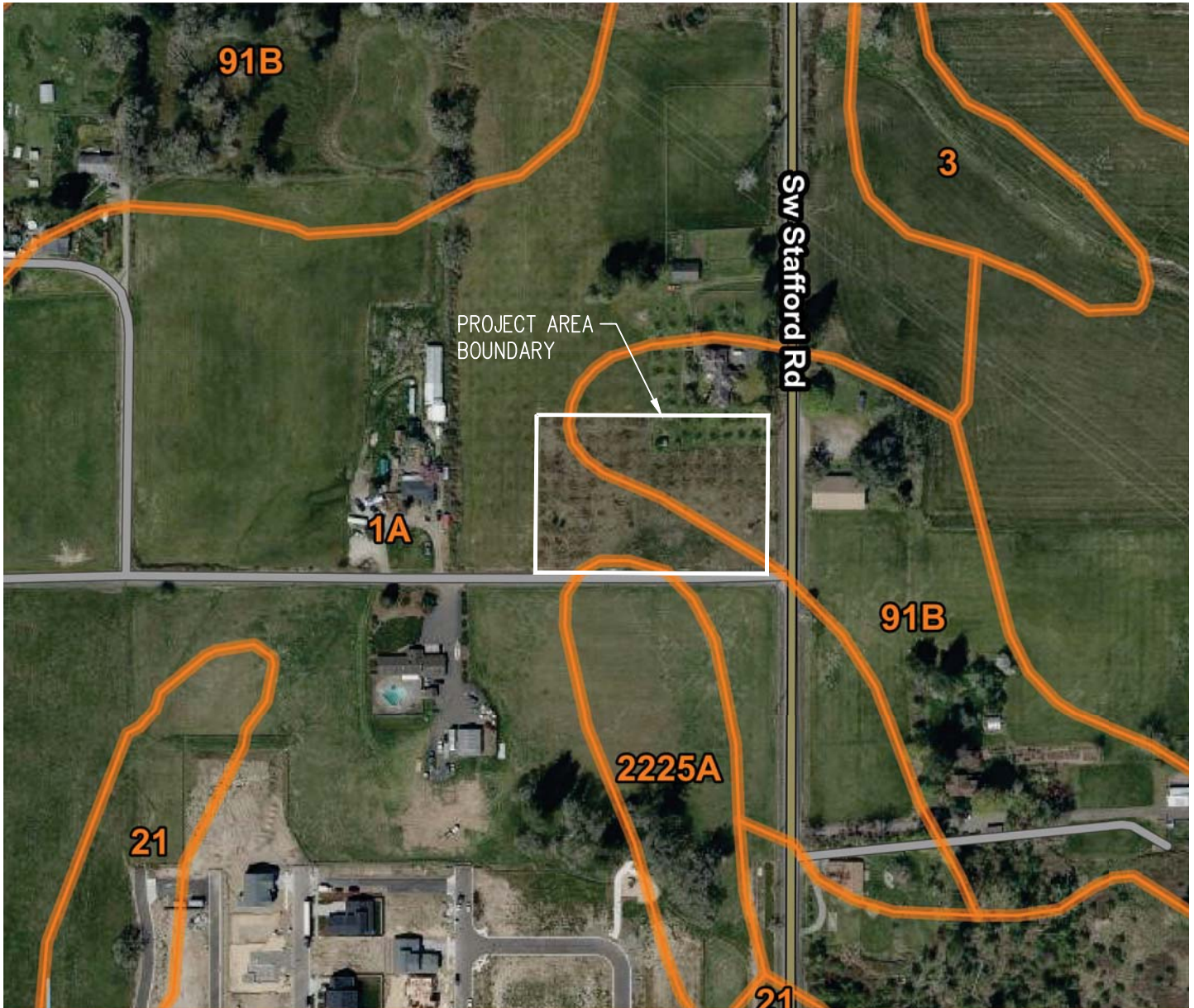
ORIGINAL PAGE SIZE: 8.5" x 11"

CLACKAMAS COUNTY  
TAX LOT 200 AND PORTION  
OF ROW  
TAX MAP 3S 1W 2D

DATE: 01/30/2023

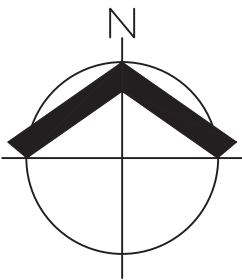
<b>TAX MAP (MAP 3S 1W 12D)</b> <b>PETRAS HOME SUBDIVISION SROZ MAP VERIFICATION</b>		<b>FIGURE</b> <b>2</b>
AKS ENGINEERING & FORESTRY, LLC 12965 SW HERMAN RD, STE 100 TUALATIN, OR 97062 503.563.6151    WWW.AKS-ENG.COM		DRWN: GPM CHKD: RAS AKS JOB: 9338





MAP UNIT SYMBOL	MAP UNIT NAME
1A	ALOHA SILT LOAM, 0% TO 3% SLOPES; NON-HYDRIC
91B	WOODBURN SILT LOAM, 3% TO 8% SLOPES; NON-HYDRIC
2225A	HUBERLY SILT LOAM, 0% TO 3% SLOPES; HYDRIC

NRCS WEB SOIL SURVEY FOR  
CLACKAMAS COUNTY



SCALE: 1" = 250 FEET








DATE: 01/30/2023

<b>NRCS SOIL SURVEY MAP</b> <b>PETRAS HOME SUBDIVISION SROZ MAP VERIFICATION</b>		<b>FIGURE</b> <b>3</b>
AKS ENGINEERING & FORESTRY, LLC 12965 SW HERMAN RD, STE 100 TUALATIN, OR 97062 503.563.6151    WWW.AKS-ENG.COM		DRWN: GPM CHKD: RAS AKS JOB: 9338

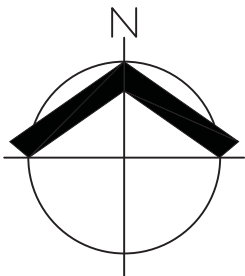




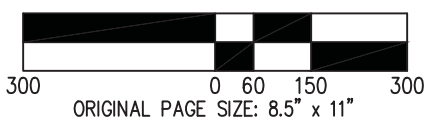
PROJECT AREA  
BOUNDARY

Wetlands		
	Estuarine and Marine Deepwater	 Freshwater Emergent Wetland
	Estuarine and Marine Wetland	 Freshwater Forested/Shrub Wetland
		 Freshwater Pond
		 Lake
		 Other
		 Riverine

US FISH & WILDLIFE SERVICE  
NATIONAL WETLANDS INVENTORY



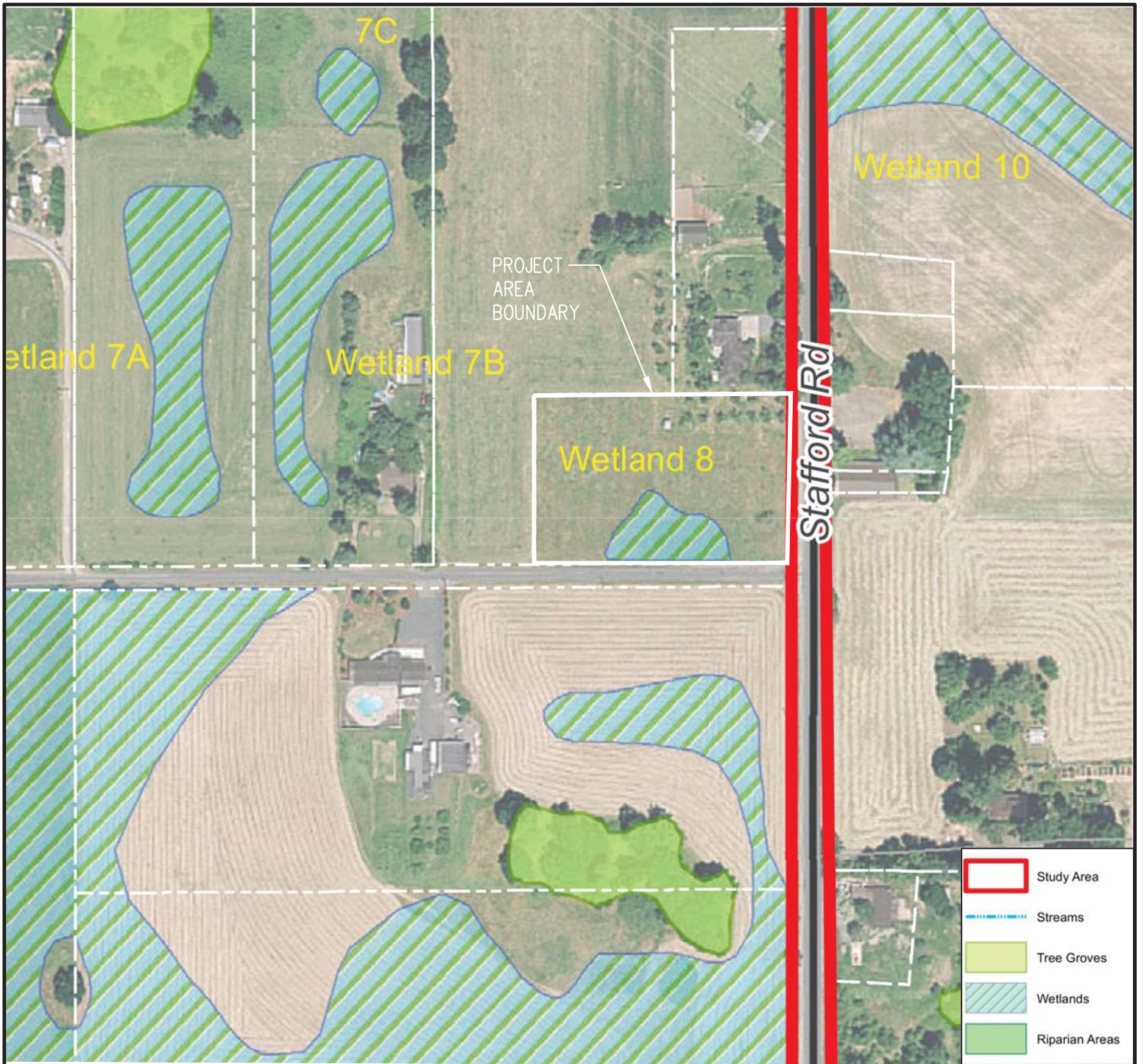
SCALE: 1" = 300 FEET



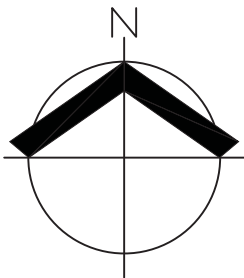
DATE: 01/30/2023

<b>NATIONAL WETLANDS INVENTORY MAP</b>		<b>FIGURE 4</b>
<b>PETRAS HOME SUBDIVISION SROZ MAP VERIFICATION</b>		
AKS ENGINEERING & FORESTRY, LLC 12965 SW HERMAN RD, STE 100 TUALATIN, OR 97062 503.563.6151    WWW.AKS-ENG.COM		DRWN: GPM CHKD: RAS AKS JOB: 9338





PACIFIC HABITAT SERVICES FROG POND AND ADVANCE ROAD URBAN GROWTH AREAS (2014)



SCALE: 1" = 200 FEET



DATE: 01/30/2023

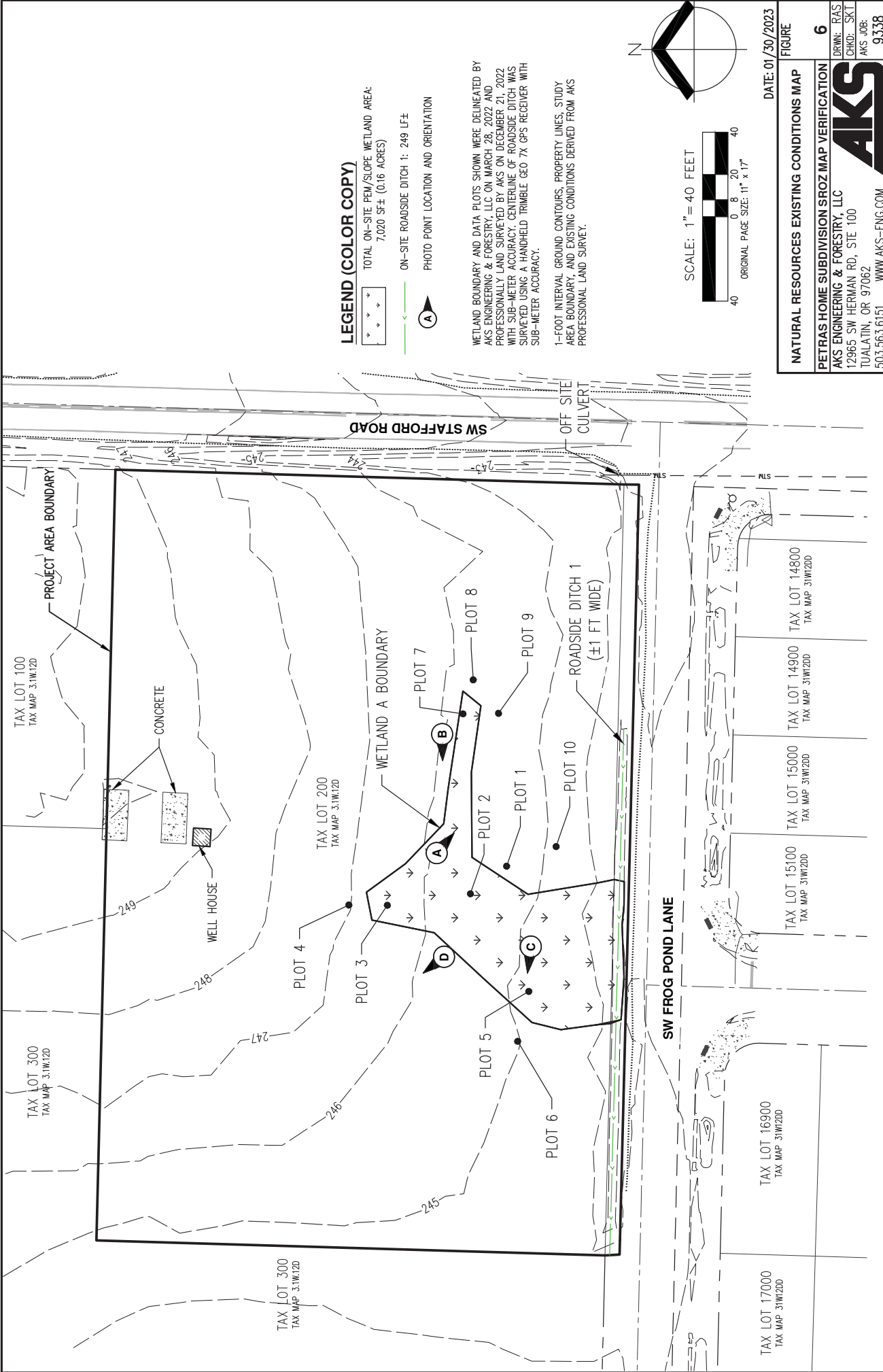
**NATIONAL WETLANDS INVENTORY MAP  
PETRAS HOME SUBDIVISION SROZ MAP VERIFICATION**

FIGURE  
**5**

AKS ENGINEERING & FORESTRY, LLC  
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TUALATIN, OR 97062  
503.563.6151 WWW.AKS-ENG.COM



DRWN: GPM  
CHKD: RAS  
AKS JOB:  
9338



**LEGEND (COLOR COPY)**

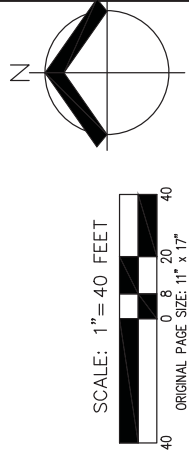
TOTAL ON-SITE PEM/SLOPE WETLAND AREA:  
7,020 SF± (0.16 ACRES)

ON-SITE ROADSIDE DITCH 1: 249 L.F±

PHOTO POINT LOCATION AND ORIENTATION

WETLAND BOUNDARY AND DATA PLOTS SHOWN WERE DELINEATED BY AKS ENGINEERING & FORESTRY, LLC ON MARCH 28, 2022 AND PROFESSIONALLY LAND SURVEYED BY AKS ON DECEMBER 21, 2022 WITH SUB-METER ACCURACY. CENTERLINE OF ROADSIDE DITCH WAS SURVEYED USING A HANDHELD TRIMBLE GEO 7X GPS RECEIVER WITH SUB-METER ACCURACY.

1-FOOT INTERVAL GROUND CONTOURS, PROPERTY LINES, STUDY AREA BOUNDARY, AND EXISTING CONDITIONS DERIVED FROM AKS PROFESSIONAL LAND SURVEY.



DATE: 01/30/2023

FIGURE  
**6**

**NATURAL RESOURCES EXISTING CONDITIONS MAP**

PETRAS HOME SUBDIVISION SROZ MAP VERIFICATION

AKS ENGINEERING & FORESTRY, LLC  
12965 SW HERMAN RD, STE 100  
TUALATIN, OR 97062  
503.563.6151 WWW.AKS-ENG.COM

DRWN: RAS  
CHKD: SKT  
AKS JOB: 9338

## **Appendix A:** **Site Representative Photos**

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**Photo A.** View of wetland facing southeast and Himalayan blackberry patch located in adjacent convex upland.



**Photo B.** View facing west of Wetland A.



**Photo C.** View west of wetland Plot 5 with Wetland A boundary and upland Plot 6 at a slightly higher elevation



**Photo D.** View northwest of upland area at a slightly higher elevation than the wetland.

## **Appendix B: OFWAM Assessment for Water Quality and Hydrologic Control Functions**

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## Petras Homes Subdivision Project- Wetland A Assessment

# Water quality (pollutant removal)

### *Sediment trapping*

During periods of heavy rainfall, water runoff may cause erosion and increase solids suspended in receiving surface waters. The excess sediment entering water systems can damage aquatic ecosystems. For example, sediment accumulation in stream bottoms can smother spawning areas and kill aquatic insect larvae. It can also reduce the storage capacity of downstream water supply reservoirs.

Wetlands perform an important function by trapping sediment from waters that pass through them. As water flows through wetlands, it is slowed by vegetation, and sediment settles to the bottom before the water moves farther downstream. As much as 90% of the solids suspended in the water may be removed as the water moves through wetlands, resulting in cleaner water entering streams, rivers, lakes and estuaries.

### *Nutrient attenuation*

Nitrogen and phosphorus are the two nutrients most often associated with water pollution. They are also main ingredients of fertilizers used on agricultural fields and lawns, and both are found in high concentrations in discharges from sewage treatment plants and livestock operations. Excessive amounts of nitrogen and phosphorus in lakes and slow-moving streams can cause algal blooms and subsequent oxygen deficiencies, which may kill fish and reduce water quality. The processes that occur as a result of excess nutrients are lumped together under the term "eutrophication." Within limits, wetlands can reduce nutrient levels so that the effects of eutrophication on downstream areas are prevented or reduced. This index considers only point and non-point pollutant sources that are due to land uses in the watershed.

## Assessment questions

### Question 1

What is the wetland's primary source of water?

- a. Surface flow, including streams and ditches.
- b. Precipitation or sheet flow.
- c. Groundwater, including seeps and springs.

### *Directions*

See question 36 in the Wetland Characterization.

### *Rationale*

Wetlands bordering a perennial or intermittent stream or lake are areas into which floodwaters spread during periods of high runoff, enabling the wetlands to remove pollutants.

*Notes*

### Question 2

Is there evidence of flooding or ponding during a portion of the growing season?

- a. Yes.
- b. Unable to determine or not applicable.
- c. No.

#### Directions

See question 37 in the Wetland Characterization.

#### Rationale

Water level fluctuation in the wetland indicates the ability to retain water. Impounded or standing water acts as a sediment trap because it greatly slows the flow of the incoming water, allowing suspended solids to settle out. Additionally, the slower velocity increases the contact time of the water with vegetation, resulting in uptake of nutrients by the vegetation. These actions function to reduce pollutant loads.

### Question 3

What is the degree of wetland vegetation cover?

- a. High (greater than 60%).
- b. Moderate (approximately 60%).
- c. Low (less than 60%).

#### Directions

See question 21 in the Wetland Characterization. Add the lower end of the ranges for forest, scrub-shrub and emergent vegetation to get the result. If the result is 60% or more, answer "high." If the result is 60%, answer "moderate." Answer "low" for other results.

#### Rationale

The more dense the vegetation, the greater the wetland's ability to take up nutrients. A dense stand of persistent emergent plants (such as cattail and rush) along with floating and submerged aquatics would tend to provide maximum nutrient uptake during the growing season. Wooded and scrub-shrub wetlands remove nutrients mainly through settling of suspended solids in runoff and flood waters.

**Question 4**

What is the wetland's area in acres?

**Directions**

See questions 17 and 27 in the Wetland Characterization.

- a. More than 5 acres.
- b. Between 0.5 acres and 5 acres; or wetland area is less than 0.5 acres, and the wetland is connected to other wetlands within a 3-mile radius by a perennial or intermittent stream, irrigation or drainage ditch, canal or lake.
- c. Less than 0.5 acres, and the wetland is not connected to other wetlands within a 3-mile radius by a perennial or intermittent stream, irrigation or drainage ditch, canal or lake.

**Rationale**

The larger the wetland, the greater its capacity and ability to filter pollutants. Small wetlands connected by surface water act as a series of filters and thus function similarly to a larger wetland.

**Question 5**

What is the dominant, existing land use within 500 feet of the wetland's edge?

- a. Developed uses.
- b. Agriculture.
- c. Exclusive Forest Use or Open Space.

**Directions**

Refer to the directions for question 8 of the wildlife habitat assessment questions.

**Rationale**

Urbanized areas have more impervious surface areas and concentrate pollution sources. Wetlands in urban areas are important for filtering the runoff water before it enters a stream.

Notes

**Question 6**

What is the water quality condition of stream reaches in the watershed upstream of the wetland or adjacent to the wetland?

**Directions**

See questions 7 and 8 in the Wetland Characterization. If both “a” and “b” apply, choose “a.”

- a. One or more upstream or adjacent reaches are listed as *water quality limited* or in *severe* water quality condition for nonpoint source pollutants.
- b. One or more upstream or adjacent reaches are listed in *moderate* water quality condition for nonpoint source pollutants.
- c.** No upstream or adjacent reaches are listed as *water quality limited*, and all upstream or adjacent reaches are listed as *no problem* (or no data available) for nonpoint source pollutants.

Notes

**Rationale**

A watershed with upstream pollutant loading sources needs wetlands to reduce pollutant levels in water before it is delivered downstream.

**Water quality: assessment criteria**

A wetland’s water-quality function is intact if:

Question 1 is answered “a” or “b,” questions 2 and 3 are answered “a,” and any other question is answered “a” or “b.”

A wetland’s water-quality function is impacted or degraded if:

Answers do not satisfy the above- or below-listed criteria.

A wetland’s water-quality function is lost or not present if:

Four out of six questions are answered “c.”



## Hydrologic control (flood control & water supply)

Wetlands function as natural water-storage areas during periods of high runoff and stream flooding.

At times they act as flood regulators by holding floodwater then slowly releasing it downstream. This temporary storage reduces the amount of water downstream during floods, thereby reducing peak flows. Through this flood storage mechanism, wetlands associated with tributaries of streams or rivers can prevent water from all tributaries reaching the stream or river at the same time (this is called desynchronization). Wetlands can also act as floodwater “brakes.” For example, water flowing through riverine wetlands during floods is slowed by trees, shrubs, reeds, rushes and other wetland vegetation. Wetlands acting as brakes can reduce flood peaks and thereby reduce flood damage, bank and bed erosion, and other adverse effects caused by fast moving water.

Wetlands also have long-term water holding abilities. Wetlands may store water for longer periods, sometimes for months. The slow draining of these wetlands to surface water or ground water as the water level in the wetland recedes may contribute to maintenance of baseflows in streams hydrologically connected to the wetland. The ability of this long-term water storage to maintain stream flows is called “flow conservation.”

### Assessment questions

#### Question 1

Is all or part of the wetland located within the 100-year floodplain or within an enclosed basin? a. Yes.  b. No.

#### Directions

See question 19 in the Wetland Characterization.

#### Rationale

Wetlands located within a floodplain or enclosed basin have a greater opportunity to receive and store water from surface flows and to release it slowly downstream or into the groundwater.

*Notes*

**Question 2**

- Is there evidence of flooding or ponding during a portion of the growing season?
- a. Yes.
  - b. Unable to determine or not applicable.
  - c. No.

**Directions**

See question 37 in the Wetland Characterization.

**Rationale**

Water marks are valid indicators of seasonal and episodic stage fluctuations in wetlands and, as such, are strong indicators of storage function.

**Question 3**

- What is the wetland's area in acres?
- a. More than 5 acres.
  - b. Between .5 acres and 5 acres.
  - c. Less than .5 acres.

**Directions**

See question 17 in the Wetland Characterization.

**Rationale**

Generally, the larger the wetland, the greater its ability to store and attenuate flood flows.

**Question 4**

- Is waterflow out of the wetland restricted (e.g., beaver dam, concrete structure, undersized culvert)?
- a. Yes, the outlet is restricted or the wetland has no outlet.
  - b. Minor restrictions slow down the water (i.e., undersized culvert.)
  - c. No, the outlet has unrestricted flow.

**Directions**

See question 38 in the Wetland Characterization.

**Rationale**

Wetlands with no outlets or with restricted or controlled outlets generally will store greater amounts of water than wetlands with unrestricted flow outlets. Also, the wetland can store water for slower release into the water system.



**Question 5**

What is the dominant wetland vegetation cover type?

- a. Woody vegetation.
- b. Emergent vegetation and ponding, or open water only.
- c. Emergent vegetation or wet meadow.

**Directions**

See question 23 in the Wetland Characterization.

**Rationale**

Densely vegetated wetlands with vegetation greater than 6 feet tall are better able to control flood flows than wetlands dominated by open water or low growing vegetation, which generally offers little resistance.

**Question 6**

What is the dominant existing land use, within 500 feet of the wetland on the downstream or down-slope edge of the wetland?

- a. Developed uses.
- b. Agriculture.
- c. Exclusive Forest Use and Open Space.

**Directions**

See question 16 in the Wetland Characterization.

**Rationale**

If the wetland is upstream from developed areas, its ability to control floods becomes more important.

**Question 7**

What is the dominant land use in the watershed upstream from the assessment area?

- a. Urban or urbanizing.
- b. Agriculture.
- c. Forested or natural area.

**Directions**

See question 6 in the Wetland Characterization.

**Rationale**

Runoff volume is directly related to the level of development in the watershed: The more development, the more runoff. The opportunity for the wetland to provide flood control and flow conservation to a community is greater where runoff is greater.

*Notes*

### Hydrologic control: assessment criteria

A wetland's hydrologic control function is intact if: Four or more questions are answered "a."

A wetland's hydrologic control function is impacted or degraded if: Answers do not satisfy the above- or below-listed criteria.

A wetland's hydrologic control function is lost or not present if: Four or more questions are answered "c."

*Notes*



# Oregon

Tina Kotek, Governor

## Department of State Lands

775 Summer Street NE, Suite 100

Salem, OR 97301-1279

(503) 986-5200

FAX (503) 378-4844

[www.oregon.gov/dsl](http://www.oregon.gov/dsl)

April 20, 2023

Petras Homes LLC  
Attn: Adrian Petras  
3673 SW Homesteader Road  
West Linn, OR 97068

**State Land Board**

Tina Kotek  
Governor

Re: WD # 2023-0058 **Approved**  
Wetland Delineation Report for Petras Home Subdivision  
Clackamas County; T3S R1W S12D TL200 and Portion of the  
Frog Pond Lane ROW

Shemia Fagan  
Secretary of State

Tobias Read  
State Treasurer

Dear Adrian Petras:

The Department of State Lands has reviewed the wetland delineation report prepared by AKS Engineering & Forestry for the site referenced above. Please note that the study area includes only a portion of the tax lot of the ROW described above (see the attached map). Based upon the information presented in the report, and additional information submitted upon request, we concur with the wetland boundaries as mapped in revised Figure 5 of the report. Please replace all copies of the preliminary wetland map with this final Department-approved map.

Within the study area, one wetland (Wetland A, totaling approximately 0.16 acres) and one ditch (Roadside Ditch 1) were identified. The wetland and the portion of the ditch contiguous with Wetland A are subject to the permit requirements of the state Removal-Fill Law. Under current regulations, a state permit is required for cumulative fill or annual excavation of 50 cubic yards or more in wetlands or below the ordinary high-water line (OHWL) of the waterway (or the 2-year recurrence interval flood elevation if OHWL cannot be determined). The remainder of the roadside ditch is exempt per OAR 141-085-0515(10). Therefore, it is not subject to these state permit requirements.

This concurrence is for purposes of the state Removal-Fill Law only. We recommend that you attach a copy of this concurrence letter to any subsequent state permit application to speed application review. Federal, other state agencies or local permit requirements may apply as well. The U.S. Army Corps of Engineers will determine jurisdiction under the Clean Water Act, which may require submittal of a complete Wetland Delineation Report.

Please be advised that state law establishes a preference for avoidance of wetland impacts. Because measures to avoid and minimize wetland impacts may include reconfiguring parcel layout and size or development design, we recommend that you work with Department staff on appropriate site design before completing the city or county land use approval process.

This concurrence is based on information provided to the agency. The jurisdictional determination is valid for five years from the date of this letter unless new information necessitates a revision. Circumstances under which the Department may change a determination are found in OAR 141-090-0045 (available on our web site or upon request). In addition, laws enacted by the legislature and/or rules adopted by the Department may result in a change in jurisdiction; individuals and applicants are subject to the regulations that are in effect at the time of the removal-fill activity or complete permit application. The applicant, landowner, or agent may submit a request for reconsideration of this determination in writing within six months of the date of this letter.

Thank you for having the site evaluated. If you have any questions, please contact Chris Stevenson, PWS, the Jurisdiction Coordinator for Clackamas County at (503) 986-5246.

Sincerely,

A handwritten signature in black ink that reads "Peter Ryan". The signature is written in a cursive style with a long, sweeping underline.

Peter Ryan, SPWS  
Aquatic Resource Specialist

Enclosures

ec: Sonya Templeton, AKS Engineering & Forestry  
City of Wilsonville Planning Department  
Kayla Woods, Corps of Engineers  
Katie Blauvelt, DSL

## WETLAND DELINEATION / DETERMINATION REPORT COVER FORM

A complete report and signed report cover form, along with applicable review fee, are required before a report review timeline can be initiated by the Department of State Lands. All applicants will receive an emailed confirmation that includes the report's unique file number and other information.

**Ways to submit report:**

- ❖ **Under 50MB** - A single unlocked PDF can be emailed to: wetland.delineation@dsl.oregon.gov.
- ❖ **50MB or larger** - A single unlocked PDF can be uploaded to DSL's Box.com website. After upload notify DSL by email at: wetland.delineation@dsl.oregon.gov.
- ❖ **OR** a hard copy of the unbound report and signed cover form can be mailed to: Oregon Department of State Lands, 775 Summer Street NE, Suite 100, Salem, OR 97301-1279.

**Ways to pay review fee:**

- ❖ By credit card on DSL's epayment portal after receiving the unique file number from DSL's emailed confirmation.
- ❖ By check payable to the Oregon Department of State Lands attached to the unbound mailed hardcopy **OR** attached to the complete signed cover form if report submitted electronically.

**Contact and Authorization Information**

<input checked="" type="checkbox"/> Applicant <input checked="" type="checkbox"/> Owner Name, Firm and Address: Petras Homes LLC ATTN: Adrian Petras 3673 SW Homesteader Road West Linn, OR 97068	Business phone # (503) 998-6820 Mobile phone # (optional) E-mail: Bujacan@yahoo.com
---	---

<input type="checkbox"/> Authorized Legal Agent, Name and Address (if different):	Business phone # Mobile phone # (optional) E-mail:
---	--

I either own the property described below or I have legal authority to allow access to the property. I authorize the Department to access the property for the purpose of confirming the information in the report, after prior notification to the primary contact.

**Typed/Printed Name:** ADRIAN PETRAS **Signature:**   
**Date:** 1/31/23 **Special instructions regarding site access:** \_\_\_\_\_

**Project and Site Information**

Project Name: Petras Home Subdivision	Latitude: _____ Longitude: _____ decimal degree - centroid of site or start & end points of linear project
Proposed Use: Residential subdivision	Tax Map # 31W12D Tax Lot(s) 200 and portion of ROW
Project Street Address (or other descriptive location): NW Corner of SW Frog Pond Lane and SW Stafford Road	Tax Map # _____ Tax Lot(s) _____
City: Wilsonville County: Clackamas	Township 3S Range 1W Section 12D QQ SE 1/4 Use separate sheet for additional tax and location information
	Waterway: NA River Mile: NA

**Wetland Delineation Information**

Wetland Consultant Name, Firm and Address: Sonya Templeton AKS Engineering & Forestry, LLC 12965 SW Herman Road, Suite 100 Tualatin OR 97062	Phone # (503) 563-6151 Mobile phone # (if applicable) E-mail: templetons@aks-eng.com
--	--

The information and conclusions on this form and in the attached report are true and correct to the best of my knowledge.

**Consultant Signature:** Sonya Templeton **Date:** 01/31/2023

**Primary Contact** for report review and site access is  Consultant  Applicant/Owner  Authorized Agent

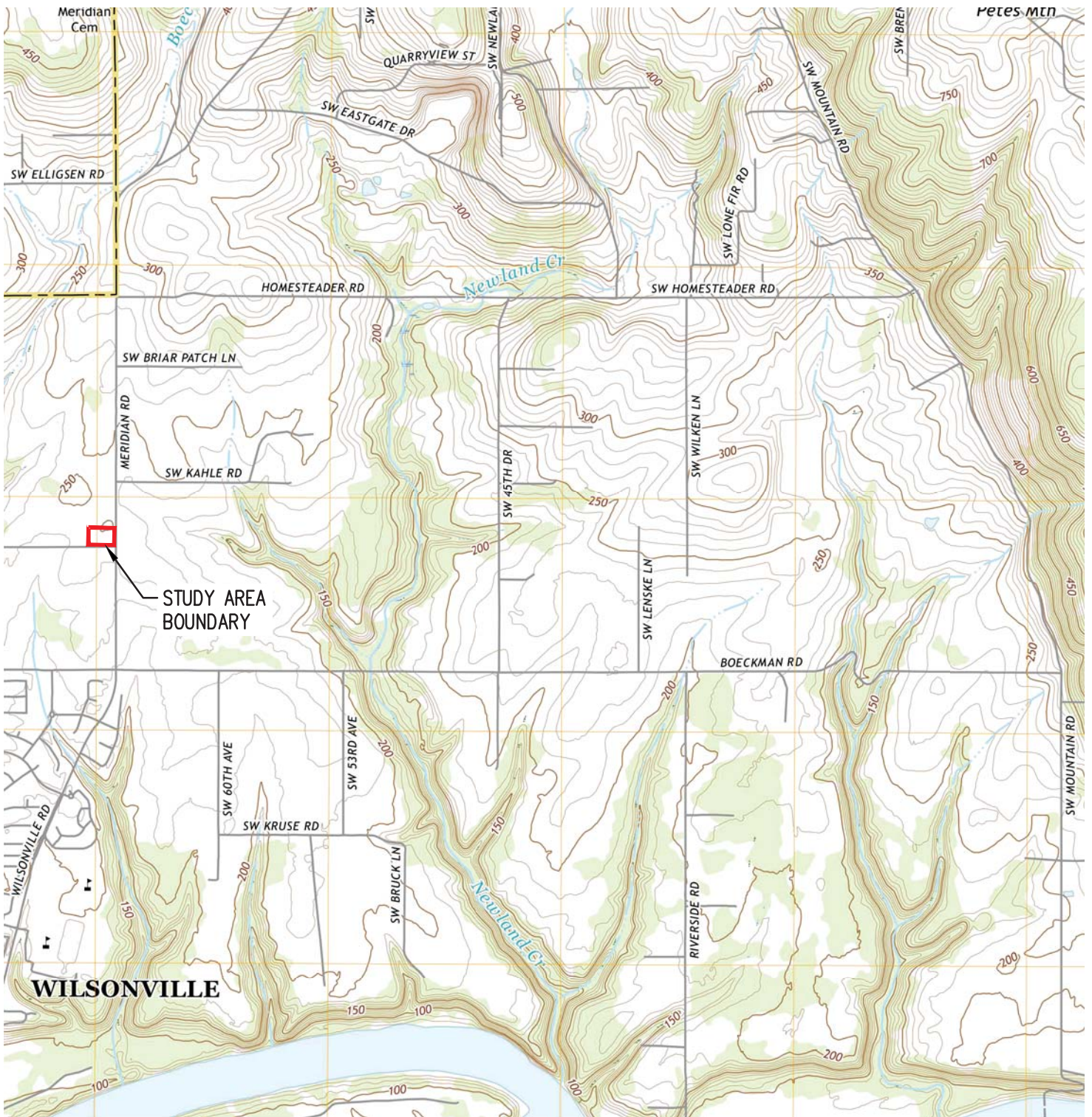
Wetland/Waters Present?  Yes  No Study Area size: 2.07 Total Wetland Acreage: 0.1600

**Check Applicable Boxes Below**

<input type="checkbox"/> R-F permit application submitted	<input checked="" type="checkbox"/> Fee payment submitted \$ <u>540</u>
<input type="checkbox"/> Mitigation bank site	<input type="checkbox"/> Resubmittal of rejected report (\$100)
<input type="checkbox"/> EFSC/ODOE Proj. Mgr: _____	<input type="checkbox"/> Request for Reissuance. See eligibility criteria. (no fee)
<input type="checkbox"/> Wetland restoration/enhancement project (not mitigation)	DSL # _____ Expiration date _____
<input type="checkbox"/> Previous delineation/application on parcel If known, previous DSL # _____	<input type="checkbox"/> LWI shows wetlands or waters on parcel Wetland ID code _____

**For Office Use Only**

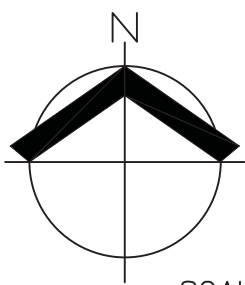
DSL Reviewer: <u>CS</u>	Fee Paid Date: ___ / ___ / ___	DSL WD # <u>2023-0058</u>
Date Delineation Received: <u>02 / 07 / 2023</u>		DSL App.# _____



STUDY AREA BOUNDARY

WILSONVILLE

USGS 7.5' TOPOGRAPHIC SERIES  
 QUADRANGLE: CANBY, OR (2020)



SCALE: 1" = 2000 FEET



ORIGINAL PAGE SIZE: 8.5" x 11"

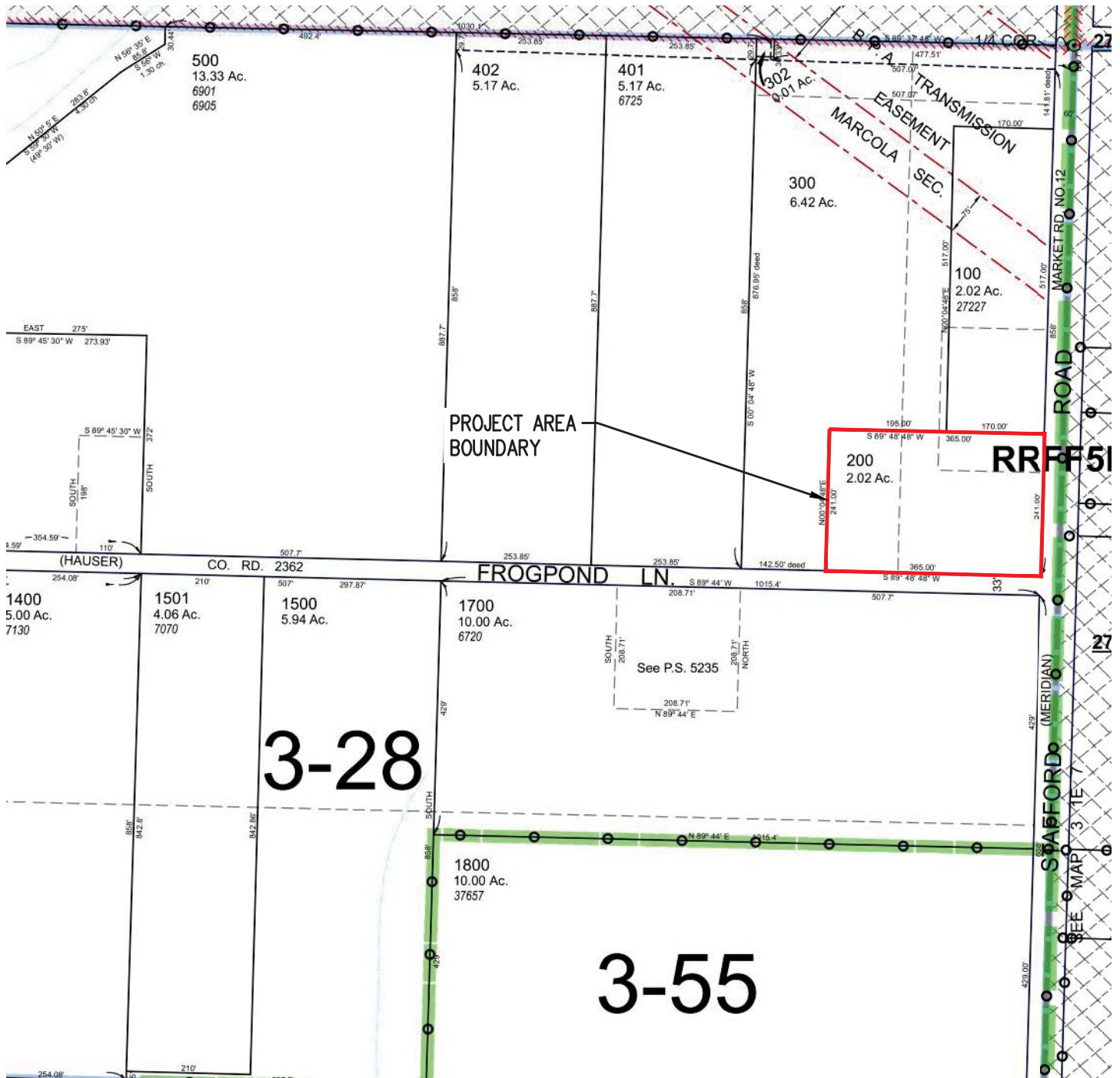
DATE: 01/26/2023

**USGS VICINITY MAP**  
**PETRAS HOME SUBDIVISION SROZ MAP VERIFICATION**

AKS ENGINEERING & FORESTRY, LLC  
 12965 SW HERMAN RD, STE 100  
 TUALATIN, OR 97062  
 503.563.6151 WWW.AKS-ENG.COM



FIGURE  
**1**  
 DRWN: GPM  
 CHKD: RAS  
 AKS JOB:  
 9338



3-28

3-55

CLACKAMAS COUNTY  
TAX LOT 200 AND PORTION  
OF ROW  
TAX MAP 3S 1W 2D

DATE: 01/30/2023

SCALE: 1" = 250 FEET



**TAX MAP (MAP 3S 1W 12D)**  
**PETRAS HOME SUBDIVISION SROZ MAP VERIFICATION**

AKS ENGINEERING & FORESTRY, LLC  
12965 SW HERMAN RD, STE 100  
TUALATIN, OR 97062  
503.563.6151 WWW.AKS-ENG.COM



FIGURE  
**2**

DRWN: GPM  
CHKD: RAS

AKS JOB:  
9338

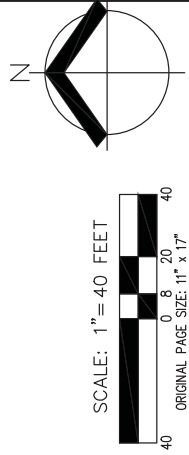
DSL WD # 2023-0058  
 Approval Issued 4/20/2023  
 Approval Expires 4/20/2028

**LEGEND (COLOR COPY)**

- TOTAL ON-SITE PEM/SLOPE WETLAND AREA:  
7,020 SF± (0.16 ACRES)
- ON-SITE ROADSIDE DITCH 1: 249 LF±
- PHOTO POINT LOCATION AND ORIENTATION

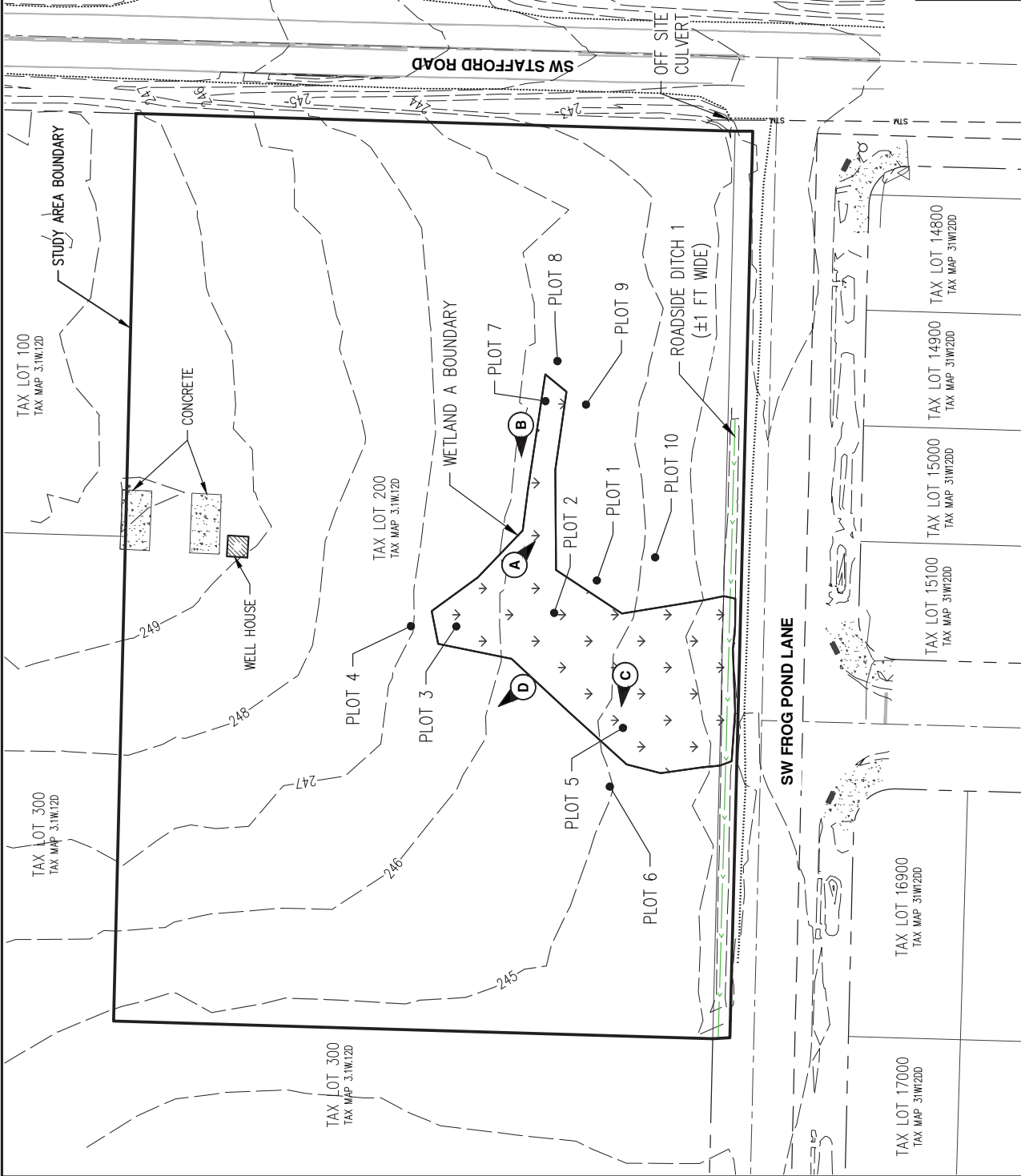
WETLAND BOUNDARY AND DATA PLOTS SHOWN WERE DELINEATED BY AKS ENGINEERING & FORESTRY, LLC ON MARCH 28, 2022 AND PROFESSIONALLY LAND SURVEYED BY AKS ON DECEMBER 21, 2022 WITH SUB-METER ACCURACY. CENTERLINE OF ROADSIDE DITCH WAS SURVEYED USING A HANDHELD TRIMBLE GEO 7X GPS RECEIVER WITH SUB-METER ACCURACY.

1-FOOT INTERVAL GROUND CONTOURS, PROPERTY LINES, STUDY AREA BOUNDARY, AND EXISTING CONDITIONS DERIVED FROM AKS PROFESSIONAL LAND SURVEY.



DATE: 01/30/2023

WETLAND DELINEATION MAP		FIGURE
PETRAS HOME SUBDIVISION WETLAND DELINEATION REPORT		5
AKS ENGINEERING & FORESTRY, LLC		DRW: RAS
12965 SW HERMAN RD, STE 100		CHKD: SKT
TUALATIN, OR 97062		AKS JOB:
503.563.6151 WWW.AKS-ENG.COM		9338





## **Exhibit G: Preliminary Stormwater Report**

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# Petras Homes Subdivision Wilsonville, Oregon

## Preliminary Stormwater Report

**Date:** October 2023

**Client:** Petras Homes, LLC.  
3673 SW Homesteader Road  
West Linn, OR 97068

**Engineering Contact:** Cody Street, EI

**Prepared By:** Nathan Ahrend, PE

**Engineering Firm:** AKS Engineering & Forestry, LLC  
12965 SW Herman Rd Suite 100  
Tualatin, OR 97062

**AKS Job Number:** 9338



RENEWAL DATE: 6/30/25



[www.aks-eng.com](http://www.aks-eng.com)

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**Appendix F:** Information from the NRCS Soil Survey of Clackamas County, Oregon

**Appendix G:** Relevant Information

---

# Preliminary Stormwater Report

## PETRAS HOMES SUBDIVISION

### WILSONVILLE, OREGON

### 1.0 Purpose of Report

The purpose of this report is to analyze the effect development of Petras Homes Subdivision will have on the downstream stormwater conveyance system, document the criteria the proposed stormwater system was designed to meet, identify the sources of information on which the analysis was based, detail the design methodology, and present the results of the analysis.

### 2.0 Project Location/Description

The development is located on Tax Lot 200 of Clackamas County Map 3 1W 12D. The project site is located northwest of the intersection of SW Stafford Road & SW Frog Pond Lane. The site is approximately  $\pm 2.02$  acres. The site generally slopes south toward the southwest and southeast corners of the site. Stormwater runoff from this development will be collected and routed to new low impact development (LID) stormwater facilities to meet the City of Wilsonville (City) standards for water quality and flow control. Stormwater runoff from the site will discharge to the existing stormwater conveyance system in SW Frog Pond Lane.

### 3.0 Regulatory Design Criteria

#### 3.1. Water Quality Requirements

Per the *2015 City of Wilsonville Stormwater & Surface Water Design & Construction Standards* (Standards), water quality facilities shall be designed to capture and treat 80 percent of the average annual runoff volume to the maximum extent practicable (MEP) with goal of removing 70 percent of total suspended solids (TSS). The City's BMP Sizing Tool addresses these water quality requirements to size stormwater management facilities meeting best management practices (BMPs).

#### 3.2. Stormwater Quality Management Criteria

Per City Standards, the duration of peak flow rates from post-development conditions shall be less than or equal to that from pre-developed conditions for all peak flows between 42 percent of the 2-year and 10-year design storm. The BMP Sizing Tool incorporates these flow control requirements to size stormwater management facilities.

### 4.0 Design Methodology

The BMP Sizing Tool was used to design the LID stormwater facilities to meet City Standards. The Santa Barbara Urban Hydrograph (SBUH) method will be used to design the stormwater conveyance system. The SBUH method uses the Soil Conservation Service (SCS) Type 1A 24-hour storm. HydroCAD computer software will aid in the analysis.

---

## **5.0 Design Parameters**

### **5.1. Design Storms**

#### **5.1.1. On-Site Inlet and Conduit Sizing**

Stormwater inlets for the site will be placed at locations that will adequately control stormwater runoff from roadways. The on-site stormwater pipes will be sized using Manning's equation, based on peak flows for the 25-year, 24-hour (3.9-inch) storm event.

#### **5.1.2. Upstream Basin**

As part of this development, the existing eyebrow at the corner of SW Yarrow Lane and SW Windflower Street will be completed, which results in a low point within the eyebrow. A portion of runoff from the existing upstream impervious area of Frog Pond Crossing (FPC) that was routed to FPC Swale #4 will now be captured and managed within the stormwater facilities of this development.

### **5.2. Pre-developed Site Conditions**

#### **5.2.1. Site Topography**

The site generally drains south, with slopes ranging from 1% to 5%. The vegetative cover of the site consists of mostly grass and some brush.

#### **5.2.2. Land Use**

Currently, the site is vacant, with a small shed structure, grass, and brush.

### **5.3. Soil Type**

The soils present on the site are classified as Woodburn Silt Loam (hydrologic group "C"), Aloha Silt Loam (hydrologic group "C/D"), and Huberly Silt Loam (hydrologic group "D") by the Natural Resources Conservation Service (NRCS) Soil Survey for Clackamas County. Information on these soil types is provided in Appendix F.

### **5.4. Post-Developed Site Conditions**

#### **5.4.1. Site Topography**

The post-developed site topography will be altered from the pre-developed site topography to allow for the construction of public streets, a private alley, single-family homes, stormwater facilities, and other associated infrastructure and features.

#### **5.4.2. Land Use**

The post-developed land use will consist of 21 residential lots with single-family homes, public streets, a private alley, and stormwater facilities.

#### **5.4.3. Post-Developed Input Parameters**

The City of Wilsonville *2015 Stormwater & Surface Water Design & Construction Standards* assesses each dwelling with 2,750 square feet of impervious area. This standard was utilized for lot 11, however this area is not practical for the rest of the lots which are smaller than 2,750 square feet. Therefore, the assumed impervious area for each smaller lot is based on an anticipated home product with a roof area of 1,144 square feet, plus 216 square feet for an assumed 12-foot-wide by 18-foot-long driveway per lot. A total impervious area of 1,360 square feet was used for the 20 smaller lots.

## **5.5. Infiltration Rate**

Per the infiltration rate test result prepared by GeoPacific Engineering, Inc. dated December 12<sup>th</sup>, 2022, falling-head infiltration testing conducted on the project site demonstrated a measured infiltration rate of 0.0 inches per hour.

## **6.0 Calculation Methodology**

### **6.1. Proposed Stormwater Conduit Sizing and Inlet Spacing**

The on-site stormwater conduit pipes will be sized using Manning's equation for the 25-year, 24-hour (3.9-inch) storm event. Stormwater inlets will be placed at locations to adequately capture stormwater runoff from the roadways and alleys.

### **6.2. Proposed Stormwater Quantity & Quality Control Facility Design**

The stormwater facility and vegetated swale will provide water quality and flow control management for stormwater runoff from impervious areas within the new street right-of-way, driveways, alleys, and roof areas. The LID stormwater facilities were sized using the BMP Sizing Tool to accommodate flows generated by developed areas of the subject property in compliance with water quality and flow control requirements in the City Standards (described in Section 3.1 and 3.2).

### **6.3. Emergency Overflow Calculations**

The emergency overflow weir was sized to convey the 100-year storm event. Calculations are included in Appendix E. If the stormwater facility's outlet structures become plugged and cannot convey runoff from the site, the overflow will sheet flow across the paved maintenance access drive and be collected by the conveyance system in SW Frog Pond Lane.

### **6.4. Downstream Analysis**

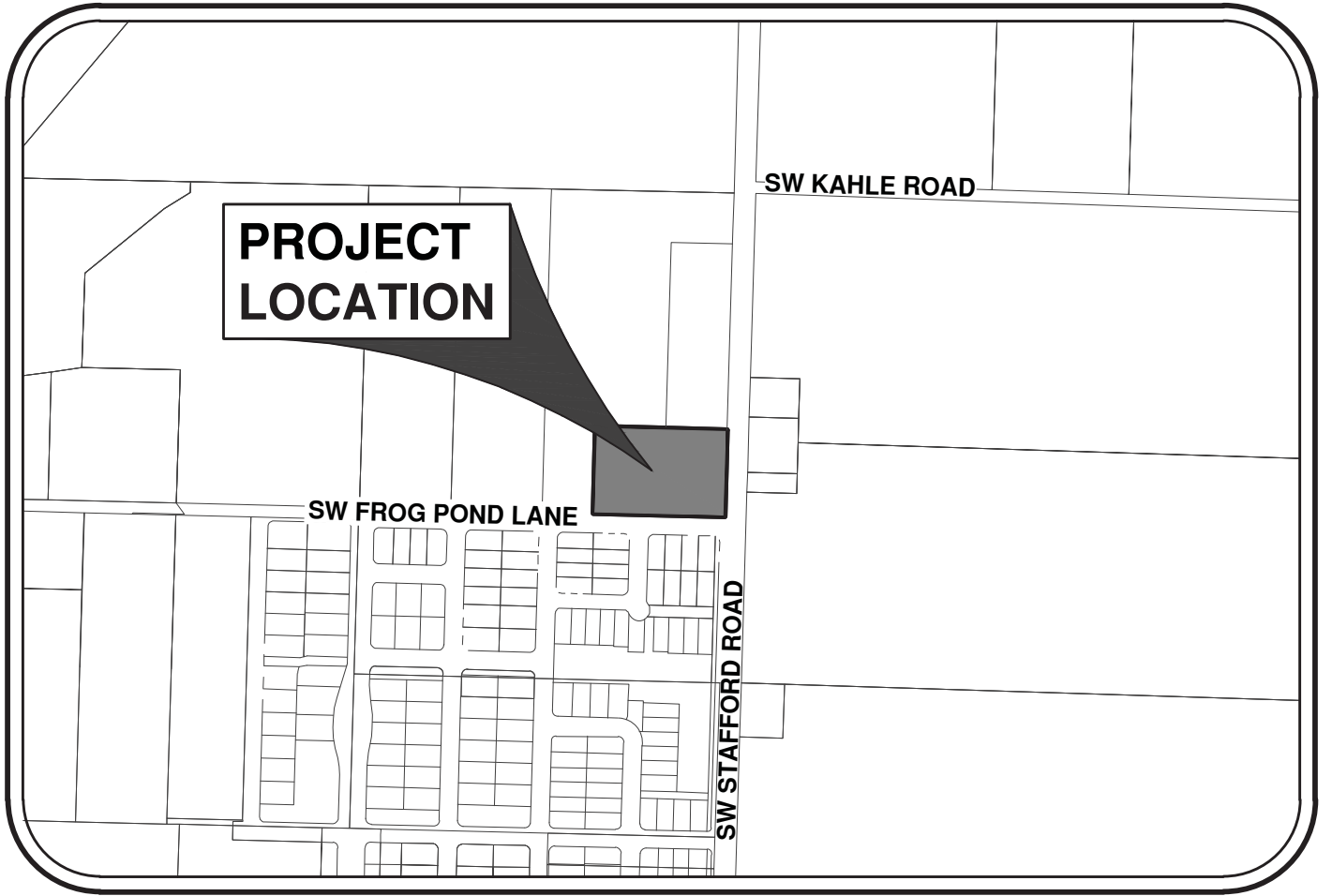
Peak flow discharges from the stormwater facilities will be detained and metered out at or below the pre-development runoff condition.

Stormwater runoff from Basins 1 and 2 will discharge to the existing conveyance system installed with Frog Pond Ridge (FPR). Stormwater runoff from Basin 3 will discharge to the existing conveyance system installed with FPC, which ultimately discharges to the conveyance system installed with FPR. The FPC storm lines have been sized with sufficient capacity to convey runoff from Basin 3. The FPR storm lines have been sized under the FPR Stormwater Management Plan (SMP) to accommodate runoff from this development. Downstream analysis has been performed for the FPR SMP.

Stormwater runoff from Basin A is routed to FPC Swale #4. The impervious area of Basin A is smaller than the existing impervious area of FPC that will now be captured and managed within the stormwater facilities of this development (described in Section 5.1.2); Therefore, FPC Swale #4 will not be negatively impacted by this development.

Stormwater runoff from Basin B is infeasible to capture and manage as part of this development; however, runoff from this area will be managed with future SW Stafford Road Improvements as part of the City of Wilsonville Transportation System Plan's Stafford Road Urban Upgrade Project UU-06.

## **Appendix A: Vicinity Map**



**VICINITY MAP**  
NOT TO SCALE



## **Appendix B: Pre-Developed Catchment Map and Detail**

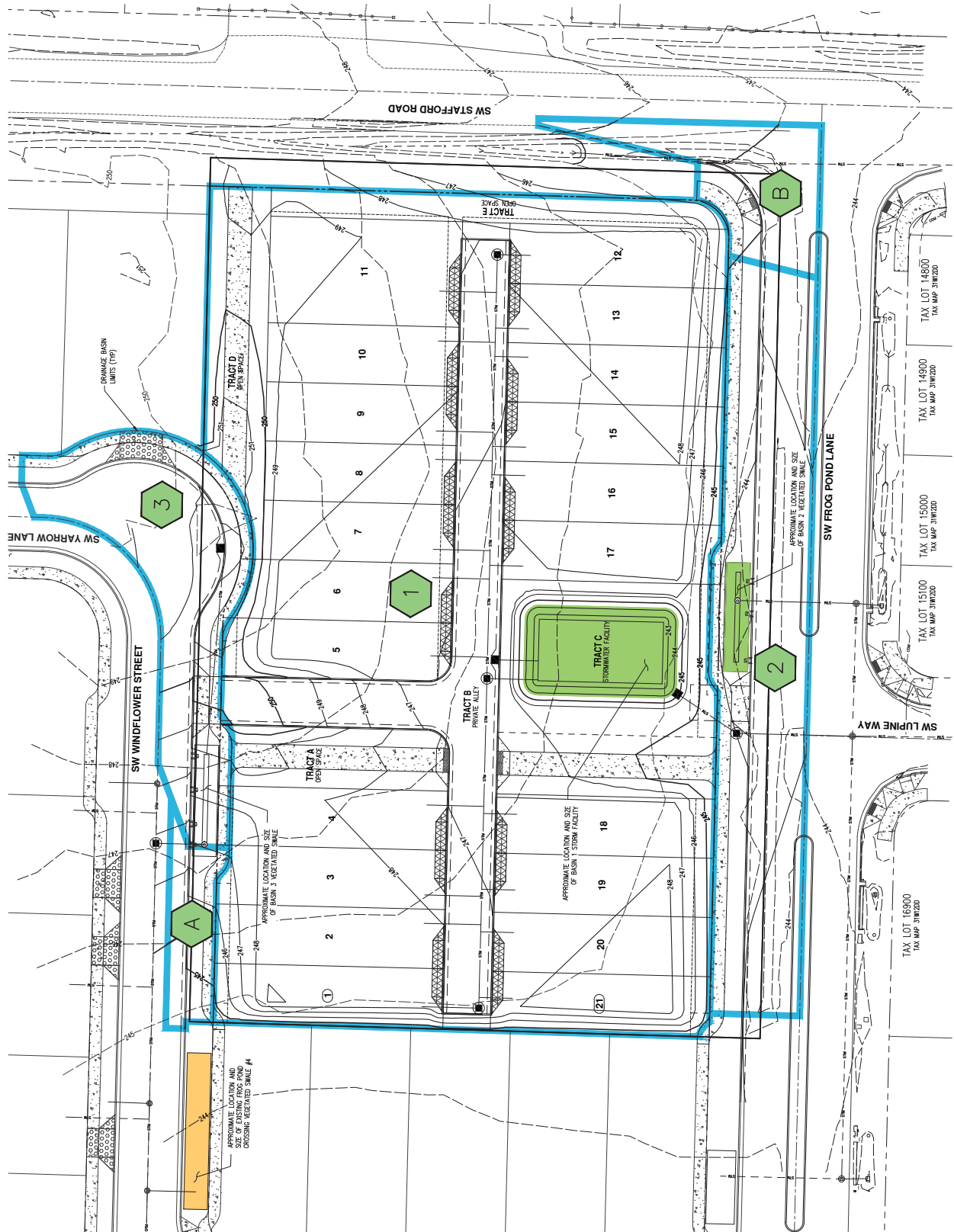
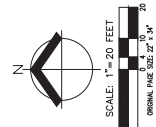
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## **Appendix C: Post-Developed Catchment Map and Detail**

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## **Appendix D: BMP Sizing Tool**

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## WES BMP Sizing Report

## Project Information

Project Name	9338 PETRAS HOMES SUBDIVISON
Project Type	Subdivision
Location	WILSONVILLE, OR
Stormwater Management Area	3092
Project Applicant	AKS
Jurisdiction	OutofDistrict

## Drainage Management Area

Name	Area (sq-ft)	Pre-Project Cover	Post-Project Cover	DMA Soil Type	BMP
BASIN 1 PERVIOUS (C)	15,479	Grass	LandscapeCsoil	C	BASIN 1 POND
BASIN 1 IMPERVIOUS (C)	9,948	Grass	ConventionalCo ncrete	C	BASIN 1 POND
BASIN 1 PERVIOUS (D)	17,159	Grass	LandscapeDsoil	D	BASIN 1 POND
BASIN 1 IMPERVIOUS (D)	6,427	Grass	ConventionalCo ncrete	D	BASIN 1 POND
BASIN 2 IMPERVIOUS (D)	9,631	Grass	ConventionalCo ncrete	D	BASIN 2 SWALE
BASIN 2 PERVIOUS (D)	2,604	Grass	LandscapeDsoil	D	BASIN 2 SWALE
BASIN 1 ROOFS (C)	14,190	Grass	Roofs	C	BASIN 1 POND
BASIN 1 ROOFS (D)	11,440	Grass	Roofs	D	BASIN 1 POND
BASIN 3 PERVIOUS (C)	1,440	Grass	LandscapeCsoil	C	BASIN 3 SWALE
BASIN 3 IMPERVIOUS (C)	5,935	Grass	ConventionalCo ncrete	C	BASIN 3 SWALE

## LID Facility Sizing Details

LID ID	Design Criteria	BMP Type	Facility Soil Type	Minimum Area (sq-ft)	Planned Areas (sq-ft)	Orifice Diameter (in)
BASIN 2 SWALE	FlowControlAndTreatment	Vegetated Swale - Filtration	Lined	458.2	460.0	1.2
BASIN 3 SWALE	FlowControlAndTreatment	Vegetated Swale - Filtration	Lined	465.9	470.0	0.8

### Pond Sizing Details

Pond ID	Design Criteria(1)	Facility Soil Type	Max Depth (ft)(2)	Top Area (sq-ft)	Side Slope (1:H)	Facility Vol. (cu-ft)(3)	Water Storage Vol. (cu-ft)(4)	Adequate Size?
BASIN 1 POND	FCWQT	Lined	5.00	2,407.0	3	6,174.6	4,709.2	Yes

1. FCWQT = Flow control and water quality treatment, WQT = Water quality treatment only

2. Depth is measured from the bottom of the facility and includes the three feet of media (drain rock, separation layer and growing media).

3. Maximum volume of the facility. Includes the volume occupied by the media at the bottom of the facility.

4. Maximum water storage volume of the facility. Includes water storage in the three feet of soil media assuming a 40 percent porosity.

# Simple Pond Geometry Configuration

Pond ID: BASIN 1 POND

Design: FlowControlAndTreatment

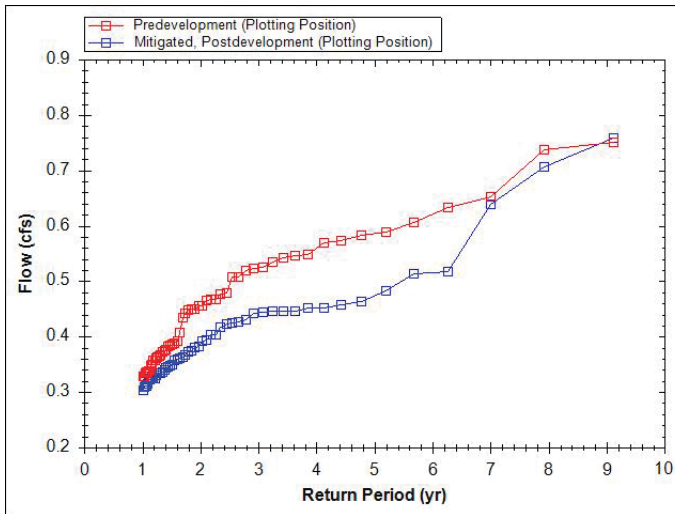
## Shape Curve

Depth (ft)	Area (sq ft)
5.0	2,407.0

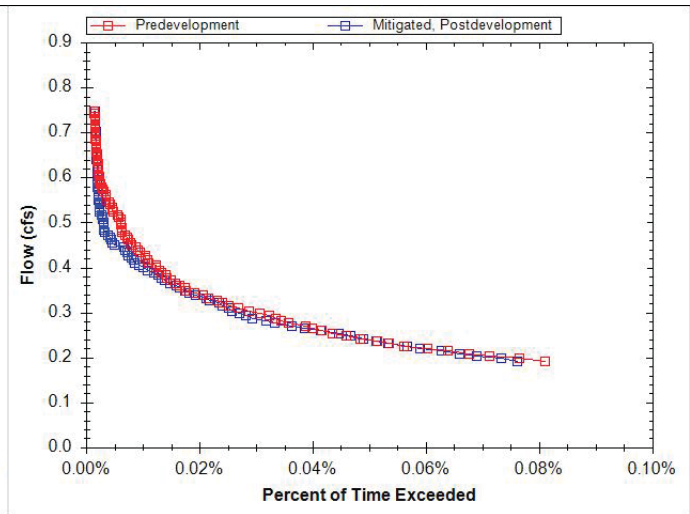
## Outlet Structure Details

Lower Orifice Invert (ft)	0.0
Lower Orifice Dia (in)	1.8
Upper Orifice Invert(ft)	3.4
Upper Orifice Dia (in)	4.1
Overflow Weir Invert(ft)	4.0
Overflow Weir Length (ft)	6.3

Flow Frequency Chart



Flow Duration Chart



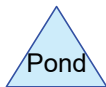
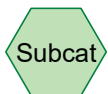


## **Appendix E: Emergency Overflow Calculations**



Basin 1

LID STORMWATER FACILITY



## 9338 HydroCAD Overflow

Prepared by AKS Engineering & Forestry, LLC

HydroCAD® 10.00-22 s/n 01338 © 2018 HydroCAD Software Solutions LLC

Printed 9/15/2023

Page 2

### Area Listing (all nodes)

Area (sq-ft)	CN	Description (subcatchment-numbers)
9,948	98	Impervious (C) (Basin 1)
6,427	98	Impervious (D) (Basin 1)
15,479	74	Pervious (C) (Basin 1)
17,159	80	Pervious (D) (Basin 1)
14,190	98	Roofs (C) (Basin 1)
11,440	98	Roofs (D) (Basin 1)

**9338 HydroCAD Overflow**

Type IA 24-hr 100-YR Rainfall=4.50"

Prepared by AKS Engineering & Forestry, LLC

Printed 9/15/2023

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Page 3

Time span=0.00-24.00 hrs, dt=0.10 hrs, 241 points

Runoff by SBUH method, Split Pervious/Imperv.

Reach routing by Stor-Ind+Trans method - Pond routing by Stor-Ind method

**SubcatchmentBasin 1: Basin 1**

Runoff Area=74,643 sf 56.27% Impervious Runoff Depth>3.36"  
Tc=5.0 min CN=77/98 Runoff=1.40 cfs 20,898 cf

**Pond SF: LID STORMWATERFACILITY**

Peak Elev=245.35' Storage=9,271 cf Inflow=1.40 cfs 20,898 cf  
Outflow=0.37 cfs 11,722 cf

**9338 HydroCAD Overflow**

Prepared by AKS Engineering & Forestry, LLC

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Type IA 24-hr 100-YR Rainfall=4.50"

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**Summary for Subcatchment Basin 1: Basin 1**

Runoff = 1.40 cfs @ 7.95 hrs, Volume= 20,898 cf, Depth> 3.36"

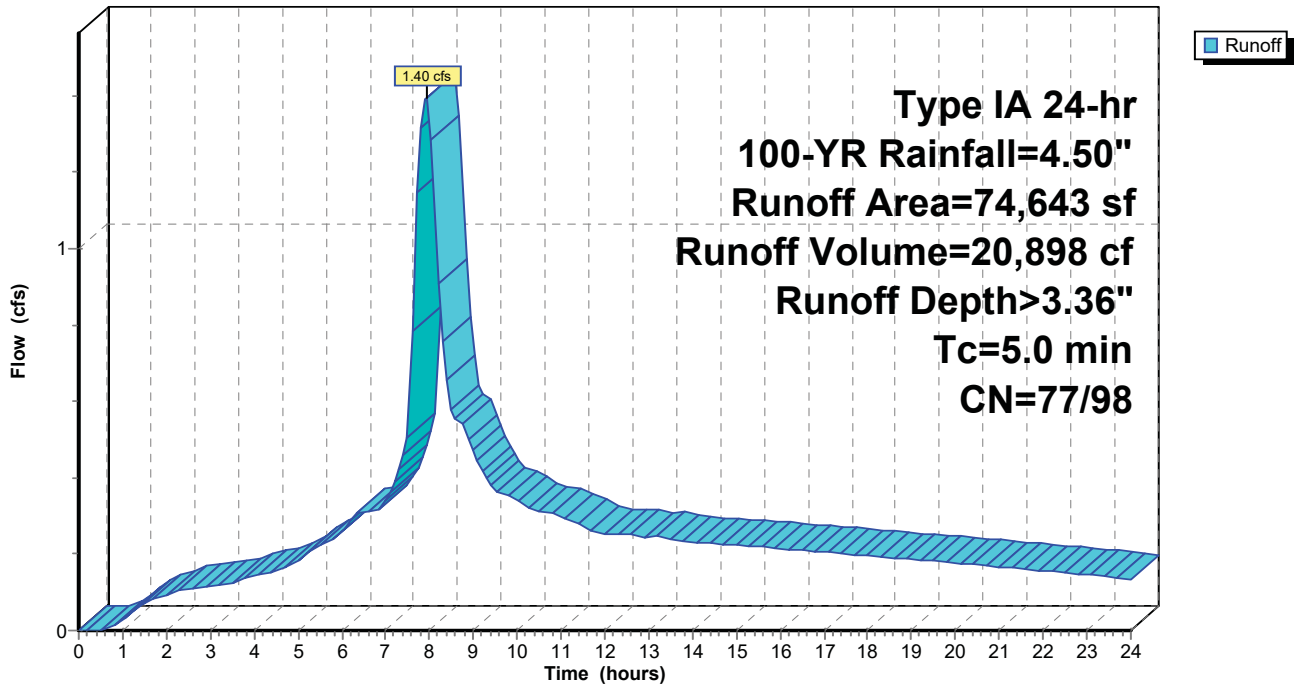
Runoff by SBUH method, Split Pervious/Imperv., Time Span= 0.00-24.00 hrs, dt= 0.10 hrs  
Type IA 24-hr 100-YR Rainfall=4.50"

	Area (sf)	CN	Description
*	6,427	98	Impervious (D)
*	11,440	98	Roofs (D)
*	17,159	80	Pervious (D)
*	9,948	98	Impervious (C)
*	14,190	98	Roofs (C)
*	15,479	74	Pervious (C)
<hr/>			
	74,643	89	Weighted Average
	32,638		43.73% Pervious Area
	42,005		56.27% Impervious Area

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

**Subcatchment Basin 1: Basin 1**

Hydrograph



**9338 HydroCAD Overflow**

Type IA 24-hr 100-YR Rainfall=4.50"

Prepared by AKS Engineering & Forestry, LLC

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**Summary for Pond SF: LID STORMWATER FACILITY**

Inflow Area = 74,643 sf, 56.27% Impervious, Inflow Depth > 3.36" for 100-YR event  
 Inflow = 1.40 cfs @ 7.95 hrs, Volume= 20,898 cf  
 Outflow = 0.37 cfs @ 9.50 hrs, Volume= 11,722 cf, Atten= 73%, Lag= 92.8 min  
 Primary = 0.37 cfs @ 9.50 hrs, Volume= 11,722 cf

Routing by Stor-Ind method, Time Span= 0.00-24.00 hrs, dt= 0.10 hrs / 2  
 Peak Elev= 245.35' @ 9.50 hrs Surf.Area= 3,294 sf Storage= 9,271 cf

Plug-Flow detention time= 480.3 min calculated for 11,722 cf (56% of inflow)  
 Center-of-Mass det. time= 232.1 min ( 932.3 - 700.2 )

Volume	Invert	Avail.Storage	Storage Description			
#1	239.30'	10,833 cf	<b>Custom Stage Data (Pyramidal)</b> Listed below (Recalc)			
Elevation (feet)	Surf.Area (sq-ft)	Voids (%)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)	Wet.Area (sq-ft)	
239.30	1,579	0.0	0	0	1,579	
242.20	1,579	40.0	1,832	1,832	2,040	
242.30	1,579	100.0	158	1,990	2,056	
244.30	2,646	100.0	4,179	6,169	3,183	
245.30	3,264	100.0	2,950	9,118	3,838	
245.80	3,595	100.0	1,714	10,833	4,190	

Device	Routing	Invert	Outlet Devices											
#1	Primary	245.30'	<b>15.0' long x 3.0' breadth Broad-Crested Rectangular Weir</b>											
			Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 1.80 2.00											
			2.50 3.00 3.50 4.00 4.50											
			Coef. (English) 2.44 2.58 2.68 2.67 2.65 2.64 2.64 2.68 2.68											
			2.72 2.81 2.92 2.97 3.07 3.32											

**Primary OutFlow** Max=0.37 cfs @ 9.50 hrs HW=245.35' (Free Discharge)

↑1=**Broad-Crested Rectangular Weir**(Weir Controls 0.37 cfs @ 0.53 fps)

**9338 HydroCAD Overflow**

Prepared by AKS Engineering & Forestry, LLC

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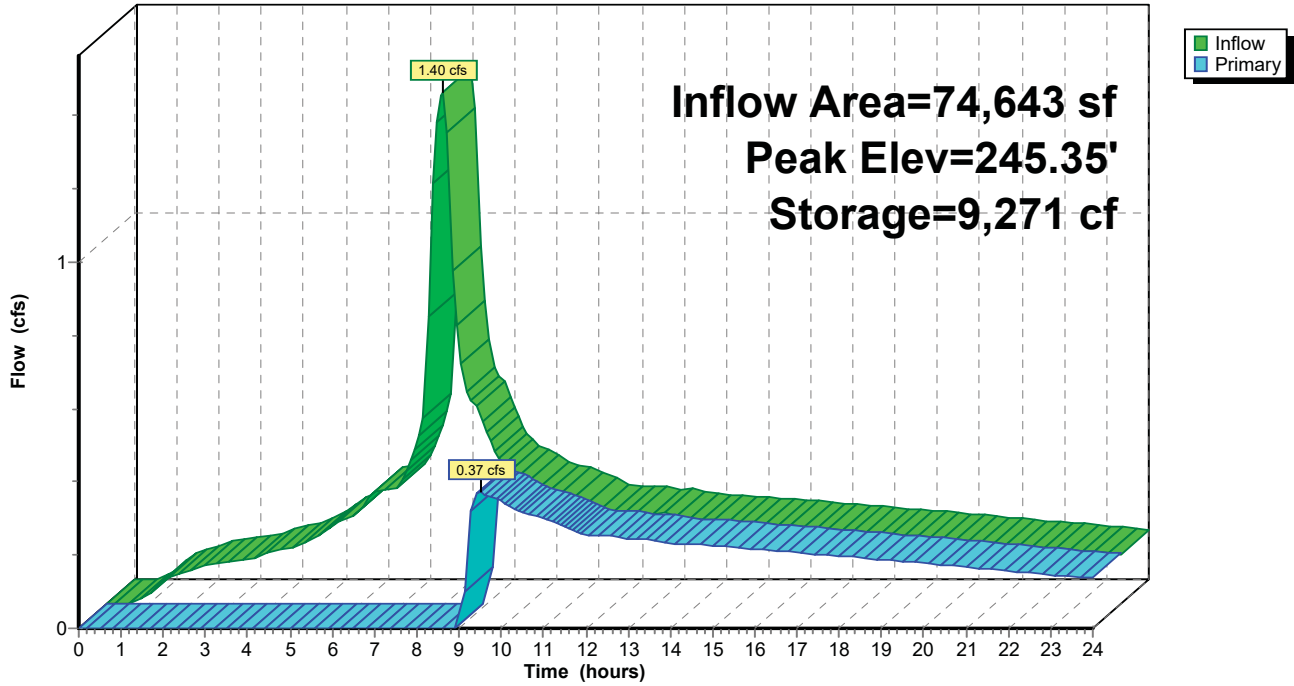
Type IA 24-hr 100-YR Rainfall=4.50"

Printed 9/15/2023

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**Pond SF: LID STORMWATER FACILITY**

Hydrograph



## **Appendix F: Information from the NRCS Soil Survey of Clackamas County, Oregon**

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# Custom Soil Resource Report for **Clackamas County Area, Oregon**



# Preface

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Soil surveys contain information that affects land use planning in survey areas. They highlight soil limitations that affect various land uses and provide information about the properties of the soils in the survey areas. Soil surveys are designed for many different users, including farmers, ranchers, foresters, agronomists, urban planners, community officials, engineers, developers, builders, and home buyers. Also, conservationists, teachers, students, and specialists in recreation, waste disposal, and pollution control can use the surveys to help them understand, protect, or enhance the environment.

Various land use regulations of Federal, State, and local governments may impose special restrictions on land use or land treatment. Soil surveys identify soil properties that are used in making various land use or land treatment decisions. The information is intended to help the land users identify and reduce the effects of soil limitations on various land uses. The landowner or user is responsible for identifying and complying with existing laws and regulations.

Although soil survey information can be used for general farm, local, and wider area planning, onsite investigation is needed to supplement this information in some cases. Examples include soil quality assessments (<http://www.nrcs.usda.gov/wps/portal/nrcs/main/soils/health/>) and certain conservation and engineering applications. For more detailed information, contact your local USDA Service Center (<https://offices.sc.egov.usda.gov/locator/app?agency=nrcs>) or your NRCS State Soil Scientist ([http://www.nrcs.usda.gov/wps/portal/nrcs/detail/soils/contactus/?cid=nrcs142p2\\_053951](http://www.nrcs.usda.gov/wps/portal/nrcs/detail/soils/contactus/?cid=nrcs142p2_053951)).

Great differences in soil properties can occur within short distances. Some soils are seasonally wet or subject to flooding. Some are too unstable to be used as a foundation for buildings or roads. Clayey or wet soils are poorly suited to use as septic tank absorption fields. A high water table makes a soil poorly suited to basements or underground installations.

The National Cooperative Soil Survey is a joint effort of the United States Department of Agriculture and other Federal agencies, State agencies including the Agricultural Experiment Stations, and local agencies. The Natural Resources Conservation Service (NRCS) has leadership for the Federal part of the National Cooperative Soil Survey.

Information about soils is updated periodically. Updated information is available through the NRCS Web Soil Survey, the site for official soil survey information.

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# How Soil Surveys Are Made

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Soil surveys are made to provide information about the soils and miscellaneous areas in a specific area. They include a description of the soils and miscellaneous areas and their location on the landscape and tables that show soil properties and limitations affecting various uses. Soil scientists observed the steepness, length, and shape of the slopes; the general pattern of drainage; the kinds of crops and native plants; and the kinds of bedrock. They observed and described many soil profiles. A soil profile is the sequence of natural layers, or horizons, in a soil. The profile extends from the surface down into the unconsolidated material in which the soil formed or from the surface down to bedrock. The unconsolidated material is devoid of roots and other living organisms and has not been changed by other biological activity.

Currently, soils are mapped according to the boundaries of major land resource areas (MLRAs). MLRAs are geographically associated land resource units that share common characteristics related to physiography, geology, climate, water resources, soils, biological resources, and land uses (USDA, 2006). Soil survey areas typically consist of parts of one or more MLRA.

The soils and miscellaneous areas in a survey area occur in an orderly pattern that is related to the geology, landforms, relief, climate, and natural vegetation of the area. Each kind of soil and miscellaneous area is associated with a particular kind of landform or with a segment of the landform. By observing the soils and miscellaneous areas in the survey area and relating their position to specific segments of the landform, a soil scientist develops a concept, or model, of how they were formed. Thus, during mapping, this model enables the soil scientist to predict with a considerable degree of accuracy the kind of soil or miscellaneous area at a specific location on the landscape.

Commonly, individual soils on the landscape merge into one another as their characteristics gradually change. To construct an accurate soil map, however, soil scientists must determine the boundaries between the soils. They can observe only a limited number of soil profiles. Nevertheless, these observations, supplemented by an understanding of the soil-vegetation-landscape relationship, are sufficient to verify predictions of the kinds of soil in an area and to determine the boundaries.

Soil scientists recorded the characteristics of the soil profiles that they studied. They noted soil color, texture, size and shape of soil aggregates, kind and amount of rock fragments, distribution of plant roots, reaction, and other features that enable them to identify soils. After describing the soils in the survey area and determining their properties, the soil scientists assigned the soils to taxonomic classes (units). Taxonomic classes are concepts. Each taxonomic class has a set of soil characteristics with precisely defined limits. The classes are used as a basis for comparison to classify soils systematically. Soil taxonomy, the system of taxonomic classification used in the United States, is based mainly on the kind and character of soil properties and the arrangement of horizons within the profile. After the soil

## Custom Soil Resource Report

scientists classified and named the soils in the survey area, they compared the individual soils with similar soils in the same taxonomic class in other areas so that they could confirm data and assemble additional data based on experience and research.

The objective of soil mapping is not to delineate pure map unit components; the objective is to separate the landscape into landforms or landform segments that have similar use and management requirements. Each map unit is defined by a unique combination of soil components and/or miscellaneous areas in predictable proportions. Some components may be highly contrasting to the other components of the map unit. The presence of minor components in a map unit in no way diminishes the usefulness or accuracy of the data. The delineation of such landforms and landform segments on the map provides sufficient information for the development of resource plans. If intensive use of small areas is planned, onsite investigation is needed to define and locate the soils and miscellaneous areas.

Soil scientists make many field observations in the process of producing a soil map. The frequency of observation is dependent upon several factors, including scale of mapping, intensity of mapping, design of map units, complexity of the landscape, and experience of the soil scientist. Observations are made to test and refine the soil-landscape model and predictions and to verify the classification of the soils at specific locations. Once the soil-landscape model is refined, a significantly smaller number of measurements of individual soil properties are made and recorded. These measurements may include field measurements, such as those for color, depth to bedrock, and texture, and laboratory measurements, such as those for content of sand, silt, clay, salt, and other components. Properties of each soil typically vary from one point to another across the landscape.

Observations for map unit components are aggregated to develop ranges of characteristics for the components. The aggregated values are presented. Direct measurements do not exist for every property presented for every map unit component. Values for some properties are estimated from combinations of other properties.

While a soil survey is in progress, samples of some of the soils in the area generally are collected for laboratory analyses and for engineering tests. Soil scientists interpret the data from these analyses and tests as well as the field-observed characteristics and the soil properties to determine the expected behavior of the soils under different uses. Interpretations for all of the soils are field tested through observation of the soils in different uses and under different levels of management. Some interpretations are modified to fit local conditions, and some new interpretations are developed to meet local needs. Data are assembled from other sources, such as research information, production records, and field experience of specialists. For example, data on crop yields under defined levels of management are assembled from farm records and from field or plot experiments on the same kinds of soil.

Predictions about soil behavior are based not only on soil properties but also on such variables as climate and biological activity. Soil conditions are predictable over long periods of time, but they are not predictable from year to year. For example, soil scientists can predict with a fairly high degree of accuracy that a given soil will have a high water table within certain depths in most years, but they cannot predict that a high water table will always be at a specific level in the soil on a specific date.

After soil scientists located and identified the significant natural bodies of soil in the survey area, they drew the boundaries of these bodies on aerial photographs and

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identified each as a specific map unit. Aerial photographs show trees, buildings, fields, roads, and rivers, all of which help in locating boundaries accurately.

# Soil Map

---

The soil map section includes the soil map for the defined area of interest, a list of soil map units on the map and extent of each map unit, and cartographic symbols displayed on the map. Also presented are various metadata about data used to produce the map, and a description of each soil map unit.



Custom Soil Resource Report  
Soil Map







































Map Scale: 1:624 if printed on A landscape (11" x 8.5") sheet.



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
- Water Features**
  -  Streams and Canals
- Transportation**
  -  Rails
  -  Interstate Highways
  -  US Routes
  -  Major Roads
  -  Local Roads
- Background**
  -  Aerial Photography
- Other**
  -  Spoil Area
  -  Stony Spot
  -  Very Stony Spot
  -  Wet Spot
  -  Other
  -  Special Line Features

## 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: Clackamas County Area, Oregon  
 Survey Area Data: Version 19, Sep 14, 2022

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

Date(s) aerial images were photographed: Apr 16, 2021—Apr 18, 2021

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
1A	Aloha silt loam, 0 to 3 percent slopes	0.8	40.5%
91B	Woodburn silt loam, 3 to 8 percent slopes	1.2	58.9%
2225A	Huberly silt loam, 0 to 3 percent slopes	0.0	0.6%
<b>Totals for Area of Interest</b>		<b>2.0</b>	<b>100.0%</b>

## Map Unit Descriptions

The map units delineated on the detailed soil maps in a soil survey represent the soils or miscellaneous areas in the survey area. The map unit descriptions, along with the maps, can be used to determine the composition and properties of a unit.

A map unit delineation on a soil map represents an area dominated by one or more major kinds of soil or miscellaneous areas. A map unit is identified and named according to the taxonomic classification of the dominant soils. Within a taxonomic class there are precisely defined limits for the properties of the soils. On the landscape, however, the soils are natural phenomena, and they have the characteristic variability of all natural phenomena. Thus, the range of some observed properties may extend beyond the limits defined for a taxonomic class. Areas of soils of a single taxonomic class rarely, if ever, can be mapped without including areas of other taxonomic classes. Consequently, every map unit is made up of the soils or miscellaneous areas for which it is named and some minor components that belong to taxonomic classes other than those of the major soils.

Most minor soils have properties similar to those of the dominant soil or soils in the map unit, and thus they do not affect use and management. These are called noncontrasting, or similar, components. They may or may not be mentioned in a particular map unit description. Other minor components, however, have properties and behavioral characteristics divergent enough to affect use or to require different management. These are called contrasting, or dissimilar, components. They generally are in small areas and could not be mapped separately because of the scale used. Some small areas of strongly contrasting soils or miscellaneous areas are identified by a special symbol on the maps. If included in the database for a given area, the contrasting minor components are identified in the map unit descriptions along with some characteristics of each. A few areas of minor components may not have been observed, and consequently they are not mentioned in the descriptions, especially where the pattern was so complex that it was impractical to make enough observations to identify all the soils and miscellaneous areas on the landscape.

The presence of minor components in a map unit in no way diminishes the usefulness or accuracy of the data. The objective of mapping is not to delineate pure taxonomic classes but rather to separate the landscape into landforms or

## Custom Soil Resource Report

landform segments that have similar use and management requirements. The delineation of such segments on the map provides sufficient information for the development of resource plans. If intensive use of small areas is planned, however, onsite investigation is needed to define and locate the soils and miscellaneous areas.

An identifying symbol precedes the map unit name in the map unit descriptions. Each description includes general facts about the unit and gives important soil properties and qualities.

Soils that have profiles that are almost alike make up a *soil series*. Except for differences in texture of the surface layer, all the soils of a series have major horizons that are similar in composition, thickness, and arrangement.

Soils of one series can differ in texture of the surface layer, slope, stoniness, salinity, degree of erosion, and other characteristics that affect their use. On the basis of such differences, a soil series is divided into *soil phases*. Most of the areas shown on the detailed soil maps are phases of soil series. The name of a soil phase commonly indicates a feature that affects use or management. For example, Alpha silt loam, 0 to 2 percent slopes, is a phase of the Alpha series.

Some map units are made up of two or more major soils or miscellaneous areas. These map units are complexes, associations, or undifferentiated groups.

A *complex* consists of two or more soils or miscellaneous areas in such an intricate pattern or in such small areas that they cannot be shown separately on the maps. The pattern and proportion of the soils or miscellaneous areas are somewhat similar in all areas. Alpha-Beta complex, 0 to 6 percent slopes, is an example.

An *association* is made up of two or more geographically associated soils or miscellaneous areas that are shown as one unit on the maps. Because of present or anticipated uses of the map units in the survey area, it was not considered practical or necessary to map the soils or miscellaneous areas separately. The pattern and relative proportion of the soils or miscellaneous areas are somewhat similar. Alpha-Beta association, 0 to 2 percent slopes, is an example.

An *undifferentiated group* is made up of two or more soils or miscellaneous areas that could be mapped individually but are mapped as one unit because similar interpretations can be made for use and management. The pattern and proportion of the soils or miscellaneous areas in a mapped area are not uniform. An area can be made up of only one of the major soils or miscellaneous areas, or it can be made up of all of them. Alpha and Beta soils, 0 to 2 percent slopes, is an example.

Some surveys include *miscellaneous areas*. Such areas have little or no soil material and support little or no vegetation. Rock outcrop is an example.

## Clackamas County Area, Oregon

### 1A—Aloha silt loam, 0 to 3 percent slopes

#### Map Unit Setting

*National map unit symbol:* 2231  
*Elevation:* 150 to 400 feet  
*Mean annual precipitation:* 40 to 60 inches  
*Mean annual air temperature:* 52 to 54 degrees F  
*Frost-free period:* 165 to 210 days  
*Farmland classification:* Prime farmland if drained

#### Map Unit Composition

*Aloha and similar soils:* 85 percent  
*Minor components:* 5 percent  
*Estimates are based on observations, descriptions, and transects of the mapunit.*

#### Description of Aloha

##### Setting

*Landform:* Terraces  
*Landform position (three-dimensional):* Tread  
*Down-slope shape:* Linear  
*Across-slope shape:* Linear  
*Parent material:* Stratified glaciolacustrine deposits

##### Typical profile

*H1 - 0 to 8 inches:* silt loam  
*H2 - 8 to 51 inches:* silt loam  
*H3 - 51 to 80 inches:* silt loam

##### Properties and qualities

*Slope:* 0 to 3 percent  
*Depth to restrictive feature:* More than 80 inches  
*Drainage class:* Somewhat poorly drained  
*Capacity of the most limiting layer to transmit water (Ksat):* Moderately high (0.20 to 0.57 in/hr)  
*Depth to water table:* About 18 to 24 inches  
*Frequency of flooding:* None  
*Frequency of ponding:* None  
*Available water supply, 0 to 60 inches:* High (about 11.9 inches)

##### Interpretive groups

*Land capability classification (irrigated):* 2w  
*Land capability classification (nonirrigated):* 2w  
*Hydrologic Soil Group:* C/D  
*Ecological site:* R002XC007OR - Valley Swale Group  
*Forage suitability group:* Somewhat Poorly Drained (G002XY005OR)  
*Other vegetative classification:* Somewhat Poorly Drained (G002XY005OR)  
*Hydric soil rating:* No

#### Minor Components

##### Huberly

*Percent of map unit:* 3 percent  
*Landform:* Swales on terraces

## Custom Soil Resource Report

*Landform position (three-dimensional):* Tread  
*Down-slope shape:* Linear  
*Across-slope shape:* Linear  
*Other vegetative classification:* Poorly Drained (G002XY006OR)  
*Hydric soil rating:* Yes

### **Dayton**

*Percent of map unit:* 2 percent  
*Landform:* Terraces  
*Landform position (three-dimensional):* Tread  
*Down-slope shape:* Linear  
*Across-slope shape:* Linear  
*Other vegetative classification:* Poorly Drained (G002XY006OR)  
*Hydric soil rating:* Yes

## **91B—Woodburn silt loam, 3 to 8 percent slopes**

### **Map Unit Setting**

*National map unit symbol:* 227z  
*Elevation:* 150 to 400 feet  
*Mean annual precipitation:* 40 to 50 inches  
*Mean annual air temperature:* 52 to 54 degrees F  
*Frost-free period:* 165 to 210 days  
*Farmland classification:* All areas are prime farmland

### **Map Unit Composition**

*Woodburn and similar soils:* 90 percent  
*Minor components:* 4 percent  
*Estimates are based on observations, descriptions, and transects of the mapunit.*

### **Description of Woodburn**

#### **Setting**

*Landform:* Terraces  
*Landform position (three-dimensional):* Tread  
*Down-slope shape:* Linear  
*Across-slope shape:* Linear  
*Parent material:* Stratified glaciolacustrine deposits

#### **Typical profile**

*H1 - 0 to 16 inches:* silt loam  
*H2 - 16 to 38 inches:* silty clay loam  
*H3 - 38 to 60 inches:* silt loam

#### **Properties and qualities**

*Slope:* 3 to 8 percent  
*Depth to restrictive feature:* More than 80 inches  
*Drainage class:* Moderately well drained  
*Capacity of the most limiting layer to transmit water (Ksat):* Moderately low to moderately high (0.06 to 0.20 in/hr)  
*Depth to water table:* About 25 to 32 inches

## Custom Soil Resource Report

*Frequency of flooding:* None  
*Frequency of ponding:* None  
*Available water supply, 0 to 60 inches:* High (about 12.0 inches)

### Interpretive groups

*Land capability classification (irrigated):* 2e  
*Land capability classification (nonirrigated):* 2e  
*Hydrologic Soil Group:* C  
*Ecological site:* R002XC008OR - Valley Terrace Group  
*Forage suitability group:* Moderately Well Drained < 15% Slopes (G002XY004OR)  
*Other vegetative classification:* Moderately Well Drained < 15% Slopes (G002XY004OR)  
*Hydric soil rating:* No

### Minor Components

#### Huberly

*Percent of map unit:* 2 percent  
*Landform:* Swales on terraces  
*Landform position (three-dimensional):* Tread  
*Down-slope shape:* Linear  
*Across-slope shape:* Linear  
*Other vegetative classification:* Poorly Drained (G002XY006OR)  
*Hydric soil rating:* Yes

#### Aquolls

*Percent of map unit:* 1 percent  
*Landform:* Flood plains  
*Hydric soil rating:* Yes

#### Dayton

*Percent of map unit:* 1 percent  
*Landform:* Terraces  
*Landform position (three-dimensional):* Tread  
*Down-slope shape:* Linear  
*Across-slope shape:* Linear  
*Other vegetative classification:* Poorly Drained (G002XY006OR)  
*Hydric soil rating:* Yes

## 2225A—Huberly silt loam, 0 to 3 percent slopes

### Map Unit Setting

*National map unit symbol:* 2sv3y  
*Elevation:* 150 to 260 feet  
*Mean annual precipitation:* 39 to 51 inches  
*Mean annual air temperature:* 52 to 54 degrees F  
*Frost-free period:* 165 to 210 days  
*Farmland classification:* Prime farmland if drained

### Map Unit Composition

*Huberly and similar soils:* 90 percent

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*Minor components: 3 percent*

*Estimates are based on observations, descriptions, and transects of the mapunit.*

### Description of Huberly

#### Setting

*Landform: Swales on terraces*

*Landform position (three-dimensional): Tread*

*Down-slope shape: Linear*

*Across-slope shape: Concave*

*Parent material: Silty glaciolacustrine deposits*

#### Typical profile

*A - 0 to 8 inches: silt loam*

*BAg - 8 to 15 inches: silt loam*

*Btg - 15 to 25 inches: silt loam*

*2Btx1 - 25 to 38 inches: silt loam*

*2Btx2 - 38 to 59 inches: silt loam*

#### Properties and qualities

*Slope: 0 to 3 percent*

*Depth to restrictive feature: More than 80 inches*

*Drainage class: Poorly drained*

*Capacity of the most limiting layer to transmit water (Ksat): Low to moderately low  
(0.01 to 0.01 in/hr)*

*Depth to water table: About 0 to 8 inches*

*Frequency of flooding: None*

*Frequency of ponding: None*

*Available water supply, 0 to 60 inches: Low (about 5.7 inches)*

#### Interpretive groups

*Land capability classification (irrigated): 3w*

*Land capability classification (nonirrigated): 3w*

*Hydrologic Soil Group: C/D*

*Ecological site: R002XC007OR - Valley Swale Group*

*Forage suitability group: Poorly Drained (G002XY006OR)*

*Other vegetative classification: Poorly Drained (G002XY006OR)*

*Hydric soil rating: Yes*

### Minor Components

#### Verboort

*Percent of map unit: 3 percent*

*Landform: Terraces*

*Landform position (three-dimensional): Tread*

*Down-slope shape: Concave*

*Across-slope shape: Concave*

*Other vegetative classification: Poorly Drained (G002XY006OR)*

*Hydric soil rating: Yes*



# **Soil Information for All Uses**

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## **Soil Properties and Qualities**

The Soil Properties and Qualities section includes various soil properties and qualities displayed as thematic maps with a summary table for the soil map units in the selected area of interest. A single value or rating for each map unit is generated by aggregating the interpretive ratings of individual map unit components. This aggregation process is defined for each property or quality.

## **Soil Qualities and Features**

Soil qualities are behavior and performance attributes that are not directly measured, but are inferred from observations of dynamic conditions and from soil properties. Example soil qualities include natural drainage, and frost action. Soil features are attributes that are not directly part of the soil. Example soil features include slope and depth to restrictive layer. These features can greatly impact the use and management of the soil.

## **Hydrologic Soil Group**

Hydrologic soil groups are based on estimates of runoff potential. Soils are assigned to one of four groups according to the rate of water infiltration when the soils are not protected by vegetation, are thoroughly wet, and receive precipitation from long-duration storms.

The soils in the United States are assigned to four groups (A, B, C, and D) and three dual classes (A/D, B/D, and C/D). The groups are defined as follows:

Group A. Soils having a high infiltration rate (low runoff potential) when thoroughly wet. These consist mainly of deep, well drained to excessively drained sands or gravelly sands. These soils have a high rate of water transmission.

Group B. Soils having a moderate infiltration rate when thoroughly wet. These consist chiefly of moderately deep or deep, moderately well drained or well drained soils that have moderately fine texture to moderately coarse texture. These soils have a moderate rate of water transmission.

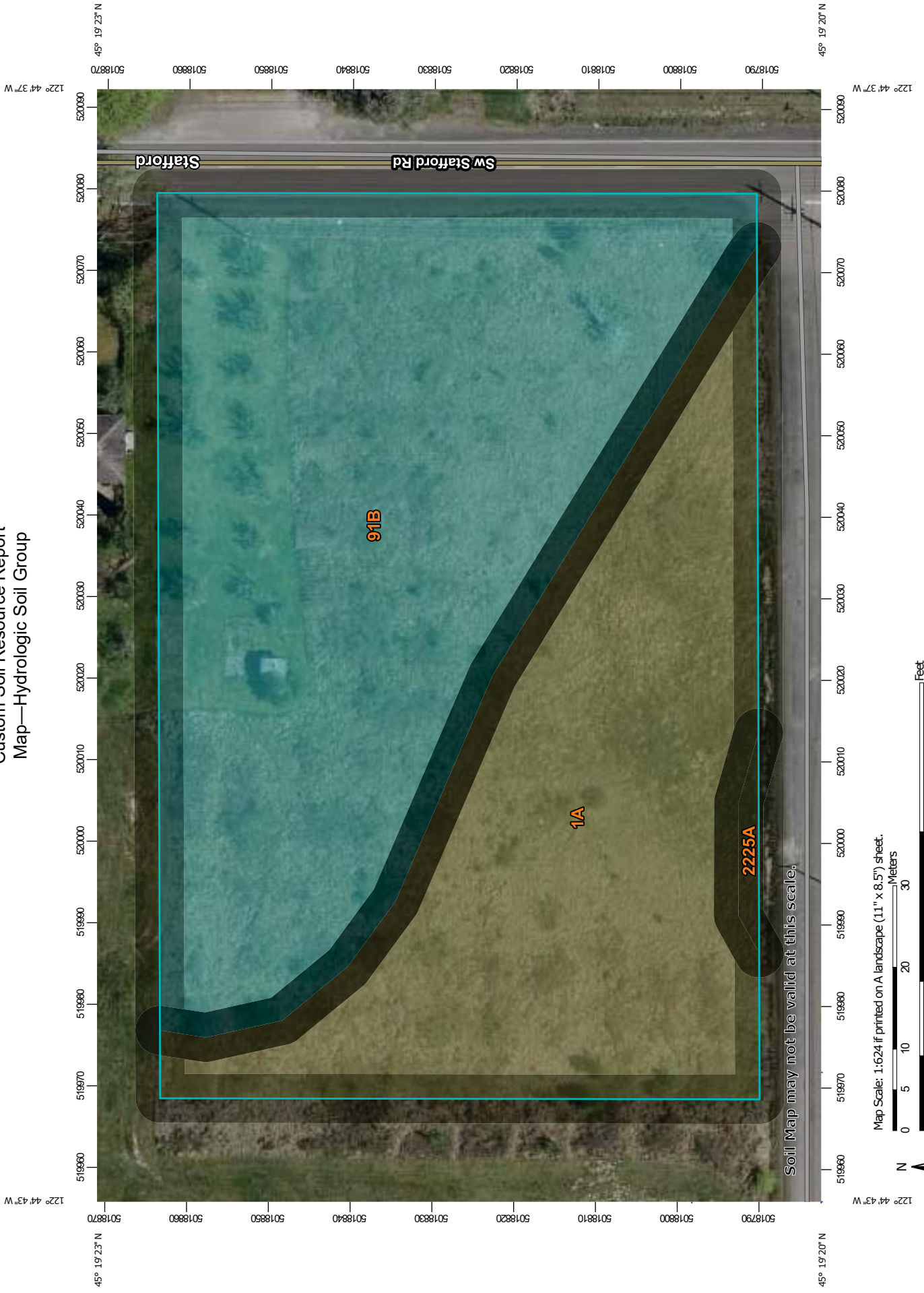
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Group C. Soils having a slow infiltration rate when thoroughly wet. These consist chiefly of soils having a layer that impedes the downward movement of water or soils of moderately fine texture or fine texture. These soils have a slow rate of water transmission.

Group D. Soils having a very slow infiltration rate (high runoff potential) when thoroughly wet. These consist chiefly of clays that have a high shrink-swell potential, soils that have a high water table, soils that have a claypan or clay layer at or near the surface, and soils that are shallow over nearly impervious material. These soils have a very slow rate of water transmission.

If a soil is assigned to a dual hydrologic group (A/D, B/D, or C/D), the first letter is for drained areas and the second is for undrained areas. Only the soils that in their natural condition are in group D are assigned to dual classes.

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Map—Hydrologic Soil Group



Map Scale: 1:624 if printed on A landscape (11" x 8.5") sheet.



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 Rating Polygons**
    - A
    - A/D
    - B
    - B/D
    - C
    - C/D
    - D
    - Not rated or not available
  - Soil Rating Lines**
    - A
    - A/D
    - B
    - B/D
    - C
    - C/D
    - D
    - Not rated or not available
  - Soil Rating Points**
    - A
    - A/D
    - B
    - B/D

## 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: Clackamas County Area, Oregon  
 Survey Area Data: Version 19, Sep 14, 2022

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

Date(s) aerial images were photographed: Apr 16, 2021—Apr 18, 2021

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.

**Table—Hydrologic Soil Group**

Map unit symbol	Map unit name	Rating	Acres in AOI	Percent of AOI
1A	Aloha silt loam, 0 to 3 percent slopes	C/D	0.8	40.5%
91B	Woodburn silt loam, 3 to 8 percent slopes	C	1.2	58.9%
2225A	Huberly silt loam, 0 to 3 percent slopes	C/D	0.0	0.6%
<b>Totals for Area of Interest</b>			<b>2.0</b>	<b>100.0%</b>

**Rating Options—Hydrologic Soil Group**

*Aggregation Method: Dominant Condition*

*Component Percent Cutoff: None Specified*

*Tie-break Rule: Higher*

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United States Department of Agriculture, Natural Resources Conservation Service. 2006. Land resource regions and major land resource areas of the United States, the Caribbean, and the Pacific Basin. U.S. Department of Agriculture Handbook 296. [http://www.nrcs.usda.gov/wps/portal/nrcs/detail/national/soils/?cid=nrcs142p2\\_053624](http://www.nrcs.usda.gov/wps/portal/nrcs/detail/national/soils/?cid=nrcs142p2_053624)

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## **Appendix G: Relevant Information**

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**2015**

**STORMWATER & SURFACE WATER  
DESIGN & CONSTRUCTION STANDARDS**

**SECTION 3 - PUBLIC WORKS STANDARDS**



**Community Development Department  
29799 SW Town Center Loop E  
Wilsonville, OR 97070**

***Revised December 2015***

allowable maximum density to use in the upstream basin analysis for ultimate development potential and conveyance system sizing.

#### **301.1.12 Extension of Public Storm Sewer Systems**

- a. The extension or upsizing of the public stormwater systems in excess of 12 inches in diameter (or equivalent flows) or as shown in the Wilsonville Stormwater Master Plan to serve the ultimate development density of the contributing area shall be done by the property owner or permit applicant and may be subject to applicable System Development Charge (SDC) credits.
- b. The City reserves the right to perform the work or cause it to be performed and bill the owner for the cost of the work or to pursue special assessment proceedings.
- c. The public storm sewer system shall extend to the most distant parcel boundary and be designed at a size and grade to facilitate future extension to serve development of the entire contributing area.
- d. Where public infrastructure improvements paid for by the property owner or permit applicant directly benefit adjacent properties, the property owner or permit applicant may pursue establishment of a reimbursement district per Section 3.116 of the City Code.
- e. The City's authorized representative may require a storm pipeline that serves or may serve more than one property to be a public system.

#### **301.1.13 Conveyance System Hydraulic Standards**

- a. The conveyance system shall be designed to convey and contain at least the peak runoff for the 25-year design storm.
- b. Structures for proposed pipe systems must be demonstrated to provide a minimum of 1 foot of freeboard between the hydraulic grade line and the top of the structure or finish grade above pipe for the 25-year post-development peak rate of runoff.
- c. Design surcharge in new pipe systems shall not be allowed if it will cause flooding in a habitable structure, including below-floor crawl spaces.
- d. The 25-year design shall be supplemented with an overland conveyance component demonstrating how a 100-year event will be accommodated. The overland component shall not be allowed to flow through or inundate an existing building.
- e. Flows in streets during the 25-year event shall not run deeper than 4 inches against the curb or extend more than 2 feet into the travel lane.
- f. Open channel systems shall be designed for minimum 1-foot freeboard from bank full, provided that no structures are impacted by the design water surface elevation.

#### **301.1.14 Storm Systems and Fish Passage**

For pipe systems that convey flows from a stream or through sensitive areas, a local representative of ODFW or other applicable state or federal agency shall be contacted to

Protecting undisturbed, uncompacted areas from construction activities provides more rainfall interception, evapo-transpiration and runoff rate attenuation than clearing and replanting, even with soil amendments. On the Preliminary Site Plan, identify areas that will not be cleared during construction.

(c) Minimize Soil Compaction

Avoid any construction activity that could cause soil compaction in areas designated for stormwater management facilities to preserve filtration and infiltration characteristics of the soil. Also avoid soil compaction in natural resource areas, and mitigation and/or re-vegetation areas. Delineate these areas on the Preliminary Site Plan and protect them during construction with orange construction fencing.

(d) Minimize Imperviousness

Complete and attach the Impervious Area Threshold Determination Form. The form allows for impervious area reduction credits for use of porous pavement, green roofs, tree preservation and tree planting (tree credits apply to non-single family developments only). Identify proposed impervious area reduction methods, and show them on the Preliminary Site Plan.

#### 4. Proposed Stormwater Management Strategy

Given suitable site and soil conditions, the City requires that development shall incorporate LID facilities to infiltrate stormwater runoff to the Maximum Extent Practicable (MEP) to recharge groundwater and mimic pre-development hydrologic conditions. LID facilities will be designed and sized according to the soil classification and/or infiltration testing rate. Onsite soil characteristics may require a geotechnical report to address soil conditions, infiltration rates and groundwater to incorporate an infiltration strategy into the stormwater management plan to the MEP.

For the *Site Assessment and Planning Checklist*, the applicant must identify and select a proposed stormwater management strategy from the choices below.

- (a) LID facilities to the MEP – Check this option if LID facilities will be utilized to the MEP to address the water quality and flow control requirements of the site. LID facilities must be sized according to the design requirements in [Section 301.4.00](#), “Stormwater Management Facility Selection and Design” utilizing either the BMP Sizing Tool or the Engineered Method. MEP is defined as installing LID facilities with a surface area of at least 10% of the total new or redeveloped impervious area. Approved stormwater management facilities that qualify as LID facilities are defined in [Section 301.4.00](#).
- (b) Onsite retention of the 10-year design storm – Where possible, retain and infiltrate all stormwater runoff up to and including the 10-year storm onsite using LID facilities. Infiltration of the full 10-year design storm is assumed to satisfy both water quality and flow control requirements of [Section 301.4.00](#), “Stormwater Management Facility Selection and Design”.

- (c) Limiting conditions for LID facilities - The following limiting conditions restrict the practicality of using onsite infiltration and may require the use of lined, non-infiltrating stormwater management facilities or underground facilities to meet stormwater management requirements. When sites have limiting conditions, a report is required to document one of the following:
- (1) Stormwater management facilities will be located on fill.
  - (2) Site areas with steep slopes ( $\geq 20\%$ ) and/or slope stability concerns (geotechnical engineering or geologist report and City approval required for infiltration facilities on moderate slopes of 10-20%).
  - (3) Sites in areas of seasonal high groundwater table (for site planning submittal, sites with jurisdictional wetlands or FEMA floodplains may be required to perform a seasonal high groundwater table assessment and determine that the seasonal groundwater table is below the proposed bottom elevation of stormwater infiltration facilities).
  - (4) Sites with contaminated soils (sites that have contaminated soils conditions must be evaluated by the Oregon Department of Environmental Quality (ODEQ) and/or the Environmental Protection Agency to determine if areas on the property are suitable for infiltration without the risk of mobilizing contaminants in the soil or groundwater. Documentation showing contamination assessment and determination must be submitted to the City at the time of application).
  - (5) There is a conflict with required source controls for high-risk sites (a geotechnical report is not required to document this limiting condition, but approval from the City is required to install lined and/or underground facilities in place of LID facilities).

## 5. Facility Selection/Sizing

After selecting a stormwater management strategy, applicants shall indicate which stormwater management facilities are proposed for the site based on the results of the site assessment and planning process. The BMP Sizing Tool shall be used to calculate the size of the facilities and the BMP Sizing Tool report shall be included as part of the application. All proposed impervious area reduction methods and proposed stormwater management facilities shall be shown on the Preliminary Site Plan.

### 301.3.00 SUBMITTAL REQUIREMENTS

The Developer's engineer shall submit sufficient supporting information as outlined below to justify the proposed stormwater management design meets all the provisions within these standards and the land use conditions of approval. It is the design engineer's responsibility to ensure that engineering plans are sufficiently clear and concise to construct the project in proper sequence, using specified methods and materials, with sufficient dimensions to fulfill the intent of these design standards. A Storm Drainage Report as outlined in [Section 301.3.02](#), "Storm Drainage Report", is required to be prepared and submitted with the design plans.

### **301.4.01 Impervious Area Used in Design**

- a. Stormwater management facilities are required when proposed development establishes or increases the impervious surface area by more than 5,000 square feet. Development includes new development, redevelopment, and/or partial redevelopment.
- b. For single-family and duplex residential subdivisions, stormwater management facilities shall be sized for all impervious areas created by the subdivision, including all residences on individual lots at the current rate of 2,750 square feet of impervious surface area per dwelling unit.
- c. For all developments other than single-family and duplex dwellings, including row houses and condominiums, the sizing of stormwater management facilities shall be based on the impervious area to be created by the development, including structures and all roads and impervious areas. Impervious surfaces shall be based on building permits, construction plans, or other appropriate methods of measurement deemed reliable by the City's authorized representative.
- d. The City encourages design initiatives that reduce the effective impervious area. For developments other than single-family and duplex dwellings, a smaller stormwater management facility may be possible.

### **301.4.02 Criteria for Requiring a Stormwater Management Facility**

A stormwater management facility shall be constructed on site unless, in the judgment of the City's authorized representative, any of the following conditions exist:

- a. The site location, size, gradient, topography, soils, or presence of an SROZ make it impractical or ineffective to construct an on-site facility.
- b. The subbasin has a more effective, existing regional site designed to incorporate the development or which has the capacity to treat the site stormwater.
- c. The development is for construction of one- or two-family (duplex) dwellings on existing lots of record which will establish or create less than 5,000 square feet of impervious surface.

### **301.4.03 Facility Selection**

LID facilities such as planters, swales, rain gardens, ponds, and other vegetated facilities are the preferred strategy to meet the stormwater management requirements for water quality treatment and flow control. Impervious area reduction techniques, such as preservation of existing trees, retaining vegetation and open space, clustering buildings, disconnecting residential downspouts, and constructing pervious pavement and green roofs, may be used as techniques to help mitigate stormwater runoff and reduce the size of the required stormwater management facilities.

- a. The following types of stormwater management facilities can be used to meet these standards:
  1. Impervious Area Reduction Methods:

- c. **Alternate Facilities** - Applicants may propose stormwater management facilities that are not listed in **Table 3.10**. Such a proposal will require the applicant to submit a request for a modification to these standards. Alternate facilities must be sized using the Engineered Method as described in this section. An example of an alternate facility would be for the use of a drywell, infiltration trench, or other underground injection control (UIC) facility on private property. To propose a UIC on private property, the applicant would need to prepare appropriate registration information to ODEQ and submit a modification request to the City.

#### **301.4.04 Design Criteria**

Stormwater management facility design is based on meeting the City's design criteria to address LID requirements, water quality treatment standards, and flow control requirements.

- a. **LID to the MEP:** The goal is to prioritize the use of LID facilities to the MEP to mimic the natural stormwater runoff conditions of the pre-developed site and recharge the groundwater. The City's strategy to meet this goal is to incorporate LID principles in site planning and facility design.

Either one of the following two options may be used to meet the LID requirement:

1. **LID facilities to the MEP** – Utilize LID facilities to the MEP to address the water quality and flow control requirements of the site. LID facilities shall be sized according to the design requirements of this section, utilizing either the BMP Sizing Tool or the Engineered Method. When site constraints limit the surface area available for stormwater management facilities, MEP is defined as installing LID facilities with a surface area of at least 10% of the total new plus replaced impervious area.
  2. **Onsite Retention** – Retain and fully infiltrate the 10-year design storm on site using LID facilities. This is equivalent to retaining and infiltrating runoff from new impervious surface for the 3.4-inch storm over 24 hours. The facility shall fully infiltrate within 72 hours following the beginning of the storm event. Infiltration of the full 10-year design storm is assumed to satisfy both water quality and flow control requirements.
- b. **Limited Infiltration:** For sites with conditions that limit the use of infiltration (fill, steep slopes, high groundwater table, well-head protection areas, and/or contaminated soils), utilizing LID facilities may not be practicable and the applicant may use lined, non-infiltrating or underground stormwater management facilities. In such cases, the applicant shall submit documentation of limiting conditions from a geotechnical engineer or engineering geologist registered in the State of Oregon, or documentation from ODEQ.
  - c. **Water Quality Requirement:** Water quality facilities shall be designed to capture and treat 80% of the average annual runoff volume to the MEP with the goal of 70% total suspended solids (TSS) removal. In this context, MEP means less effective treatment may not be substituted when it is practicable to provide more effective treatment. The treatment volume equates to a design storm of 1.0 inch over 24 hours.

The BMP Sizing Tool addresses these water quality requirements to size stormwater management facilities.

Hydrodynamic separators, when used as a sole method of stormwater treatment, do not meet the MEP requirement for stormwater treatment effectiveness with regard to these stormwater standards.

- d. **Flow Control Requirement:** The duration of peak flow rates from post-development conditions shall be less than or equal to the duration of peak flow rates from pre-development conditions for all peak flows between 42% of the 2-year storm peak flow rate<sup>1</sup> up to the 10-year peak flow rate. A hydrologic/hydraulic analytical model capable of performing a continuous simulation of flows from local long-term rainfall data shall be used to determine the peak flow rates, recurrence intervals and durations. The BMP Sizing Tool incorporates these flow control requirements to size stormwater management facilities.

### **301.4.05 Design Methods**

This section explains the two methods accepted by the City for designing stormwater management facilities: the BMP Sizing Tool Method and the Engineered Method. To use a different method for sizing a treatment facility type not covered in these standards, applicants shall obtain approval from the City's authorized representative prior to submitting permit applications for review.

#### **a. BMP Sizing Tool Method:**

1. A BMP Sizing Tool application is available from the City to assist with the sizing of stormwater management facilities that meet the requirements of these standards. The following facilities can be sized using the tool:
  - (a) Rain Garden – Infiltration and Filtration
  - (b) Stormwater Planter – Infiltration and Filtration
  - (c) Vegetated Swale - Infiltration and Filtration
  - (d) Infiltrator
  - (e) Detention Pond
2. The detention pond option will allow credit for the utilization of upstream LID facilities.
3. The report generated by the BMP Sizing Tool shall be included with permit application submittals. The BMP Sizing Tool can be used during the initial site

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<sup>1</sup> The lower threshold of 42% of the 2-year peak flow rate for flow-duration matching is based on a 2008 study by the Oregon Department of Transportation (ODOT) titled, "Water Quantity (Flow Control) Design Storm Performance Standard." ODOT's study found that bed movement in sand-bedded streams occurs at approximately two-thirds of the bank full flow, which is assumed to be roughly equivalent to the 1.2 year discharge. ODOT's flow frequency analysis established that two thirds of the 1.2-year discharge is approximately equivalent to 42 percent of the 2-year discharge.

**Table 2-2a** Runoff curve numbers for urban areas <sup>1/</sup>

Cover description	Average percent impervious area <sup>2/</sup>	Curve numbers for hydrologic soil group			
		A	B	C	D
<b>Fully developed urban areas (vegetation established)</b>					
Open space (lawns, parks, golf courses, cemeteries, etc.) <sup>3/</sup> :					
Poor condition (grass cover < 50%) .....		68	79	86	89
Fair condition (grass cover 50% to 75%) .....		49	69	79	84
Good condition (grass cover > 75%) .....		39	61	74	80
Impervious areas:					
Paved parking lots, roofs, driveways, etc. (excluding right-of-way) .....		98	98	98	98
Streets and roads:					
Paved; curbs and storm sewers (excluding right-of-way) .....		98	98	98	98
Paved; open ditches (including right-of-way) .....		83	89	92	93
Gravel (including right-of-way) .....		76	85	89	91
Dirt (including right-of-way) .....		72	82	87	89
Western desert urban areas:					
Natural desert landscaping (pervious areas only) <sup>4/</sup> .....		63	77	85	88
Artificial desert landscaping (impervious weed barrier, desert shrub with 1- to 2-inch sand or gravel mulch and basin borders) .....		96	96	96	96
Urban districts:					
Commercial and business .....	85	89	92	94	95
Industrial .....	72	81	88	91	93
Residential districts by average lot size:					
1/8 acre or less (town houses) .....	65	77	85	90	92
1/4 acre .....	38	61	75	83	87
1/3 acre .....	30	57	72	81	86
1/2 acre .....	25	54	70	80	85
1 acre .....	20	51	68	79	84
2 acres .....	12	46	65	77	82

**Developing urban areas**

Newly graded areas  
(pervious areas only, no vegetation) <sup>5/</sup> .....

	77	86	91	94
--	----	----	----	----

Idle lands (CN's are determined using cover types  
similar to those in table 2-2c).

<sup>1</sup> Average runoff condition, and  $I_a = 0.2S$ .

<sup>2</sup> The average percent impervious area shown was used to develop the composite CN's. Other assumptions are as follows: impervious areas are directly connected to the drainage system, impervious areas have a CN of 98, and pervious areas are considered equivalent to open space in good hydrologic condition. CN's for other combinations of conditions may be computed using figure 2-3 or 2-4.

<sup>3</sup> CN's shown are equivalent to those of pasture. Composite CN's may be computed for other combinations of open space cover type.

<sup>4</sup> Composite CN's for natural desert landscaping should be computed using figures 2-3 or 2-4 based on the impervious area percentage (CN = 98) and the pervious area CN. The pervious area CN's are assumed equivalent to desert shrub in poor hydrologic condition.

<sup>5</sup> Composite CN's to use for the design of temporary measures during grading and construction should be computed using figure 2-3 or 2-4 based on the degree of development (impervious area percentage) and the CN's for the newly graded pervious areas.



**Table 2-2b** Runoff curve numbers for cultivated agricultural lands <sup>1/</sup>

Cover description			Curve numbers for hydrologic soil group			
Cover type	Treatment <sup>2/</sup>	Hydrologic condition <sup>3/</sup>	A	B	C	D
Fallow	Bare soil	—	77	86	91	94
	Crop residue cover (CR)	Poor	76	85	90	93
		Good	74	83	88	90
Row crops	Straight row (SR)	Poor	72	81	88	91
		Good	67	78	85	89
	SR + CR	Poor	71	80	87	90
		Good	64	75	82	85
	Contoured (C)	Poor	70	79	84	88
		Good	65	75	82	86
	C + CR	Poor	69	78	83	87
		Good	64	74	81	85
	Contoured & terraced (C&T)	Poor	66	74	80	82
		Good	62	71	78	81
C&T+ CR	Poor	65	73	79	81	
	Good	61	70	77	80	
Small grain	SR	Poor	65	76	84	88
		Good	63	75	83	87
	SR + CR	Poor	64	75	83	86
		Good	60	72	80	84
	C	Poor	63	74	82	85
		Good	61	73	81	84
	C + CR	Poor	62	73	81	84
		Good	60	72	80	83
	C&T	Poor	61	72	79	82
		Good	59	70	78	81
	C&T+ CR	Poor	60	71	78	81
		Good	58	69	77	80
Close-seeded or broadcast legumes or rotation meadow	SR	Poor	66	77	85	89
		Good	58	72	81	85
	C	Poor	64	75	83	85
		Good	55	69	78	83
	C&T	Poor	63	73	80	83
		Good	51	67	76	80

<sup>1</sup> Average runoff condition, and  $I_a=0.2S$

<sup>2</sup> Crop residue cover applies only if residue is on at least 5% of the surface throughout the year.

<sup>3</sup> Hydraulic condition is based on combination factors that affect infiltration and runoff, including (a) density and canopy of vegetative areas, (b) amount of year-round cover, (c) amount of grass or close-seeded legumes, (d) percent of residue cover on the land surface (good  $\geq 20\%$ ), and (e) degree of surface roughness.

Poor: Factors impair infiltration and tend to increase runoff.

Good: Factors encourage average and better than average infiltration and tend to decrease runoff.

**Table 2-2c** Runoff curve numbers for other agricultural lands <sup>1/</sup>

Cover description	Hydrologic condition	Curve numbers for hydrologic soil group			
		A	B	C	D
Pasture, grassland, or range—continuous forage for grazing. <sup>2/</sup>	Poor	68	79	86	89
	Fair	49	69	79	84
	Good	39	61	74	80
Meadow—continuous grass, protected from grazing and generally mowed for hay.	—	30	58	71	78
Brush—brush-weed-grass mixture with brush the major element. <sup>3/</sup>	Poor	48	67	77	83
	Fair	35	56	70	77
	Good	30 <sup>4/</sup>	48	65	73
Woods—grass combination (orchard or tree farm). <sup>5/</sup>	Poor	57	73	82	86
	Fair	43	65	76	82
	Good	32	58	72	79
Woods. <sup>6/</sup>	Poor	45	66	77	83
	Fair	36	60	73	79
	Good	30 <sup>4/</sup>	55	70	77
Farmsteads—buildings, lanes, driveways, and surrounding lots.	—	59	74	82	86

<sup>1</sup> Average runoff condition, and  $I_a = 0.2S$ .

<sup>2</sup> **Poor:** <50% ground cover or heavily grazed with no mulch.

**Fair:** 50 to 75% ground cover and not heavily grazed.

**Good:** > 75% ground cover and lightly or only occasionally grazed.

<sup>3</sup> **Poor:** <50% ground cover.

**Fair:** 50 to 75% ground cover.

**Good:** >75% ground cover.

<sup>4</sup> Actual curve number is less than 30; use CN = 30 for runoff computations.

<sup>5</sup> CN's shown were computed for areas with 50% woods and 50% grass (pasture) cover. Other combinations of conditions may be computed from the CN's for woods and pasture.

<sup>6</sup> **Poor:** Forest litter, small trees, and brush are destroyed by heavy grazing or regular burning.

**Fair:** Woods are grazed but not burned, and some forest litter covers the soil.

**Good:** Woods are protected from grazing, and litter and brush adequately cover the soil.

**Table 2-2d** Runoff curve numbers for arid and semiarid rangelands <sup>1/</sup>

Cover description		Curve numbers for hydrologic soil group			
Cover type	Hydrologic condition <sup>2/</sup>	A <sup>3/</sup>	B	C	D
Herbaceous—mixture of grass, weeds, and low-growing brush, with brush the minor element.	Poor		80	87	93
	Fair		71	81	89
	Good		62	74	85
Oak-aspen—mountain brush mixture of oak brush, aspen, mountain mahogany, bitter brush, maple, and other brush.	Poor		66	74	79
	Fair		48	57	63
	Good		30	41	48
Pinyon-juniper—pinyon, juniper, or both; grass understory.	Poor		75	85	89
	Fair		58	73	80
	Good		41	61	71
Sagebrush with grass understory.	Poor		67	80	85
	Fair		51	63	70
	Good		35	47	55
Desert shrub—major plants include saltbush, greasewood, creosotebush, blackbrush, bursage, palo verde, mesquite, and cactus.	Poor	63	77	85	88
	Fair	55	72	81	86
	Good	49	68	79	84

<sup>1</sup> Average runoff condition, and  $I_a = 0.2S$ . For range in humid regions, use table 2-2c.

<sup>2</sup> Poor: <30% ground cover (litter, grass, and brush overstory).

Fair: 30 to 70% ground cover.

Good: > 70% ground cover.

<sup>3</sup> Curve numbers for group A have been developed only for desert shrub.

## **Exhibit H: Geotechnical Report**

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## Geotechnical Engineering Report

Petras Homes Subdivision  
T3S R1W Section 12 Tax Lot 200  
Wilsonville, Oregon

GeoPacific Engineering, Inc. Project No. 22-6182  
June 27, 2023



Real-World Geotechnical Solutions  
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- 2 Site Plan, Exploration Locations, and Soil Group



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Updated June 27, 2023  
Project No. 22-6182

**Adrian Petras**  
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CC: Jay Gostynski, AKS Engineering & Forestry, LLC. via email: [gostynskij@aks-eng.com](mailto:gostynskij@aks-eng.com)

**SUBJECT: GEOTECHNICAL ENGINEERING REPORT  
PETRAS HOMES SUBDIVISION  
T3S R1W SECTION 12 TAX LOT 200  
WILSONVILLE, OREGON**

## 1.0 PROJECT INFORMATION

This report presents the results of a geotechnical engineering study conducted by GeoPacific Engineering, Inc. (GeoPacific) for the above-referenced project. The purpose of our investigation was to evaluate subsurface conditions at the site, and to provide geotechnical recommendations for site development. This geotechnical study was performed in accordance with GeoPacific Proposal No. P-8254, dated October 20, 2022, and your subsequent authorization of our proposal and *General Conditions for Geotechnical Services*.

<b>Site Location:</b>	SW Frog Pond Lane – T3S R1W Section 12 Tax Lot 200 Wilsonville, Oregon (Figures 1 and 2)
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<b>Developer:</b>	Petras Homes, LLC. 3673 SW Homesteader Road West Linn, Oregon 97068 Phone: (503) 998-6820
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<b>Jurisdictional Agency:</b>	City of Wilsonville, Oregon
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<b>Civil Engineer:</b>	AKS Engineering & Forestry, LLC 12965 SW Herman Road, Unit 100 Tualatin, Oregon 97062 Phone: (503) 563-6151
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## **2.0 SITE AND PROJECT DESCRIPTION**

The subject site is approximately 2 acres in size and located northwest of the intersection of SW Frog Pond Lane and SW Stafford Road in the City of Wilsonville, Clackamas County, Oregon (Figure 1). Topography is flat to very gently sloping with grades of 5 percent or less. The site is currently unimproved, and vegetation consists primarily of short grasses and sparse trees.

It is our understanding that the site will be developed for 20 attached single family homes and one detached single family home (11 parent lots and 10 child lots - 21 lots total), new streets, storm management facilities, open space, and associated underground utilities (Figure 2). The grading plan provided for our review indicates maximum cuts and fills will be approximately 3 feet.

## **3.0 REGIONAL GEOLOGIC SETTING**

The project site is located on the southwestern margin of the Portland West Hills, in the northwest portion of the Tualatin Basin. The Tualatin Basin is an east/west trending structural feature produced by broad regional down warping of the area. Regionally, the subject site lies within the Willamette Valley/Puget Sound lowland, a broad structural depression situated between the Coast Range on the west and the Cascade Range on the east. A series of discontinuous faults subdivide the Willamette Valley into a mosaic of fault-bounded, structural blocks (Yeats et al., 1996). Uplifted structural blocks form bedrock highlands, while down-warped structural blocks form sedimentary basins.

The site is underlain by the Quaternary age (last 1.6 million years) Willamette Formation, a catastrophic flood deposit associated with repeated glacial outburst flooding of the Willamette Valley (Yeats et al., 1996; Gannett and Caldwell, 1998). The last of these outburst floods occurred about 10,000 years ago. These deposits typically consist of horizontally layered, micaceous, silt to coarse sand forming poorly-defined to distinct beds less than 3 feet thick.

The Willamette Formation is underlain by the Miocene age (about 14.5 to 16.5 million years ago) Columbia River Basalt Formation, a thick sequence of lava flows that form the crystalline bedrock of Tualatin Valley (Yeats et al., 1996; Gannett and Caldwell, 1998). These basalts are dense, finely crystalline rock that is commonly fractured along blocky and columnar vertical joints. Individual basalt flow units typically range from 25 to 125 feet thick and interflow zones are typically vesicular, scoriaceous, and brecciated, and sometimes include sedimentary rocks. Typically, the upper portion of the basalt is deeply weathered and decomposed to a residual soil consisting of red-brown, clayey silt.

## **4.0 REGIONAL SEISMIC SETTING**

At least three major fault zones capable of generating damaging earthquakes are thought to exist in the vicinity of the subject site. These include the Portland Hills Fault Zone, the Gales Creek-Newberg-Mt. Angel Structural Zone, and the Cascadia Subduction Zone.

### **4.1 Portland Hills Fault Zone**

The Portland Hills Fault Zone is a series of NW-trending faults that include the central Portland Hills Fault, the western Oatfield Fault, and the eastern East Bank Fault. These faults occur in a northwest-trending zone that varies in width between 3.5 and 5.0 miles. The combined three faults vertically displace the Columbia River Basalt by 1,130 feet and appear to control thickness changes in late Pleistocene (approx. 780,000 years) sediment (Madin, 1990). The Portland Hills Fault occurs along the Willamette River at the base of the Portland Hills and is approximately 9.5 miles northeast

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Project No. 22-6182**

of the site. The Oatfield Fault occurs along the western side of the Portland Hills and is approximately 8.3 miles northeast of the site. The East Bank Fault occurs along the eastern margin of the Willamette River and is located approximately 14.3 miles northeast of the site. The accuracy of the fault mapping is stated to be within 500 meters (Wong, et al., 2000). No historical seismicity is correlated with the mapped portion of the Portland Hills Fault Zone, but in 1991 a M3.5 earthquake occurred on a NW-trending shear plane located 1.3 miles east of the fault (Yelin, 1992). Although there is no definitive evidence of recent activity, the Portland Hills Fault Zone is assumed to be potentially active (Geomatrix Consultants, 1995).

#### **4.2 Gales Creek-Newberg-Mt. Angel Structural Zone**

The Gales Creek-Newberg-Mt. Angel Structural Zone is a 50-mile-long zone of discontinuous, NW-trending faults that lies approximately 10.6 miles southwest of the subject site. These faults are recognized in the subsurface by vertical separation of the Columbia River Basalt and offset seismic reflectors in the overlying basin sediment (Yeats et al., 1996; Werner et al., 1992). A recent geologic reconnaissance and photogeologic analysis study conducted for the Scoggins Dam site in the Tualatin Basin revealed no evidence of deformed geomorphic surfaces along the structural zone (Unruh et al., 1994). No seismicity has been recorded on the Gales Creek or Newberg Faults (the faults closest to the subject site); however, these faults are considered to be potentially active because they may connect with the seismically active Mount Angel Fault and the rupture plane of the 1993 M5.6 Scotts Mills earthquake (Werner et al. 1992; Geomatrix Consultants, 1995).

#### **4.3 Cascadia Subduction Zone**

The Cascadia Subduction Zone is a 680-mile-long zone of active tectonic convergence where oceanic crust of the Juan de Fuca Plate is subducting beneath the North American continent at a rate of 4 cm per year (Goldfinger et al., 1996). A growing body of geologic evidence suggests that prehistoric subduction zone earthquakes have occurred (Atwater, 1992; Carver, 1992; Peterson et al., 1993; Geomatrix Consultants, 1995). This evidence includes: (1) buried tidal marshes recording episodic, sudden subsidence along the coast of northern California, Oregon, and Washington, (2) burial of subsided tidal marshes by tsunami wave deposits, (3) paleoliquefaction features, and (4) geodetic uplift patterns on the Oregon coast. Radiocarbon dates on buried tidal marshes indicate a recurrence interval for major subduction zone earthquakes of 250 to 650 years with the last event occurring 300 years ago (Atwater, 1992; Carver, 1992; Peterson et al., 1993; Geomatrix Consultants, 1995). The inferred seismogenic portion of the plate interface lies approximately along the Oregon Coast at depths of between 20 and 40 kilometers below the surface.

### **5.0 FIELD EXPLORATION AND SUBSURFACE CONDITIONS**

Our site-specific explorations for this report were conducted on November 28, 2022. Five exploratory test pits (designated TP-1 through TP-5) were excavated with a small sized trackhoe to depths ranging between 9.5 and 10.5 feet at the approximate locations presented on Figure 2. It should be noted that exploration locations were located in the field by pacing or taping distances from apparent property corners and other site features shown on the plans provided. As such, the locations of the explorations should be considered approximate.

A GeoPacific Engineering Geologist continuously monitored the field exploration program and logged the test pits. Soils observed in the explorations were classified in general accordance with the Unified Soil Classification System (USCS). During exploration, our geologist also noted geotechnical conditions such as soil consistency, moisture and groundwater conditions. Logs of

test pits are attached to this report. The following report sections are based on the exploration program and summarize subsurface conditions encountered at the site.

## **5.1 Soil Descriptions**

**Undocumented Fill:** Undocumented fill was not encountered in our explorations conducted for this study. We anticipate that areas of undocumented fill may be present outside our test pit locations – especially in the vicinity of the existing rights-of-way for SW Frog Pond Lane and SW Stafford Road.

**Topsoil Horizon:** The ground surface in test pits TP-1 through TP-5 was directly underlain by a moderately to highly organic topsoil horizon. The topsoil horizon consisted of brown to dark brown silt (OL-ML) that was loose and contained fine roots throughout. In test pits TP-1 through TP-5, the topsoil extended to a depth of 8 to 12 inches.

**Willamette Formation:** Underlying the topsoil horizon in explorations was clayey silt (ML) belonging to the Willamette Formation. The light brown, clayey silt was generally stiff to very stiff; however, medium stiff soils were encountered to a depth of 2 feet in test pits TP-2 and TP-3. The clayey silt transitioned to silt below a depth of approximately 3 to 4.5 feet. In test pits, material belonging to the Willamette Formation extended beyond the maximum depth of exploration (9.5 to 10.5 feet).

## **5.2 Groundwater and Soil Moisture**

On November 28, 2022, observed soil moisture conditions were generally moist to wet in areas of seepage. Groundwater seepage was encountered in test pit TP-1 at a depth of 2.5 feet. Discharge was visually estimated at less than ¼ gallons per minute. Our review of nearby water well logs indicates that static groundwater is present at a depth of approximately 55 to 90 feet below the native ground surface (Oregon Water Resources Department, 2023). It is anticipated that groundwater conditions will vary depending on the season, local subsurface conditions, changes in site utilization, and other factors. Perched groundwater may be encountered in localized areas. Seeps and springs may exist in areas not explored and may become evident during site grading. If the seasonal fluctuation of the static groundwater table underlying the subject site require detailed understanding, piezometers may be installed and periodically monitored.

## **6.0 INFILTRATION TESTING**

Soil infiltration testing was performed using the pushed pipe infiltration method in test pit TP-1. Soil in the test pit was pre-saturated for a period of over 2 hours. The water level was measured to the nearest tenth of an inch every fifteen minutes to half hour with reference to the ground surface. Falling head infiltration testing continued until rates stabilized. Table 1 presents the results of our falling head infiltration tests.

**Table 1. Summary of Infiltration Test Results**

Test Pit	Depth (feet)	Soil Type	Infiltration Rate (in/hr)	Hydraulic Head Range (inches)
TP-1	5	Silt (ML)	0	13-14

Due to the presence of fine grained soil conditions, it is our opinion that the site is not suitable for infiltration.

**7.0 HYDROLOGIC SOIL GROUP CLASSIFICATION**

Regional soils mapping by the Natural Resources Conservation Service (NRCS) indicate the presence of three soil types at the site, as tabulated in Table 2, and presented on Figure 2.

**Table 2: Soil units present at SW Frog Pond Lane Subdivision**

Map Unit Symbol	Map Unit Name	Hydrologic Soil Group per NRCS	Percentage of Site per NRCS	Results of Infiltration Testing
91B	Woodburn Silt Loam, 3 to 8 percent slopes	C	54%	0 inches per hour
1A	Aloha Silt Loam, 0 to 3 percent slopes	C/D	45%	Not Tested
2225A	Huberly Silt Loam, 0 to 3 percent slopes	C/D	1%	Not Tested

The NRCS defines type C soils as: “Soils having a slow infiltration rate when thoroughly wet. These consist chiefly of soils having a layer that impedes the downward movement of water or soils of moderately fine texture or fine texture. These soils have a slow rate of water transmission.” Type D soils are defined as “Soils having a very slow infiltration rate (high runoff potential) when thoroughly wet. These consist chiefly of clays that have a high shrink-swell potential, soils that have a high water table, soils that have a claypan or clay layer at or near the surface, and soils that are shallow over nearly impervious material. These soils have a very slow rate of water transmission.”

Based on our soil infiltration testing, on site soils exhibit low permeability. Explorations indicate the upper 3 to 4.5 feet consists primarily of clayey silt soils. We concur with NRCS C/D designation of soil group 1A (Aloha Silt Loam, 0 to 3 percent slopes). Based on soil conditions encountered, the low infiltration rates, and the perched groundwater conditions in the winter months, it is our opinion that the Woodburn Silt Loam (3 to 8 percent slopes) at the SW Frog Pond Lane Subdivision should be partially classified as Hydrologic Soil Group C (67 percent of the unit or 36 percent of the site) with the remaining 33 percent of the Woodburn Silt Loam unit (or 18 percent of the site) classified as Group D. No explorations were performed in the area mapped as Huberly Silt Loam; therefore, GeoPacific cannot evaluate that soil group’s hydrologic classification. Table 3 presents our opinion of the percentage of each soil unit’s hydrologic soil group designation and is based on explorations conducted.

**Table 3: Hydrologic Soil Group Designation based on explorations conducted by GeoPacific**

Map Unit Symbol	Map Unit Name	Hydrologic Soil Group per NRCS	Percentage of Site per NRCS	Hydrologic Soil Group Designation based on Explorations		
				C/D	C	D
1A	Aloha Silt Loam, 0 to 3 percent slopes	C/D	45%	100% of unit		
91B	Woodburn Silt Loam, 3 to 8 percent slopes	C	54%		67% of unit (36% of site)	33% of unit (18% of site)
2225A	Huberly Silt Loam, 0 to 3 percent slopes	C/D	1%	Not Evaluated		

**8.0 CONCLUSIONS AND RECOMMENDATIONS**

Our site investigation indicates that the proposed construction appears to be geotechnically feasible, provided that the recommendations of this report are incorporated into the design and construction phases of the project. Our explorations indicate the native soils on site are generally stiff to very stiff and are suitable for development utilizing conventional spread footing foundations. The primary geotechnical conditions detrimental to development include:

1. Medium stiff, near surface soils were encountered in test pits TP-2 and TP-3 in the upper 2 feet. Additional depths of excavation for street subgrade preparation and foundations may be required in areas. As an alternative, overexcavation and recompaction may be performed in dry weather.
2. Low permeability soils. Our infiltration testing indicates on site, fine grained soils are not suitable for infiltration of stormwater.

**8.1 Site Preparation Recommendations**

Areas of proposed construction and areas to receive fill should be cleared of any organic and inorganic debris. Inorganic debris and organic materials from clearing should be removed from the site. Organic-rich soils and root zones should then be stripped from construction areas of the site or where engineered fill is to be placed. Depth of stripping of existing topsoil is estimated to be approximately 6 to 9 inches across the majority of the site, however depth of organic soil layers may increase in areas. The final depth of soil removal will be determined based on a site inspection after the stripping/excavation has been performed. Stripped topsoil should be removed from areas proposed for placement of engineered fill. Any remaining topsoil should be stockpiled only in designated areas and stripping operations should be observed and documented by the geotechnical engineer or his representative.

If encountered, undocumented fills and any subsurface structures (dry wells, basements, driveway and landscaping fill, old utility lines, septic leach fields, field drain tiles, etc.) should be completely removed and the excavations backfilled with engineered fill. Field drain tiles should be intercepted at the high end of the site and routed to the storm drain system.

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We recommend that areas proposed for placement of engineered fill are scarified to a minimum depth of 12 inches and recompacted prior to placement of structural fill. Prior to placement of engineered fill, the underlying soils be over-excavated, ripped, aerated to optimum moisture content, and recompacted to project specifications for engineered fill as determined by the Modified Proctor (ASTM D1557).

Areas proposed to be left at grade may require additional over-excavation of structural areas in order to reach soils which will provide adequate bearing support for the proposed structures. Site earthwork may be impacted by shallow groundwater. Stabilization of subgrade soils will require aeration and recompaction. If subgrade soils are found to be difficult to stabilize, over-excavation, placement of granular soils, or cement treatment of subgrade soils may be feasible options. GeoPacific should be onsite to observe preparation of subgrade soil conditions prior to placement of engineered fill.

## **8.2 Engineered Fill**

In general, we anticipate that soils from planned cuts and utility trench excavations will be suitable for use as engineered fill provided they are adequately moisture conditioned prior to compacting. Imported fill material should be reviewed by GeoPacific prior to being imported to the site. Oversize material greater than 6 inches in size should not be used within 3 feet of foundation footings, and material greater than 12 inches in diameter should not be used in engineered fill.

All grading for the proposed construction should be performed as engineered grading in accordance with the applicable building code at the time of construction with the exceptions and additions noted herein. Site grading should be conducted in accordance with the requirements outlined in the 2015 International Building Code (IBC), Chapter 18 and Appendix J. Areas proposed for fill placement should be prepared as described in the *Site Preparation Recommendations* section. Surface soils should then be scarified and recompacted prior to placement of structural fill. Site preparation, soil stripping, and grading activities should be observed and documented by a geotechnical engineer or his representative. Proper test frequency and earthwork documentation usually requires daily observation and testing during stripping, rough grading, and placement of engineered fill.

Engineered fill should be compacted in horizontal lifts not exceeding 12 inches using standard compaction equipment. We recommend that engineered fill be compacted to at least 90 percent of the maximum dry density determined by ASTM D1557 (Modified Proctor) or equivalent. Field density testing should conform to ASTM D2922 and D3017, or D1556. All engineered fill should be observed and tested by the project geotechnical engineer or his representative. Typically, one density test is performed for at least every 2 vertical feet of fill placed or every 500 yd<sup>3</sup>, whichever requires more testing. Because testing is performed on an on-call basis, we recommend that the earthwork contractor be held contractually responsible for test scheduling and frequency.

Site earthwork may be impacted by shallow groundwater, soil moisture and wet weather conditions. Earthwork in wet weather would likely require extensive use of additional crushed aggregate, cement or lime treatment, or other special measures, at considerable additional cost compared to earthwork performed under dry-weather conditions.

## **8.3 Excavating Conditions and Utility Trench Backfill**

Subsurface test pit exploration indicates that, in general, utility trenches can be excavated using conventional heavy equipment such as dozers and trackhoes. Shallow, perched groundwater conditions that could cause sidewall caving in excavations have been encountered in the site

**Petras Homes Subdivision  
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vicinity. If encountered, these conditions could make utility trenching difficult, especially in the winter months, and adequate shoring should be maintained.

We anticipate that onsite soils can generally be excavated using conventional heavy equipment. Maintenance of safe working conditions, including temporary excavation stability, is the responsibility of the contractor. Actual slope inclinations at the time of construction should be determined based on safety requirements and actual soil and groundwater conditions. All temporary cuts in excess of 4 feet in height should be sloped in accordance with U.S. Occupational Safety and Health Administration (OSHA) regulations (29 CFR Part 1926) or be shored. The existing near surface native soils classify as Type B Soil and temporary excavation side slope inclinations as steep as 1H:1V may be assumed for planning purposes. These cut slope inclinations are applicable to excavations above the water table only.

Shallow, perched groundwater and saturated soils may be encountered during the wet weather season and should be anticipated in excavations and utility trenches. We anticipate that dewatering systems consisting of ditches, sumps and pumps would be adequate for control of perched groundwater. Regardless of the dewatering system used, it should be installed and operated such that in-place soils are prevented from being removed along with the groundwater. Trench bottom stabilization, such as one to two feet of compacted crushed aggregate base, may be necessary in deeper trenches.

Vibrations created by traffic and construction equipment may cause some caving and raveling of excavation walls. In such an event, lateral support for the excavation walls should be provided by the contractor to prevent loss of ground support and possible distress to existing or previously constructed structural improvements.

Underground utility pipes should be installed in accordance with the procedures specified in ASTM D2321 and City of Wilsonville standards. We recommend that the upper 4 feet of structural trench backfill be compacted to at least 95 percent of the maximum dry density obtained by the Modified Proctor (ASTM D698) or equivalent. Structural trench backfill below 4 feet should be compacted to at least 90 percent of the maximum dry density obtained by the Modified Proctor (ASTM D1557) or equivalent. Initial backfill lift thicknesses for a  $\frac{3}{4}$ "-0 crushed aggregate base may need to be as great as 4 feet to reduce the risk of flattening underlying flexible pipe. Subsequent lift thickness should not exceed 1 foot. If imported granular fill material is used, then the lifts for large vibrating plate-compaction equipment (e.g. hoe compactor attachments) may be up to 2 feet, provided that proper compaction is being achieved and each lift is tested. Use of large vibrating compaction equipment should be carefully monitored near existing structures and improvements due to the potential for vibration-induced damage.

Adequate density testing should be performed during construction to verify that the recommended relative compaction is achieved. Typically, at least one density test is taken for every 4 vertical feet of backfill on each 100-lineal-foot section of trench.

#### **8.4 Erosion Control Considerations**

During our field exploration program, we did not observe soil conditions that are considered to be susceptible to erosion. In our opinion, the primary concern regarding erosion potential will occur during construction in areas that have been stripped of vegetation. Erosion at the site during construction can be minimized by implementing the project erosion control plan, which should include judicious use of straw wattles, fiber rolls, and silt fences. If used, these erosion control devices should remain in place throughout site preparation and construction.

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Erosion and sedimentation of exposed soils can also be minimized by quickly re-vegetating exposed areas of soil, and by staging construction such that large areas of the project site are not denuded and exposed at the same time. Areas of exposed soil requiring immediate and/or temporary protection against exposure should be covered with either mulch or erosion control netting/blankets. Areas of exposed soil requiring permanent stabilization should be seeded with an approved grass seed mixture, or hydroseeded with an approved seed-mulch-fertilizer mixture.

### **8.5 Wet Weather Earthwork**

Soils underlying the site are likely to be moisture sensitive and will be difficult to handle or traverse with construction equipment during periods of wet weather. Earthwork is typically most economical when performed under dry weather conditions. Earthwork performed during the wet-weather season will require expensive measures such as cement treatment or imported granular material to compact areas where fill may be proposed to the recommended engineering specifications. If earthwork is to be performed or fill is to be placed in wet weather or under wet conditions when soil moisture content is difficult to control, the following recommendations should be incorporated into the contract specifications.

- Earthwork should be performed in small areas to minimize exposure to wet weather. Excavation or the removal of unsuitable soils should be followed promptly by the placement and compaction of clean engineered fill. The size and type of construction equipment used may have to be limited to prevent soil disturbance. Under some circumstances, it may be necessary to excavate soils with a backhoe to minimize subgrade disturbance caused by equipment traffic.
- The ground surface within the construction area should be graded to promote run-off of surface water and to prevent the ponding of water.
- Material used as engineered fill should consist of clean, granular soil containing less than 5 percent passing the No. 200 sieve. The fines should be non-plastic. Alternatively, cement treatment of on-site soils may be performed to facilitate wet weather placement.
- The ground surface within the construction area should be sealed by a smooth drum vibratory roller, or equivalent, and under no circumstances should be left uncompacted and exposed to moisture. Soils which become too wet for compaction should be removed and replaced with clean granular materials.
- Excavation and placement of fill should be observed by the geotechnical engineer to verify that all unsuitable materials are removed and suitable compaction and site drainage is achieved.
- Geotextile silt fences, straw wattles, and fiber rolls should be strategically located to control erosion.

If cement or lime treatment is used to facilitate wet weather construction, GeoPacific should be contacted to provide additional recommendations and field monitoring.

### **8.6 Spread Foundations**

The proposed residential structures may likely be supported on shallow foundations bearing on competent undisturbed, native soils and/or engineered fill, appropriately designed and constructed as recommended in this report. Medium stiff native silt soils were encountered in the upper 2 feet in test pits TP-2 and TP-3, which were located in the northern portion of the site. Additional depths of excavation for subgrade preparation and foundations may be required in areas. Areas where homes are to be constructed where no engineered fill will be placed should either be prepared as



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recommended for roadway areas; or the foundation envelopes of the proposed homes should be over-excavated to expose native soils on a lot by lot basis. (See *Site Preparation Recommendations* section).

Foundation design, construction, and setback requirements should conform to the applicable building code at the time of construction. For maximization of bearing strength and protection against frost heave, spread footings should be embedded at a minimum depth of 12 inches below exterior grade. If soft soil conditions are encountered at footing subgrade elevation, they should be removed and replaced with compacted crushed aggregate.

The anticipated allowable soil bearing pressure is 1,500 lbs/ft<sup>2</sup> for footings bearing on competent, native soil and/or engineered fill. The recommended maximum allowable bearing pressure may be increased by 1/3 for short-term transient conditions such as wind and seismic loading. For loads heavier than 35 kips, the geotechnical engineer should be consulted. If heavier loads than described above are proposed, it may be necessary to over-excavate point load areas and replace with additional compacted crushed aggregate. The coefficient of friction between on-site soil and poured-in-place concrete may be taken as 0.42, which includes no factor of safety. The maximum anticipated total and differential footing movements (generally from soil expansion and/or settlement) are 1 inch and ¾ inch over a span of 20 feet, respectively. We anticipate that the majority of the estimated settlement will occur during construction, as loads are applied. Excavations near structural footings should not extend within a 1H:1V plane projected downward from the bottom edge of footings.

Footing excavations should penetrate through topsoil and any disturbed soil to competent subgrade that is suitable for bearing support. All footing excavations should be trimmed neat, and all loose or softened soil should be removed from the excavation bottom prior to placing reinforcing steel bars. Due to the moisture sensitivity of on-site native soils, foundations constructed during the wet weather season may require over-excavation of footings and backfill with compacted, crushed aggregate.

Our recommendations are for residential construction incorporating raised wood floors and conventional spread footing foundations. After site development, a Final Soil Engineer's Report should either confirm or modify the above recommendations.

### **8.7 Concrete Slabs-on-Grade**

Preparation of areas beneath concrete slab-on-grade floors should be performed as recommended in the *Site Preparation Recommendations* section. Care should be taken during excavation for foundations and floor slabs, to avoid disturbing subgrade soils. If subgrade soils have been adversely impacted by wet weather or otherwise disturbed, the surficial soils should be scarified to a minimum depth of 8 inches, moisture conditioned to within about 3 percent of optimum moisture content, and compacted to engineered fill specifications. Alternatively, disturbed soils may be removed and the removal zone backfilled with additional crushed rock.

For evaluation of the concrete slab-on-grade floors using the beam on elastic foundation method, a modulus of subgrade reaction of 150 kcf (87 pci) should be assumed for the medium stiff, fine-grained soils anticipated to be present at foundation subgrade elevation following adequate site preparation as described above. This value assumes the concrete slab system is designed and constructed as recommended herein, with a minimum thickness of 8 inches of 1½"-0 crushed aggregate beneath the slab. The total thickness of crushed aggregate will be dependent on the subgrade conditions at the time of construction, and should be verified visually by proof-rolling.

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Under-slab aggregate should be compacted to at least 95 percent of its maximum dry density as determined by ASTM D1557 (Modified Proctor) or equivalent.

In areas where moisture will be detrimental to floor coverings or equipment inside the proposed structure, appropriate vapor barrier and damp-proofing measures should be implemented. A minimum of 8 inches of ¾"-0 should be provided beneath slabs-on-grade. Appropriate design professionals should be consulted regarding vapor barrier and damp proofing systems, ventilation, building material selection and mold prevention issues, which are outside GeoPacific's area of expertise.

## **8.8 Footing and Roof Drains**

If the proposed structure will have a raised floor, and no concrete slab-on-grade floors are used, perimeter footing drains would not be required based on soil conditions encountered at the site and experience with standard local construction practices. Where it is desired to reduce the potential for moist crawl spaces, footing drains may be installed. If concrete slab-on-grade floors are used, perimeter footing drains should be installed as recommended below.

Where used, perimeter footing drains should consist of 3 or 4-inch diameter, perforated plastic pipe embedded in a minimum of 1 ft<sup>3</sup> per lineal foot of clean, free-draining drain rock. The drain pipe and surrounding drain rock should be wrapped in non-woven geotextile (Mirafi 140N, or approved equivalent) to minimize the potential for clogging and/or ground loss due to piping. Water collected from the footing drains should be directed to the local storm drain system or other suitable outlet. A minimum 0.5 percent fall should be maintained throughout the drain and non-perforated pipe outlet. The footing drains should include clean-outs to allow periodic maintenance and inspection. Subject to considerations as provided for hillside lots, footing drains may outlet at the curb, or on the back sides of lots where sufficient fall is not available to allow drainage to the street. In no case shall collected stormwater be discharge at the top of a slope or allowed to flow freely over a slope face.

Construction should include typical measures for controlling subsurface water beneath the homes, including positive crawlspace drainage to an adequate low-point drain exiting the foundation, visqueen covering the exposed ground in the crawlspace, and crawlspace ventilation (foundation vents). The homebuyers should be informed and educated that some slow flowing water in the crawlspaces is considered normal and not necessarily detrimental to the home given these other design elements incorporated into its construction. Appropriate design professionals should be consulted regarding crawlspace ventilation, building material selection and mold prevention issues, which are outside GeoPacific's area of expertise.

Down spouts and roof drains should collect roof water in a system separate from the footing drains in order to reduce the potential for clogging. Roof drain water should be directed to the storm drain system. Grades should be sloped downward and away from buildings to reduce the potential for ponded water near structures.

## **8.9 Permanent Below-Grade Foundation Walls**

Lateral earth pressures against below-grade foundation retaining walls will depend upon the inclination of any adjacent slopes, type of backfill, degree of wall restraint, method of backfill placement, degree of backfill compaction, drainage provisions, and magnitude and location of any adjacent surcharge loads. At-rest soil pressure is exerted on a retaining wall when it is restrained against rotation. In contrast, active soil pressure will be exerted on a wall if its top is allowed to rotate or yield a distance of roughly 0.001 times its height or greater.

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If the subject retaining walls will be free to rotate at the top, they should be designed for an active earth pressure equivalent to that generated by a fluid weighing 35 pcf for level backfill against the wall. For restrained wall, an at-rest equivalent fluid pressure of 55 pcf should be used in design, again assuming level backfill against the wall. These values assume that the recommended drainage provisions are incorporated, and hydrostatic pressures are not allowed to develop against the wall.

During a seismic event, lateral earth pressures acting on below-grade structural walls will increase by an incremental amount that corresponds to the earthquake loading. Based on the Mononobe-Okabe equation and peak horizontal accelerations appropriate for the site location, seismic loading should be modeled using the active or at-rest earth pressures recommended above, plus an incremental rectangular-shaped seismic load of magnitude  $6.5H$ , where  $H$  is the total height of the wall.

We assume relatively level ground surface below the base of the walls. As such, we recommend passive earth pressure of 300 pcf for use in design, assuming wall footings are cast against competent native soils or engineered fill. If the ground surface slopes down and away from the base of any of the walls, a lower passive earth pressure should be used and GeoPacific should be contacted for additional recommendations.

A coefficient of friction of 0.42 may be assumed along the interface between the base of the wall footing and subgrade soils. The recommended coefficient of friction and passive earth pressure values do not include a safety factor, and an appropriate safety factor should be included in design. The upper 12 inches of soil should be neglected in passive pressure computations unless it is protected by pavement or slabs on grade.

The above recommendations for lateral earth pressures assume that the backfill behind the subsurface walls will consist of properly compacted structural fill, and no adjacent surcharge loading. If the walls will be subjected to the influence of surcharge loading within a horizontal distance equal to or less than the height of the wall, the walls should be designed for the additional horizontal pressure. For uniform surcharge pressures, a uniformly distributed lateral pressure of 0.3 times the surcharge pressure should be added. Traffic surcharges may be estimated using an additional vertical load of 250 psf (2 feet of additional fill), in accordance with local practice.

The recommended equivalent fluid densities assume a free-draining condition behind the walls so that hydrostatic pressures do not build-up. This can be accomplished by placing a 12 to 18-inch wide zone of sand and gravel containing less than 5 percent passing the No. 200 sieve against the walls. A 3-inch minimum diameter perforated, plastic drain pipe should be installed at the base of the walls and connected to a suitable discharge point to remove water in this zone of sand and gravel. The drain pipe should be wrapped in filter fabric (Mirafi 140N or other as approved by the geotechnical engineer) to minimize clogging.

Wall drains are recommended to prevent detrimental effects of surface water runoff on foundations – not to dewater groundwater. Drains should not be expected to eliminate all potential sources of water entering a basement or beneath a slab-on-grade. An adequate grade to a low point outlet drain in the crawlspace is required by code. Underslab drains are sometimes added beneath the slab when placed over soils of low permeability and shallow, perched groundwater.

Water collected from the wall drains should be directed into the local storm drain system or other suitable outlet. A minimum 0.5 percent fall should be maintained throughout the drain and non-perforated pipe outlet. Down spouts and roof drains should not be connected to the wall drains in order to reduce the potential for clogging. The drains should include clean-outs to allow

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periodic maintenance and inspection. Grades around the proposed structure should be sloped such that surface water drains away from the building.

GeoPacific should be contacted during construction to verify subgrade strength in wall keyway excavations, to verify that backslope soils are in accordance with our assumptions, and to take density tests on the wall backfill materials.

Structures should be located a horizontal distance of at least 1.5H away from the back of the retaining wall, where H is the total height of the wall. GeoPacific should be contacted for additional foundation recommendations where structures are located closer than 1.5H to the top of any wall.

**8.10 Pavement Design**

For design purposes, we used an estimated resilient modulus of 6,000 for compacted native soil. Table 4 presents our recommended minimum pavement section for dry weather construction.

**Table 4. Recommended Minimum Dry-Weather Pavement Section**

<b>Material Layer</b>	<b>Light-duty Public Streets</b>	<b>Compaction Standard</b>
Asphaltic Concrete (AC)	3 in.	92% of Rice Density AASHTO T-209
Crushed Aggregate Base ¾"-0 (leveling course)	2 in.	95% of Modified Proctor AASHTO T-180
Crushed Aggregate Base 1½"-0	10 in. minimum	95% of Modified Proctor AASHTO T-180
Subgrade	12 in. minimum	95% of Standard Proctor AASHTO T-99

Any pockets of organic debris or loose fill encountered during ripping or tilling should be removed and replaced with engineered fill (see *Site Preparation* Section). In order to verify subgrade strength, we recommend proof-rolling directly on subgrade with a loaded dump truck during dry weather and on top of base course in wet weather. Soft areas that pump, rut, or weave should be stabilized prior to paving. If pavement areas are to be constructed during wet weather, the subgrade and construction plan should be reviewed by the project geotechnical engineer at the time of construction so that condition specific recommendations can be provided. The moisture sensitive subgrade soils make the site a difficult wet weather construction project.

During placement of pavement section materials, density testing should be performed to verify compliance with project specifications. Generally, one subgrade, one base course, and one asphalt compaction test is performed for every 100 to 200 linear feet of paving.

**8.11 Wet Weather Construction Pavement Section**

This section presents our recommendations for wet weather pavement section and construction for new pavement sections at the project. These wet weather pavement section recommendations are intended for use in situations where it is not feasible to compact the subgrade soils to City of Wilsonville requirements, due to wet subgrade soil conditions, and/or construction during wet weather.

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Based on our site review, we recommend a wet weather section with a minimum subgrade deepening of 6 inches to accommodate a working subbase of additional 1½"-0 crushed rock. Geotextile fabric, Mirafi 500x or equivalent, should be placed on subgrade soils prior to placement of base rock.

With implementation of the above recommendations, it is our opinion that the resulting pavement section will provide equivalent or greater structural strength than the dry weather pavement section currently planned. However, it should be noted that construction in wet weather is risky and the performance of pavement subgrades depend on a number of factors including the weather conditions, the contractor's methods, and the amount of traffic the road is subjected to. There is a potential that soft spots may develop even with implementation of the wet weather provisions recommended in this letter. If soft spots in the subgrade are identified during roadway excavation, or develop prior to paving, the soft spots should be over-excavated and backfilled with additional crushed rock.

During subgrade excavation, care should be taken to avoid disturbing the subgrade soils. Removals should be performed using an excavator with a smooth-bladed bucket. Truck traffic should be limited until an adequate working surface has been established. We suggest that the crushed rock be spread using bulldozer equipment rather than dump trucks, to reduce the amount of traffic and potential disturbance of subgrade soils.

Care should be taken to avoid over-compaction of the base course materials, which could create pumping, unstable subgrade soil conditions. Heavy and/or vibratory compaction efforts should be applied with caution. Following placement and compaction of the crushed rock to project specifications (95 percent of Modified Proctor), a finish proof-roll should be performed before paving.

The above recommendations are subject to field verification. GeoPacific should be on-site during construction to verify subgrade strength and to take density tests on the engineered fill, base rock and asphaltic pavement materials.

## **9.0 SEISMIC DESIGN**

The Oregon Department of Geology and Mineral Industries (Dogami), Oregon HazVu: 2023 Statewide GeoHazards Viewer indicates that the site is in an area where *severe* ground shaking is anticipated during an earthquake. Single family structures should be designed to resist earthquake loading in accordance with the methodology described in the 2021 International Building Code (IBC) with applicable Oregon Structural Specialty Code (OSSC) revisions (current 2022). We recommend Site Class D be used for design as defined in ASCE 7, Chapter 20, Table 20.3-1. Design values determined for the site using the Applied Technology Council (ATC) *ASCE7-16 Hazards By Location Online Tool* are summarized in Table 5 and are based upon existing soil conditions.

**Table 5. Recommended Earthquake Ground Motion Parameters (ATC 2023)**

Parameter	Value
Location (Lat, Long), degrees	45.323, -122.745
Mapped Spectral Acceleration Values (MCE):	
Peak Ground Acceleration $PGA_M$	0.458
Short Period, $S_s$	0.82 g
1.0 Sec Period, $S_1$	0.38 g
Soil Factors for Site Class D:	
$F_a$	1.172
$F_v$	*1.92
$SD_s = 2/3 \times F_a \times S_s$	0.641 g
$SD_1 = 2/3 \times F_v \times S_1$	*0.487 g
Residential Seismic Design Category	D

\* The  $F_v$  value reported in the above table is a straight-line interpolation of mapped spectral response acceleration at 1-second period,  $S_1$  per Table 1613.2.3(2) of OSSC 2019 with the assumption that Exception 2 of ASCE 7-16 Chapter 11.4.8 is met.  $SD_1$  is based on the  $F_v$  value. The structural engineer should evaluate exception 2 and determine whether or not the exception is met. If Exception 2 is not met, and the long-period site coefficient ( $F_v$ ) is required for design, GeoPacific Engineering can be consulted to provide a site-specific procedure as per ASCE 7-16, Chapter 21.

### 9.1 Soil Liquefaction

The Oregon Department of Geology and Mineral Industries (DOGAMI), Oregon HazVu: 2023 Statewide GeoHazards Viewer indicates that the site is in an area considered to be at *moderate* risk for soil liquefaction during an earthquake. Soil liquefaction is a phenomenon wherein saturated soil deposits temporarily lose strength and behave as a liquid in response to ground shaking caused by strong earthquakes. Soil liquefaction is generally limited to loose, sands and granular soils located below the water table, and fine-grained soils with a plasticity index less than 15. Our explorations indicate the site is underlain by stiff to very stiff, fine grained soils above the water table, which is not considered prone to liquefaction.

For construction of single family structures, special design or construction measures are not required by code to mitigate the effects of liquefaction. However, GeoPacific may be consulted to perform further study of seismic hazards on the site if desired. We anticipate that our additional explorations on the site for the purpose of evaluating seismic hazards would include at least two cone penetrometer tests.

### **10.0 UNCERTAINTIES AND LIMITATIONS**

We have prepared this report for the owner and their consultants for use in design of this project only. This report should be provided in its entirety to prospective contractors for bidding and estimating purposes; however, the conclusions and interpretations presented in this report should not be construed as a warranty of the subsurface conditions. Experience has shown that soil and groundwater conditions can vary significantly over small distances. Inconsistent conditions can occur between explorations that may not be detected by a geotechnical study. If, during future site operations, subsurface conditions are encountered which vary appreciably from those described herein, GeoPacific should be notified for review of the recommendations of this report, and revision of such if necessary.

Sufficient geotechnical monitoring, testing and consultation should be provided during construction to confirm that the conditions encountered are consistent with those indicated by explorations. The checklist attached to this report outlines recommended geotechnical observations and testing for the project. Recommendations for design changes will be provided should conditions revealed during construction differ from those anticipated, and to verify that the geotechnical aspects of construction comply with the contract plans and specifications.

Within the limitations of scope, schedule and budget, GeoPacific attempted to execute these services in accordance with generally accepted professional principles and practices in the fields of geotechnical engineering and engineering geology at the time the report was prepared. No warranty, expressed or implied, is made. The scope of our work did not include environmental assessments or evaluations regarding the presence or absence of wetlands or hazardous or toxic substances in the soil, surface water, or groundwater at this site.

We appreciate this opportunity to be of service.

Sincerely,

**GEOPACIFIC ENGINEERING, INC.**



Beth K. Rapp, C.E.G.  
Senior Engineering Geologist



EXPIRES: 06/30/2025

James D. Imbrie, G.E., C.E.G.  
Principal Geotechnical Engineer

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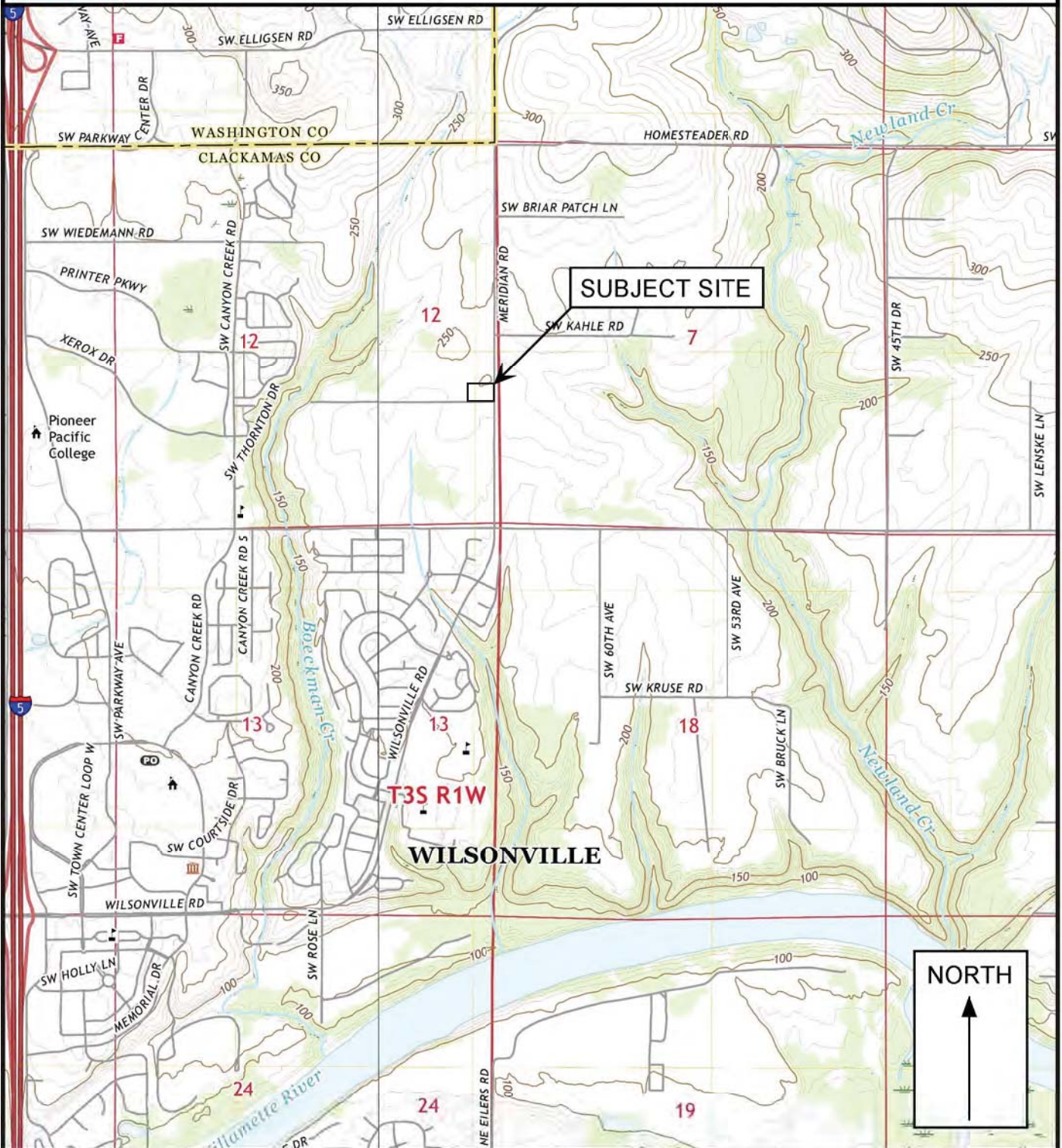
**CHECKLIST OF RECOMMENDED GEOTECHNICAL TESTING AND OBSERVATION**

<b>Item No.</b>	<b>Procedure</b>	<b>Timing</b>	<b>By Whom</b>	<b>Done</b>
1	Preconstruction meeting	Prior to beginning site work	Contractor, Developer, Civil and Geotechnical Engineers	
2	Fill removal from site or sorting and stockpiling	Prior to mass stripping	Soil Technician/ Geotechnical Engineer	
3	Stripping, aeration, and root-picking operations	During stripping	Soil Technician	
4	Compaction testing of engineered fill (90% of Modified Proctor)	During filling, tested every 2 vertical feet	Soil Technician	
5	Retaining Wall Keyway and Subbase	During Excavation	Soil Technician/ Geotechnical Engineer	
6	Retaining Wall Backfill and Geogrid Placement	During Construction	Soil Technician/ Geotechnical Engineer	
7	Compaction testing of trench backfill (95% of Modified Proctor above 4 feet - 90% of Modified Proctor below 4 feet)	During backfilling, tested every 4 vertical feet for every 200 linear feet	Soil Technician	
8	Street Subgrade Inspection (95% of Standard Proctor)	Prior to placing base course	Soil Technician	
9	Base course compaction (95% of Modified Proctor)	Prior to paving, tested every 200 linear feet	Soil Technician	
10	Asphalt Compaction (92% Rice Value)	During paving, tested every 100 linear feet	Soil Technician	
11	Final Geotechnical Engineer's Report	Completion of project	Geotechnical Engineer	



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VICINITY MAP

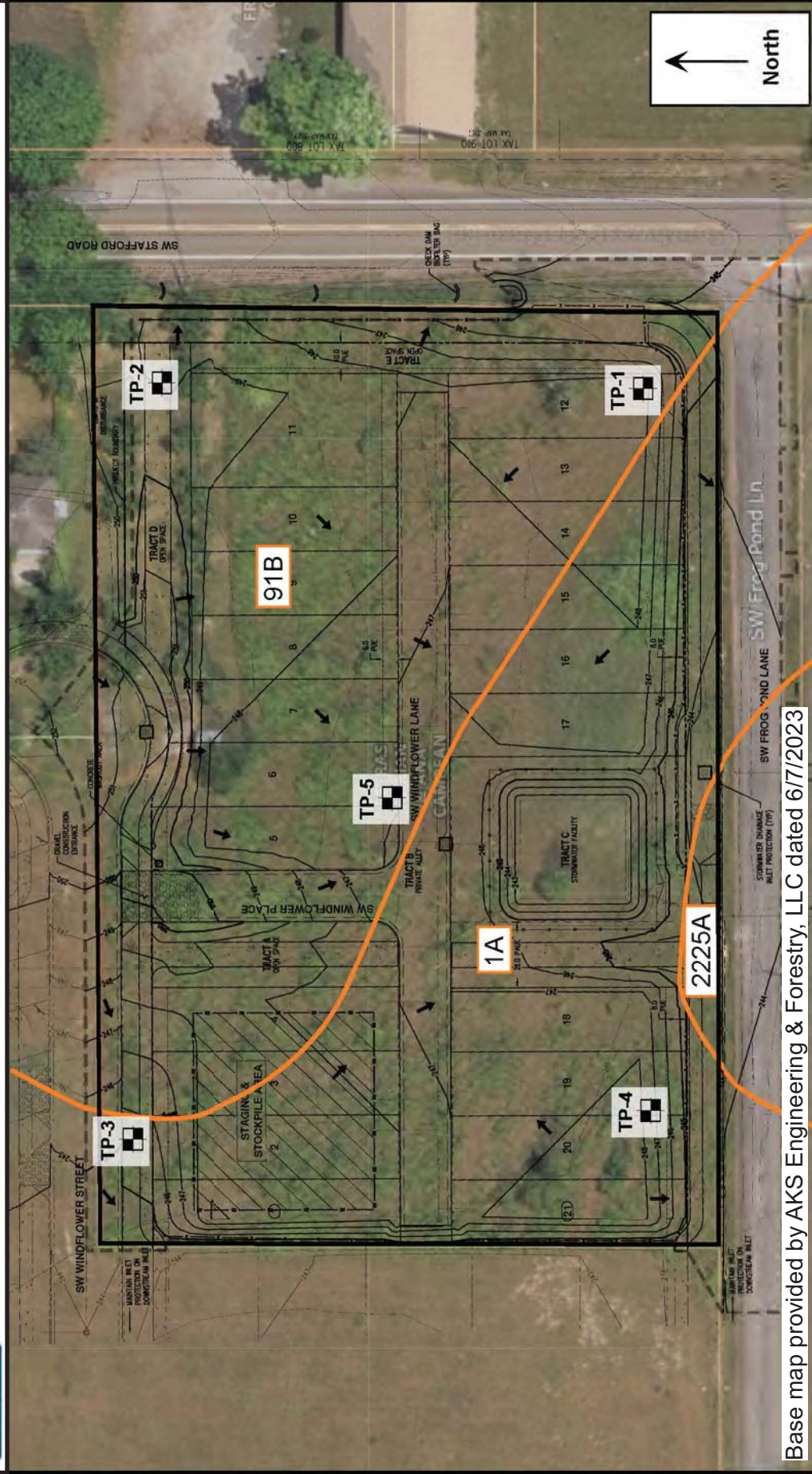


<p><b>Legend</b></p> <p>Approximate Scale 1 in = 2,000 feet</p> <p>Base map: U.S. Geological Survey 7.5 minute Topographic Map Series, Canby, Oregon Quadrangle, and Sherwood, Oregon Quadrangle, 2020.</p>	<p>Date: 6/27/2023          Drawn by: EKR</p>	
<p>Project: Petras Homes Subdivision          Wilsonville, Oregon</p>	<p>Project No. 22-6182</p>	<p>FIGURE 1</p>



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# SITE PLAN, EXPLORATION LOCATIONS, AND SOIL GROUP



Base map provided by AKS Engineering & Forestry, LLC dated 6/7/2023

## Legend

TP-1 Test Pit Designation and  
 Approximate Location

**1A**

Soil Group Unit as Mapped by the  
 Web Soil Survey (NCRS, 2023)

0 60'

APPROXIMATE SCALE 1"=60'

Date: 6/27/2023  
 Drawn by: EKR

Project: Petras Homes Subdivision  
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FIGURE 2




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# TEST PIT LOG

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Test Pit No. **TP-1**

Depth (ft)	Pocket Penetrometer (tons/ft <sup>2</sup> )	Sample Type	In-Situ Dry Density (lb/ft <sup>3</sup> )	Moisture Content (%)	Water Bearing Zone	Material Description
1	1.5					Highly organic SILT (OL-ML), dark brown, many large roots throughout, loose, moist (Topsoil Horizon)
2	2.0					Stiff to very stiff, clayey SILT (ML), light brown, micaceous, trace black staining, subtle to strong orange and gray mottling, moist (Willamette Formation)
3	4.5					
4	4.5					
5						
6						Stiff to very stiff, SILT (ML), light brown, micaceous, trace black staining, strong orange and gray mottling, moist (Willamette Formation)
7						
8						
9						
10						Test Pit Terminated at 9.5 Feet.
11						Note: Groundwater seepage encountered at 2.5 feet. Discharge visually estimated at less than 1/4 gallon per minute.
12						

**LEGEND**



Bag Sample



Bucket Sample



Shelby Tube Sample



Seepage



Water Bearing Zone



Water Level at Abandonment

Date Excavated: 11/28/2022

Logged By: B. Rapp

Surface Elevation:



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# TEST PIT LOG

Project: Petras Homes Subdivision  
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Test Pit No. **TP-2**

Depth (ft)	Pocket Penetrometer (tons/ft <sup>2</sup> )	Sample Type	In-Situ Dry Density (lb/ft <sup>3</sup> )	Moisture Content (%)	Water Bearing Zone	Material Description
1	1.0					Highly organic SILT (OL-ML), brown, many fine roots throughout, 4 inch thick root mat, loose, moist (Topsoil Horizon)
2	3.0					Medium stiff to very stiff, clayey SILT (ML), light brown, micaceous, trace black staining, strong orange and gray mottling, moist (Willamette Formation)
3	3.5					
4	4.5					
5						
6						Stiff to very stiff, SILT (ML), light brown, micaceous, trace black staining, subtle orange and gray mottling, moist (Willamette Formation)
7						
8						
9						
10						Test Pit Terminated at 9.5 Feet. Note: No seepage or groundwater encountered.
11						
12						

**LEGEND**



Bag Sample



Bucket Sample



Shelby Tube Sample



Seepage



Water Bearing Zone



Water Level at Abandonment

Date Excavated: 11/28/2022

Logged By: B. Rapp

Surface Elevation:



14835 SW 72nd Avenue  
 Portland, Oregon 97224  
 Tel: (503) 598-8445

# TEST PIT LOG

Project: Petras Homes Subdivision  
 Wilsonville, Oregon

Project No. 22-6182

Test Pit No. **TP-3**

Depth (ft)	Pocket Penetrometer (tons/ft <sup>2</sup> )	Sample Type	In-Situ Dry Density (lb/ft <sup>3</sup> )	Moisture Content (%)	Water Bearing Zone	Material Description
1	1.0					Moderately organic SILT (OL-ML), brown, many fine roots throughout, 4 to 6 inch thick root mat, loose, moist (Topsoil Horizon)
2	2.5					Medium stiff to very stiff, clayey SILT (ML), light brown, micaceous, trace black staining, fine roots to 3 feet, strong orange and gray mottling, moist (Willamette Formation)
3	3.5					
4	4.5					
5						
6						Stiff to very stiff, SILT (ML), light brown, micaceous, trace black staining, subtle orange and gray mottling, moist (Willamette Formation)
7						
8						
9						
10						Test Pit Terminated at 10 Feet.
11						Note: No seepage or groundwater encountered.
12						

**LEGEND**



100 to 1,000 g  
Bag Sample



5 Gal. Bucket  
Bucket Sample



Shelby Tube Sample



Seepage



Water Bearing Zone



Water Level at Abandonment

Date Excavated: 11/28/2022

Logged By: B. Rapp

Surface Elevation:



14835 SW 72nd Avenue  
 Portland, Oregon 97224  
 Tel: (503) 598-8445

# TEST PIT LOG

Project: Petras Homes Subdivision  
 Wilsonville, Oregon

Project No. 22-6182

Test Pit No. **TP-4**

Depth (ft)	Pocket Penetrometer (tons/ft <sup>2</sup> )	Sample Type	In-Situ Dry Density (lb/ft <sup>3</sup> )	Moisture Content (%)	Water Bearing Zone	Material Description
1	3.0					Moderately to highly organic SILT (OL-ML), brown, many fine roots throughout, 5 inch thick root mat, loose, moist (Topsoil Horizon)
2	2.5					Very stiff, clayey SILT (ML), light brown, micaceous, trace black staining, strong orange and gray mottling, moist (Willamette Formation)
3	2.5					
4	4.5					
5						
6						Stiff, SILT (ML), light brown, micaceous, trace black staining, subtle orange and gray mottling, moist (Willamette Formation)
7						
8						
9						
10						
11						Test Pit Terminated at 10.5 Feet. Note: No seepage or groundwater encountered.
12						

**LEGEND**



Bag Sample



Bucket Sample



Shelby Tube Sample



Seepage



Water Bearing Zone



Water Level at Abandonment

Date Excavated: 11/28/2022

Logged By: B. Rapp

Surface Elevation:





14835 SW 72nd Avenue  
 Portland, Oregon 97224  
 Tel: (503) 598-8445

# TEST PIT LOG

Project: Petras Homes Subdivision  
 Wilsonville, Oregon

Project No. 22-6182

Test Pit No. **TP-5**

Depth (ft)	Pocket Penetrometer (tons/ft <sup>2</sup> )	Sample Type	In-Situ Dry Density (lb/ft <sup>3</sup> )	Moisture Content (%)	Water Bearing Zone	Material Description
1	3.0					Moderately organic SILT (OL-ML), brown, many fine roots throughout, 4 inch thick root mat, loose, moist (Topsoil Horizon)
2	4.5					Very stiff, clayey SILT (ML), light brown, micaceous, trace black staining, strong orange and gray mottling, moist (Willamette Formation)
3	4.5					
4	4.0					
5						
6						Very stiff, SILT (ML), light brown, micaceous, trace black staining, subtle orange and gray mottling, moist (Willamette Formation)
7						
8						
9						
10						Test Pit Terminated at 10 Feet.
11						Note: No seepage or groundwater encountered.
12						

**LEGEND**



Bag Sample



Bucket Sample



Shelby Tube Sample



Seepage



Water Bearing Zone



Water Level at Abandonment

Date Excavated: 11/28/2022

Logged By: B. Rapp

Surface Elevation:

## Exhibit I: Draft CC&Rs

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# **Petras Homes Subdivision Development**

Covenants, Conditions, and Restrictions (CC&Rs)

## **RECITALS**

Declarant is the sole owner of the real property and its improvements located in the City of Wilsonville, Clackamas County, Oregon. This property, known as "Petras Homes Subdivision," encompasses all the lots and tracts as depicted on the recorded plat map in the County of Clackamas.

The intention of Declarant is to develop Petras Homes Subdivision as a Class I planned community, adhering to the Oregon Planned Community Act. With the aim of establishing Petras Homes Subdivision as a planned community, Declarant seeks to impose covenants, conditions, restrictions, easements, assessments, and liens on the Property. These measures are intended to create a comprehensive general plan of improvement and development that benefits all lots and the common areas within Petras Homes Subdivision.

Recognizing the importance of efficiently preserving the values and amenities of Petras Homes Subdivision, Declarant deems it necessary to form a nonprofit corporation. This corporation will be delegated and assigned the powers and authority to own, maintain, and administer the common areas and facilities. Additionally, it will be responsible for the maintenance, repair, and replacement of certain portions of the Property. The corporation will also administer and enforce the covenants, conditions, and restrictions outlined in this Declaration, as well as collect and disburse the assessments and charges established herein.

Declarant reserves the right to annex additional property, referred to as the "Additional Property," in the future. However, Declarant is not obligated to annex any portion of the Additional Property to Petras Homes Subdivision. If annexed, the Additional Property will become an integral part of Petras Homes Subdivision and will be subject to the provisions of this Declaration. There is no restriction on the number of lots and tracts that may be annexed to Petras Homes Subdivision.

## **ARTICLE 1**

### **DEFINITIONS**

**1.1 "Architectural Review Committee" or "ARC"** refers to the committee established and operating in accordance with the provisions outlined in Article 6 of this Declaration, responsible for reviewing and approving architectural designs and modifications within Petras Homes Subdivision.

**1.2 "Articles"** refer to the Articles of Incorporation for the nonprofit corporation, Petras Homes Subdivision Homeowners Association, as officially filed with the Oregon Secretary of State.

**1.3 "Association"** refers to the Petras Homes Subdivision Homeowners Association, including its successors and assigns, responsible for the administration, management, and enforcement of the CC&Rs within Petras Homes Subdivision.

**1.4 "Board"** refers to the Board of Directors of the Petras Homes Subdivision Homeowners Association, duly elected or appointed, entrusted with the governance and decision-making responsibilities of the Association.

**1.5 "Bylaws"** refer to the Bylaws of the Petras Homes Subdivision Homeowners Association, a legally binding document outlining the internal rules and procedures governing the operation of the Association. The Bylaws are recorded in the deed records of Clackamas County, Oregon.

**1.6 "Common Area"** refers to Tracts A, B, C, and D as depicted on the recorded Plat of the Property, including any improvements situated thereon. These areas and improvements are intended for the common use and enjoyment of the members, subject to the restrictions outlined in this Declaration. The Common Area will be conveyed to the Association.

**1.7 "Commonly Maintained Property"** refers to any property not owned by the Association but for which the Association is responsible for maintenance, which may include, but is not limited to, mailboxes and other designated areas.

**1.8 "Declaration"** refers to this document, including the covenants, conditions, restrictions, and all other provisions set forth herein, governing the rights, obligations, and responsibilities of the property owners within Petras Homes Subdivision.

**1.9 "Declarant"** refers to Petras Homes an Oregon limited liability company, and its successors or assigns. Declarant holds the initial development rights and has the authority to assign some or all of its rights to purchasers of lots within Petras Homes Subdivision. Such assignees shall become successor Declarants to the extent of their assignments.

**1.10 "General Plan of Development"** refers to the comprehensive plan established by the Declarant for the development of the Property. This plan has been approved by the appropriate governmental agencies and may be subject to amendments as deemed necessary.

**1.11 "Petras Homes Subdivision "** refers to Lots 1-41 of the Property and Tracts A, B, C, and D as indicated on the Petras Homes Subdivision plat. The term may also encompass any additional lots that may be annexed into Petras Homes Subdivision in the future.

**1.12 "Home"** refers to any portion of a structure located on a Lot within Petras Homes Subdivision, designed and intended for use and occupancy as a residence.

**1.13 "Lot"** refers to each individual lot as depicted on the Petras Homes Subdivision plat. The term "Lot" excludes any of the designated Tracts.

**1.14 "Members"** refers to the Owners of Lots within Petras Homes Subdivision, who are members of the Petras Homes Subdivision Homeowners Association.

**1.15 "Occupant"** refers to any person, including Owners, lessees, or any other authorized individuals, who occupy a Home within Petras Homes Subdivision.

**1.16 "Owner"** refers to the record owner or owners, whether one or more persons or entities, holding the fee simple title to any Lot within Petras Homes Subdivision. The term also includes a purchaser in possession of a Lot under a land sale contract. However, it does not include persons or entities holding an interest in any Lot solely as security for the performance of an obligation.

**1.17 "Plat"** refers to the Plat of Petras Homes Subdivision, officially recorded in the Plat Records of Clackamas County, Oregon. It encompasses the initial plat of Petras Homes Subdivision and any subsequent plats for future phases that may be annexed into this Declaration. This definition includes any amendments made to these plats.

**1.18 "Property"** has the meaning ascribed to it in the Recitals of this Declaration, encompassing all the real property comprising Petras Homes Subdivision.

**1.19 "Reserve Accounts"** refer to accounts established by the Board to hold funds designated for the construction, improvement, or maintenance of the Common Area and the Commonly Maintained Property within Petras Homes Subdivision.

**1.20 "Rules and Regulations"** pertain to the official documents containing the rules, regulations, and policies adopted by the Board or the Architectural Review Committee. These documents may be amended from time to time and serve as guidelines for the conduct and use of properties within Petras Homes Subdivision.

**1.21 "Tracts"** refer to Tracts A, B, C, and D, as depicted on the Plat of Petras Homes Subdivision. These designated tracts are part of the common areas and serve specific purposes as outlined in this Declaration.

## **ARTICLE 2**

### **PROPERTY SUBJECT TO THIS DECLARATION**

**2.1 Initial Development:** Declarant hereby declares that all of the real property described below is owned and will be owned, conveyed, hypothecated, encumbered, used, occupied, and improved subject to this Declaration:

- a) Ten Townhomes located at [Address of Townhomes], collectively referred to as "Townhomes."
- b) One House located at [Address of House], referred to as the "House."

These properties shall be subject to the covenants, conditions, and restrictions outlined in this Declaration.

**2.2 Right to Annex Additional Property or to Withdraw Property:** The Declarant holds the exclusive right to annex additional property to Petras Homes Subdivision, expanding its boundaries and incorporating new parcels into the community. Likewise, the Declarant reserves the right to withdraw certain portions of the Property from Petras Homes Subdivision, if necessary. These actions shall be undertaken in accordance with applicable laws, regulations, and the provisions set forth in this Declaration.

## **ARTICLE 3**

### **OWNERSHIP AND EASEMENTS**

**3. Appurtenant Ownership:** The ownership rights of each Owner in the Common Area shall be directly tied to their ownership of the respective Lot. The Owner shall not be permitted to convey or transfer a Lot separate from the associated interest in the Common Area. Consequently, any conveyance of a Lot shall automatically include the right to use and enjoy the Common Area,

without the need for explicit mention in the transfer document. Furthermore, the Common Area shall not be subject to judicial partition. Each Owner, whether through sale, gift, inheritance, or other legal means, hereby waives and relinquishes any rights, interests, or legal claims for the partition of any Common Area. This waiver includes the commitment not to initiate, pursue, or seek a judicial partition. The ownership interests in both the Common Area and Lots are subject to the easements granted and reserved in this Declaration.

- **Establishment of Easements:** All easements granted or reserved in this Declaration shall be deemed established upon the recordation of this document. These easements shall be considered covenants running with the land, ensuring their enforceability for the benefit of all Owners and their respective Lots. It is acknowledged that these easements hold priority over any other encumbrances affecting or in favor of any portion of Petras Homes Subdivision.

**3.1 Appurtenant Ownership:** The use and benefits of the Common Area shall be tied to each Owner's respective Lot. No Lot can be conveyed separately from its interest in the Common Area. The transfer of any Lot automatically includes the right to use the Common Area, without the need for explicit reference in the conveyance document. Judicial partition of the Common Area is prohibited. Each Owner, whether through deed, gift, devise, or operation of law, waives any rights or claims for partition of the Common Area, acknowledging that no action for partition shall be pursued. Ownership interests in the Common Area and Lots are subject to the easements specified in this Declaration.

**3.2 Lot Ownership:** Each Lot in Petras Homes Subdivision shall be conveyed in fee to a single Owner. If multiple individuals or entities possess an undivided interest in the same Lot, they shall be considered as one Owner.

**3.3 Common Area Ownership:** The Association shall acquire title to the Common Area no later than the Turnover Meeting, except as outlined in subsection 3.5.

### 3.4 Easements

**3.4.1 Easements on Plat:** The Common Area and Lots are subject to the easements and rights-of-way depicted on the Plat, including but not limited to public utility easements, stormwater drainage, detention, sidewalk, and public access easements.

**3.4.2 Easements for Common Area:** Every Owner shall possess a non-exclusive right and easement to use and enjoy the Common Area, which shall be inherent to and transfer with the title of each Lot. This easement is subject to ORS 94.665, as may be amended.

**3.4.3 Easements Reserved by Declarant:** While Declarant owns any Lot, it retains an easement over the Common Area to facilitate necessary sales activities. Declarant and its successors and assigns maintain the right of ingress and egress, the ability to store materials, and any other reasonable use required for the Property's construction. These activities should not unreasonably interfere with an Owner's access, use, or enjoyment of their Lot.

**3.4.4 Additional Utility and Drainage Easements:** This Declaration acknowledges all easements granted or acquired by Declarant for utility installation and drainage facilities necessary for Petras Homes Subdivision 's development. No structures, plantings, or materials that obstruct utility installation, alter drainage channels, or impede water flow through easement areas are permitted.

**3.4.5 Association's Right of Entry:** Declarant grants the Association and its authorized agents the right to enter Lots and Common Area as necessary to fulfill their obligations outlined in this Declaration, the Bylaws, and the Articles, subject to any amendments.

**3.4.6 Easement to Governmental Entities:** Declarant grants a non-exclusive easement over the Common Area to governmental and quasi-government entities, agencies, utilities, and their agents for utility provision purposes.

**3.4.7 Perimeter Right of Entry Benefiting Association:** Declarant grants the Association and its authorized agents a right of entry over the perimeter portion of each Lot within building setbacks set by applicable ordinances. This right is for the installation, maintenance, repair, and replacement of private streets, Common Area, Commonly Maintained Property, utilities, communication lines, and drainage.

The Board may grant or convey the reserved easements to governmental bodies, agencies, public or private utility companies or providers upon a two-thirds (2/3) vote during a duly called Board meeting.

**3.5 Declarant's Authority to Dedicate Common Area and Grant Easements: Board's Authority after Transfer of Title to Association:**

**35.1 Declarant's Rights:** Declarant retains the right and authority to dedicate or convey any portion or all of the Tracts to governmental bodies or agencies, without requiring approval from any other Owner or the Association. Declarant also retains the right and authority to grant easements over the Tracts to governmental bodies or agencies, as well as public or private utility companies or providers, without the need for approval from any other Owner or the Association.

**35.2 Expiration of Declarant's Rights:** Declarant's rights and authority outlined in this Section 3.5 shall cease upon the conveyance of the Tracts to the Association. Subsequently, the Board shall possess the same powers previously held by Declarant and may exercise these powers with a two-thirds (2/3) or greater vote of the Board members during any properly convened Board meeting. The provisions of this Section 3.5 supersede any conflicting provisions found in other sections of this Declaration.

## **Article 4**

### **Lots and Homes**

**4.1 Residential Use:** Lots shall be exclusively used for residential purposes. Without the consent of the Board, no trade, craft, business, profession, commercial, or similar activity shall be conducted on any Lot or within any Home. Additionally, no goods, equipment, vehicles, materials, or supplies related to any trade, service, or business shall be stored or kept on any Lot or within any Home. However, the following exceptions apply:

(a) Activities related to the sale of residences are permitted.

(b) Declarant, contractors, and homebuilders have the right to construct residences on any Lot, store construction materials and equipment on the Lots during the construction process, and utilize a residence as a sales office or model home for sales purposes within Petras Homes Subdivision.

(c) Lot Owners may maintain their personal business or professional library, keep personal business or professional records or accounts, handle personal business or professional telephone calls, and meet with a reasonable number of business or professional associates, clients, or customers within their residence.

The Board shall not approve any commercial activities that are otherwise prohibited by this section unless it determines that such activities would only involve normal residential activities visible outside the residence and would not violate applicable local government ordinances.

## **4.2 Construction of Homes:**

Prior to the construction of a Home or any other structure on a Lot, the approval of the Architectural Review Committee (ARC) must be obtained, as outlined in Article 6. The ARC will consider various factors such as siting, shape, size, color, design, height, solar access, and materials when determining whether to grant consent for the proposed work.

**Restrictions on Construction:** The following restrictions apply to all Lots:

**4.2.1 Lot Coverage:** The total square footage of any structure on a Lot must not exceed the limits set by applicable zoning ordinances and the variances granted through the land use approval for the Property.

**4.2.2 Setbacks:** All Homes within Petras Homes Subdivision must comply with the setback requirements established by the City of Wilsonville, Clackamas County, and other governing authorities. Additionally, the Architectural Standards and the ARC will review relevant data to determine any additional setback requirements.

## **4.3: Lots and Homes**

**Completion of Construction:** All construction activities and landscaping on any Lot, including exterior finishing, painting, and landscaping, must be fully completed within twelve (12) months from the start of construction, resulting in a finished appearance when viewed from any angle. In cases where adverse weather conditions or other factors pose undue hardship, the provision may be extended for a reasonable duration with written approval from the ARC. If construction does not commence within twelve (12) months after the ARC's approval of construction documents, the approval shall be considered revoked, unless the Owner has obtained a written extension of time from the ARC.

**4.4: Landscaping:** Landscaping for the front yard portion of each Lot must be completed within three (3) months after the Home is occupied. The Declarant or any Lot Owner with finished Homes held for sale must complete front yard landscaping within three (3) months after substantial completion of the Home. Owners are responsible for irrigating their entire yard to maintain green lawns and fresh landscaping. Street trees located in front of an Owner's Home shall be irrigated and maintained by the Owner in accordance with the requirements of the City of Wilsonville or any other governing jurisdiction. Owners are prohibited from removing or relocating street trees.

**4.5: Maintenance of Lots and Homes:** Each Owner is responsible for maintaining their Lot and all improvements in a clean, attractive, and well-maintained condition, ensuring they do not pose a fire hazard. This includes, but is not limited to, maintaining roofs, siding, windows, doors, garage doors, walks, patios, chimneys, landscaping, street trees (if not maintained by the Association or a sub-association), and other exterior improvements and glass surfaces. Owners must also comply with City of Wilsonville ordinances regarding the maintenance of any sidewalk adjoining their Lot. Any repainting, re-staining, or exterior remodeling must receive prior review and approval from the ARC. Additionally, each Owner is responsible for promptly repairing any damage to their Lot or improvements caused by fire, flood, storm, earthquake, riot, vandalism, or other causes within a reasonable timeframe.

**4.6: Rental of Homes:** Owners have the option to rent or lease their Homes or a portion thereof, subject to the following conditions:

**4.6.1 Written Rental Agreements Required:** The Owner and the tenant must enter into a written rental or lease agreement that explicitly states that the tenant is bound by all



provisions of the Declaration, Bylaws, and Rules and Regulations. Any violation of these provisions shall be considered a default under the rental or lease agreement.

**4.6.2 Minimum Rental Period:** The rental or lease period should not be less than thirty (30) days.

**4.6.3 Provision of Documents to Tenant:** The Owner must provide each tenant with a copy of the Declaration, Bylaws, and Rules and Regulations.

**4.7 Animals:** Animals, livestock, or poultry of any kind, except for a reasonable number of dogs and cats that are not kept, bred, or raised for commercial purposes and are adequately controlled to avoid nuisance, are prohibited within any Lot. However, birds, fish, small reptiles, and small caged or tank-kept animals that are permanently housed within the interior of a Home are exempted. Owners whose pets cause inconvenience or damage to other Owners must take appropriate measures to prevent recurrence and reimburse affected Owners for any reasonable costs incurred in repairing such damage. Dogs must be leashed when outside the Owner's Lot. The Board may require the removal of a pet after receiving the third written notice of a pet-related violation of any rules, regulations, or restrictions within the Property.

**4.8 Nuisance:** No noxious, harmful, or offensive activities shall be conducted on any Lot or Common Area. Additionally, no actions or placements shall interfere with or jeopardize the enjoyment of the Owner or other Occupants or cause annoyance. Outdoor burning of leaves, debris, trash, garbage, or household refuse is strictly prohibited.

**4.9 Parking:** Parking of boats, trailers, commercial vehicles, mobile homes, campers, recreational vehicles, or equipment on Common Areas, streets within or adjacent to the Property is not allowed, including for loading or unloading purposes. Such vehicles may not be parked on any Lot, including driveways, for more than three (3) days unless fully enclosed within a garage or fully obscured from view behind a fence that does not extend beyond the front of the Home or garage. Owners must obtain prior approval from the ARC to install any screening fence.

**4.10 Vehicles in Disrepair:** No Owner shall allow any vehicle in a state of disrepair (e.g., non-functional, immovable, flat tires, missing body parts) or without a valid license to be abandoned or parked on Common Areas or on any street within or adjacent to the Property. Such vehicles may not remain on a Lot for more than three (3) days. The Association may have the vehicle removed from the Property and charge the expense of removal to the Owner if they fail to remove the vehicle within forty-eight (48) hours of receiving a notice from the Association. The expenses will be treated as an Assessment, collectible and enforceable as per the Declaration and Bylaws.

**4.11 Signs:** No signs, except for one temporary "For Sale" or "For Rent" sign not exceeding 24 inches in height and 36 inches in length, placed by the Owner or a licensed real estate agent, are allowed on any Lot. However, temporary "political" signs may be placed by the Owner or Occupant, provided they are removed within three days after the relevant election. Real estate signs must be removed within three days after the sale closing date.

**4.12 Rubbish and Trash:** No Lot or Common Area shall be used as a dumping ground for trash or rubbish. All garbage and waste must be kept in appropriate containers for proper disposal, which should be screened or kept out of public view. Yard rakings, dirt, and landscaping materials must not be dumped on streets, Common Areas, or other Lots. If an Owner fails to remove such materials after receiving notice from the Board, the Association may have them removed at the Owner's expense. Such expense will be treated as an Assessment, collectible and enforceable as per the Declaration and Bylaws.

**4.13 Fences and Hedges:** Prior written approval from the ARC is required for the installation or replacement of fences or boundary hedges. Rear yard fences should not exceed six feet in height

and must not extend beyond the front elevation of the home. Fencing on corner lots should comply with applicable City of Wilsonville vision clearance requirements. All fences, excluding those installed during the development of Petras Homes Subdivision, should conform to the style outlined in Exhibit "A" and be stained Sherwin Williams SW 3524 "Chestnut," unless otherwise approved by the ARC Committee.

**4.14 Service Facilities:** Service facilities such as garbage containers, fuel tanks, clotheslines, etc., must be screened to ensure they are not visible from the street, except on garbage pickup days. All telephone, electrical, cable television, and other utility installations should be placed underground in compliance with applicable law and subject to approval by the ARC.

**4.15 Antennas and Satellite Dishes:** Unless permitted by law or this section, no exterior antennas, satellite dishes, or other transmission devices shall be erected or placed on any Common Area or Lot. With prior written consent from the ARC, satellite dishes or antennas with a surface diameter of one meter or less, designed for receiving television broadcast signals or wireless cable, may be placed on any Lot if they are not visible from the street and are screened from neighboring Lots to the extent possible. Reasonable rules and regulations may be established by the Board or ARC regarding the installation, safety, placement, and screening of such devices, provided they do not unreasonably delay or increase installation, maintenance, or use, or prevent acceptable signal reception.

**4.16 Exterior Lighting or Noise-Making Devices:** No exterior lighting or noise-making devices, except for security and fire alarms, may be installed or maintained on any Lot without the consent of the ARC.

**4.17 Basketball Hoops:** The installation of a permanent basketball hoop on any Lot requires prior approval from the ARC. The ARC may choose to prohibit such basketball hoops altogether. 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. Temporary or portable basketball hoops must be stored or screened from view when not in use.

**4.18 Grades, Slopes, and Drainage:** Established drainage patterns or systems over or through any Lot must not be interfered with unless alternative provisions are made for proper drainage and approved by the ARC. Proper drainage refers to the designed and constructed drainage swales, conduits, inlets, and outlets within Petras Homes Subdivision.

**4.19 Damage or Destruction to Home and/or Lot:** In the event of damage by fire or other casualty, the Owner must either restore the damaged improvements or remove all damaged improvements, including foundations, and leave the Lot in a clean and safe condition. If the Owner chooses to restore the damaged improvements, the work must be performed within 60 days after the damage occurs and completed within six months thereafter. The restoration should aim to bring the improvements to substantially the same condition as before the damage, unless the provisions of Article 6 are followed.

**4.20 Right of Maintenance and Entry by Association:** If an Owner fails to perform maintenance or repairs that they are obligated to undertake according to the Declaration, and the Board determines that such maintenance or repair is necessary to preserve the attractiveness, quality, nature, and value of Petras Homes Subdivision, the Board may cause the maintenance or repair to be performed. In such cases, the Board may enter the Lot when necessary to carry out the work. The Owner has the right to request a hearing on the matter, which should be submitted in writing within five days of receiving notice. The hearing should take place within five to twenty days after the request is received. Entry onto the Lot should be made with minimal inconvenience to the Owner, and advance written notice of at least 48 hours should be provided, except in

emergency situations. The costs of such maintenance or repair will be charged to the Owner as an Assessment, which can be collected and enforced like any other assessments under the Declaration and Bylaws.

**4.21 Association Rules and Regulations:** The Board has the authority to adopt, modify, or revoke Rules and Regulations that govern the conduct of individuals, the operation and use of Lots and the Common Area, and the administration and operation of the Association. These Rules and Regulations are intended to ensure the peaceful and orderly use and enjoyment of the Property. Once adopted, they are binding on all Owners and occupants of Lots. Copies of the Rules and Regulations, including any amendments, modifications, or revocations, should be promptly delivered to each Owner. The method of adopting such Rules and Regulations is provided in the Bylaws, and the ARC may also adopt rules and regulations relevant to its functions with approval or consent from the Board.

**4.22 Ordinances and Regulations:** The standards and restrictions outlined in this Article 4 represent the minimum requirements. If local governmental ordinances and regulations are more restrictive or establish higher or different standards, those local regulations will prevail.

**4.23 Temporary Structures:** No temporary structures, including trailers, basements, tents, shacks, garages, barns, or other outbuildings, may be used on any Lot as a residence, whether temporarily or permanently.

**4.24 Declarant Exemptions:** Home builders constructing homes for sale to third parties and the Declarant are exempt from the provisions of Section 4.14 regarding sign placement.

Please note that this interpretation is based solely on the provided information and may not capture the complete context of the original document. It's always advisable to refer to the original document and consult with legal professionals for accurate understanding and advice regarding specific provisions.

## **ARTICLE 5**

### **COMMON AREA AND COMMONLY MAINTAINED PROPERTY**

**5.1 Common Area Tracts:** The property includes several designated tracts for specific purposes. Tract A is designated for natural resources and open space. Tract B serves as a private alley access for lots 17-24. Tract C is for pedestrian and bicycle access. Tract D is designated for landscaping and open space.

**5.2 Easements:** Lots have 6-foot public utility easements along their front-lot and side-lot frontages.

**5.3 Use of Common Areas:** The use of the Common Area is subject to the provisions outlined in the Declaration, Bylaws, Articles, and Rules and Regulations established by the Board. Obstruction of any part of the Common Area is not allowed. Storage or keeping of items in the Common Area requires prior written consent from the Board. Any alterations or additions to the Common Area also require prior written consent from the Board. The Common Area owned by the Association consists solely of the designated tracts.

**5.4 Maintenance of Common Area and Commonly Maintained Property:** The Association is responsible for the maintenance, repair, replacement, and upkeep of the Common Area and Commonly Maintained Property, unless otherwise specified in the Declaration. The Association is obligated to keep the Common Area in good condition and repair, provide necessary services, and take appropriate actions to ensure its maintenance.

**5.5 Alterations to Common Area:** Unless otherwise specified in the Declaration, only the Association has the authority to construct, reconstruct, or alter any improvement located on the

Common Area. Proposals for construction, alteration, maintenance, or repair of any improvement may be made at Board meetings, subject to limitations mentioned in the Bylaws and Declaration.

**5.6 Funding:** Expenditures for alterations, maintenance, or repairs to existing improvements, for which a reserve has been collected, will be made from the Reserve Account. If there is no reserve or the Reserve Account is insufficient, the Board may levy a special assessment to fund the construction, alteration, repair, or maintenance of an improvement or any other portion of the Common Area and Commonly Maintained Property.

**5.7 Landscaping:** All landscaping on any Lot, the Common Area, or Commonly Maintained Property must be maintained and cared for in a manner consistent with the original approval by the Declarant or the Architectural Review Committee (ARC). Weeds and diseased or dead lawn, trees, ground cover, or shrubs must be removed and replaced. Lawns should be neatly mowed, and trees and shrubs should be neatly trimmed. Irrigation of landscaping should be done properly, adhering to any water use restrictions or moratoria imposed by government bodies or agencies.

**5.8 Condemnation of Common Area:** If any portion of the Common Area is taken for public or quasi-public use through eminent domain or purchase, the Board has the discretion to receive and expend the entire award in a manner that best serves the Association and the Owners' interests. The Association represents the interests of all Owners in negotiations, suits, actions, or settlements related to such matters.

**5.9 Damage or Destruction of Common Area:** If any portion of the Common Area or Commonly Maintained Property is damaged or destroyed by an Owner or any of their guests, occupants, tenants, licensees, agents, or family members in a manner that would make the Owner liable under Oregon law, the Association is authorized to repair such damage. The Association will restore the area in a workmanlike manner, either to its original state or as modified or altered subsequently by the Association's discretion. Reasonable costs incurred in connection with repairs will become a special assessment on the Lot and against the responsible Owner.

**5.10 Power of Association to Sell, Convey or Grant Security Interest in Common Area:** The Association has the authority to sell, convey, or subject to a security interest any portion of the Common Area. The process and limitations for such transactions are governed by ORS 94.665, which outlines the procedures to be followed.

**5.11 Public Use of Lands:** The liability of the Declarant, the Association, and its members regarding the general public's use of the lands for recreational purposes is limited as provided by ORS 105.672 through 105.700. These statutes protect landowners who allow public access for recreational purposes and outline the extent of their liability.

This article establishes guidelines and regulations regarding the Common Area and Commonly Maintained Property within the community. It clarifies the responsibilities of the Association, outlines procedures for alterations and repairs, and addresses issues such as public use, maintenance, and potential damages or condemnation.

## ARTICLE 6

### ARCHITECTURAL REVIEW COMMITTEE

**6.1 Architectural Review:** Prior to commencing any improvement, alteration, or placement on a lot, the plans and specifications must be submitted to the Architectural Review Committee (ARC) for written approval. The ARC's role is to ensure the quality of workmanship, materials, and harmony in exterior design, landscaping, and location in relation to topography and grade elevations. Compliance with structural and building codes, solar ordinances, zoning codes, and other regulations remains the responsibility of the applicant. The specific procedures and

requirements for review and approval are outlined in the design guidelines and standards established by the ARC. This article applies whenever the Declaration requires the ARC's consent.

**6.2 Appointment and Removal of ARC Members:** During the development phase until Petras Homes Subdivision is fully built out, the Declarant has the right to appoint all members of the ARC and their replacements. After build-out, the Board assumes the authority to appoint and remove ARC members. The ARC consists of three members, and the Board may appoint itself or any of its members to serve on the ARC. If an ARC has not been appointed, the Board acts as the ARC.

**6.3 Majority Action:** Unless otherwise stated, a majority of ARC members can act on behalf of the ARC without a meeting or consulting other members. The ARC's decisions are documented in written instruments.

**6.4 Duties:** The ARC reviews and acts upon proposals and plans submitted under this article. It also has the discretion to establish architectural rules, regulations, and guidelines known as "Architectural Standards."

**6.5 ARC Decision:** The ARC must render a written decision approving or denying each application within 30 working days of receiving all required materials. If appeals are allowed (as per Section 6.8), the decision becomes final after the 10-day appeal period or when the Board issues a decision on the appeal. Failure to render a decision within 30 days or request an extension results in automatic approval of the application. The ARC can request one or more extensions, each not exceeding 30 days. If the ARC fails to provide a written decision within the extended period, the application is deemed approved. However, the applicant may agree to additional extensions to complete or supplement the application.

**6.6 ARC Discretion:** The ARC has the sole discretion to withhold consent for proposed work if it deems it inappropriate for a specific lot or incompatible with the design standards intended for Petras Homes Subdivision. Factors considered include siting, shape, size, color, design, height, solar access, and impact on enjoyment.

**6.7 Estoppel Certificate:** Upon written request and payment of a reasonable fee, the ARC must provide an Owner with a certificate signed by the Chairperson or an authorized member of the ARC. The certificate confirms compliance or non-compliance of improvements on the Owner's lot with the Declaration. If non-compliance is identified, the certificate specifies the nature of the non-compliance. The certificate is binding among Declarant, the ARC, the Association, all Owners, and those deriving an interest through them.

**6.8 Fees:** The ARC may charge applicants a reasonable application fee and additional costs associated with retaining architects, attorneys, engineers, and other consultants for advice. These fees are collectible as assessments according to Article 10.

**6.9 Exemption for Declarant and Successor:** The Declarant or its successor is exempt from the requirement to submit plans for approval to the ARC.

**6.10 Nonwaiver:** The ARC's consent to any matter does not establish a precedent or waive its right to withhold approval for similar matters in the future.

**6.11 Appeal:** Once the Board assumes the authority to appoint ARC members, any Owner who is adversely affected by the ARC's action can appeal to the Board. The appealing Owner must submit a written notice of appeal within ten (10) days, stating specific objections or mitigating circumstances. The Board will issue a final decision within forty-five (45) days, with reasonable efforts made to reach a decision within twenty (20) days. If the Board is serving as the ARC, the appeal is treated as a request for reconsideration.

**6.12 Effective Period of Consent:** Unless otherwise stated in Section 4.3, the ARC's consent for proposed work expires automatically after six (6) months, unless construction has commenced or the Owner has obtained an extension from the ARC.

**6.13 Determination of Compliance:** The ARC has the authority to inspect work periodically to ensure substantial compliance with the approved plans. If the work is not in substantial conformance or if the required approval was not obtained, the ARC will notify the Owner in writing, specifying the noncompliance and requiring the Owner to remedy it.

**Noncompliance:** If the ARC determines that an Owner has not constructed an improvement as approved or has constructed without obtaining approval, a notice of noncompliance is sent to the Owner. If the Owner fails to diligently remedy the noncompliance within three (3) days, the ARC schedules a hearing within thirty (30) days. At the hearing, if the ARC finds no valid reason for the noncompliance, it determines the estimated costs of achieving compliance and may issue a fine. The Owner is given ten (10) days to remedy the noncompliance. Failure to comply within the specified period allows the ARC, at its discretion, to remove the noncomplying improvement, remedy the noncompliance, and/or record a notice of noncompliance in the county deed records. The costs incurred will be assessed against the Owner as a Reimbursement Assessment.

**6.14 Liability:** The ARC and its members are not liable to any Owner or Occupant for any damage, loss, or prejudice resulting from their actions or failures to act, provided they have acted in good faith.

**6.15 Membership Termination:** Class B membership (Declarant's membership) will cease and be converted to Class A membership upon either of the following conditions: (a) when all Lots are sold from the Declarant to a party other than a successor Declarant, or (b) upon written election by the Declarant to terminate Class B membership. After the Termination Date, each Owner, including the Declarant, is entitled to one (1) vote per Lot owned for all matters on which Owners are entitled to vote. Fractional voting is not allowed, except for determining a quorum.

## **ARTICLE 7**

### **MEMBERSHIP IN THE ASSOCIATION**

**7.1 Members:** Every Owner is a member of the Association, and membership is inseparable from Lot ownership. When ownership of a Lot is transferred, membership in the Association automatically transfers as well. Occupants and Owners are bound by this Declaration, the Articles, Bylaws, Rules and Regulations of the Association, and any amendments thereto, without any further action or acknowledgement.

**7.2 Proxy:** Each Owner has the right to vote in person, by written ballot, or through a proxy. A proxy given by an Owner cannot be revoked except by providing actual notice of revocation to the person presiding over an Association meeting. For a proxy to be valid, it must be dated and specify that it is revocable only with notice. Unless otherwise specified, a proxy is valid for one (1) year from its date.

**7.3 Voting Rights:** The Association consists of two (2) classes of voting members:

**7.3.1 Class A:** Class A members include all Lot Owners except the Declarant. Each Class A member is entitled to one (1) vote per Lot owned on all matters on which Owners are eligible to vote.

**7.3.2 Class B:** The Class B member is the Declarant, its successors, and assigns. The Class B member has three (3) votes for each Lot owned. The Class B membership may also consider other factors it deems relevant in deciding whether to grant consent for proposed

work, such as the effect on the enjoyment of the ARC or its members, provided that the decision is made in good faith and based on their actual knowledge.

**7.4 Procedure:** All meetings of the Association, Board, ARC, and Association committees shall adhere to established rules of order as determined by the Board. Regardless of the specific rule of order adopted, the President shall have the right to vote on all matters, not solely to break a tie vote. It is important to note that a tie vote does not constitute a majority or signify the approval of any motion or resolution

## **ARTICLE 8**

### **DECLARANT CONTROL**

**8.1 Interim Board and Officers:** The Declarant retains administrative control over the Association and has the authority to appoint and remove members of an interim board, known as the "Interim Board." The Interim Board, consisting of one to three members, will manage the Association's affairs and possess all powers and rights of the Board until the Turnover Meeting, as defined below. It is important to note that notwithstanding this provision, at the Turnover Meeting, at least one Director must be elected by Owners other than the Declarant, even if the Declarant has the voting power to elect all three Directors.

**8.2 Turnover Meeting:** The Declarant is obligated to convene a meeting, referred to as the "Turnover Meeting," within sixty (60) days from the earlier of the following dates:

8.2.1 Latest Date: When all Lots are sold by the Declarant to a party other than a successor Declarant; or

8.2.2 Optional Turnover: At the time when the Declarant chooses in writing to terminate Class B membership.

Notice of the Turnover Meeting shall be provided to each Owner in accordance with the Bylaws. In the event that the Declarant fails to call the required Turnover Meeting, the transitional advisory committee or any Owner may initiate the meeting.

**8.3 Transitional Advisory Committee:** Within sixty (60) days after the Declarant conveys at least fifty percent (50%) of the Lots in the Project, the Declarant must organize a meeting of Owners for the purpose of electing a Transitional Advisory Committee. This committee shall consist of three (3) members, with two members selected by Owners other than the Declarant and one member appointed by the Declarant.

The Transitional Advisory Committee shall have reasonable access to the same information and documents that the Declarant is obligated to provide to the Association at the Turnover Meeting. In the event that the Declarant fails to call the meeting as stipulated in this Section 8.3, an Owner is entitled to initiate the meeting.

## **ARTICLE 9**

### **DECLARANT'S SPECIAL RIGHTS**

**9.1 General:** The Declarant assumes the responsibility of developing Lots and other necessary improvements within Petras Homes Subdivision. The successful completion of the development work, along with the marketing and sale of all Lots, is crucial for establishing and maintaining the Property as a residential community. Until all Homes on the Property have been constructed, fully completed, and sold, the Declarant shall retain certain special rights as outlined in this Article 9, pertaining to the Common Area and each Lot on the Property.

**9.2 Marketing Rights:** The Declarant shall possess the right to maintain a sales office and model(s) on any Lot(s) it owns. Both the Declarant and prospective purchasers, along with their

agents, shall be entitled to utilize and occupy the sales office and models during reasonable hours, any day of the week. Additionally, the Declarant is permitted to display "For Sale" signs and community marketing signs at suitable locations on the Property, including the Common Area.

**9.3 Declarant Easements:** The Declarant reserves easements over the Property, as further specified in Sections 3.4 and 3.5 of this Declaration.

**9.4 Additional Improvements:** It should be noted that the Declarant has not made any commitments to construct any improvements beyond those explicitly described in this Declaration.

**9.5 Control of the ARC:** The Declarant retains the right, though not the obligation, to exercise control over all aspects of the Architectural Review Committee (ARC), including the appointment of all ARC members and the authority to approve, modify, or adopt the Architectural Standards outlined in Article 6 of this document.

## **ARTICLE 10**

### **FUNDS AND ASSESSMENTS**

**10.1 Purpose of Assessments: Expenses.** The assessments imposed by the Association shall be utilized exclusively to advance the interests of the Owners and Occupants of Petras Homes Subdivision, aiming to enhance recreation, health, safety, aesthetics, and welfare. These funds shall be allocated for the improvement, operation, and maintenance of the Common Area and Commonly Maintained Property, as well as for fulfilling the Association's obligations, administering its affairs, and procuring property and liability insurance.

**10.2 Covenants to Pay:** Each Owner agrees and undertakes to remit the assessments and any additional charges levied in accordance with this Declaration or the Bylaws. The allocation of assessments for operating expenses, repairs, replacements, and reserves shall be determined as outlined in Section 10.4.2.

**10.2.1 Funds Held in Trust.** The Association shall collect and hold the assessments on behalf of each Owner, utilizing them strictly in accordance with Section 10.1. These assessments are the property of the Association and are non-refundable to Owners or Lots. In the event of the sale or transfer of a Lot, the Owner's interest in these funds shall automatically transfer to the new Owner.

**10.2.2 No Offsets Allowed.** No offsets against assessments shall be permitted under any circumstances, including claims challenging the Association's performance of its duties.

**10.2.3 Association Profits.** Any profits gained by the Association shall be retained as the Association's property and contributed to the Current Operating Account.

**10.3 Basis of Assessment: Commencement of Assessments.** Assessments for reserves shall commence when a Lot is sold from the Declarant to a non-successor Declarant party. However, if the Lot is sold to a homebuilder for constructing a Home, the reserves may be accrued and shall be paid when the homebuilder sells the completed Home to a third party. The accrual of reserves cannot extend beyond the Turnover Meeting date. If the Lot is not sold to a homebuilder, reserves may not be accrued and must be paid upon billing. Assessments for operating expenses shall commence ninety (90) days after the issuance of a building permit for the Lot. Operation assessments may not be accrued. The amount of the annual assessment for Owners, excluding the Declarant, shall be determined by the Declarant, who is exempt from paying assessments on Lots owned by it.

**10.4 Annual Assessments:** Annual assessments for each fiscal year shall be established upon the approval of the budget by the Board. The initial assessment and its implementation shall be determined by the Declarant and prorated on a monthly basis. For future purposes, any portion of



a month shall be considered a full month. Annual assessments shall be levied on a fiscal year basis, with the fiscal year corresponding to the calendar year unless otherwise adopted by the Association members through a vote. Unless stated otherwise by the Board, annual assessments shall be due and payable on the first day of each calendar year during the term of this Declaration.

**10.4.1 Budgeting.** The Board shall prepare, approve, and distribute to each member a pro forma operating statement (budget) annually, consisting of estimated revenue and expenses on an accrual basis. The budget shall include the total cash reserves available for the replacement or major repair of the Common Area, Commonly Maintained Property, and contingencies. Additionally, it shall contain an itemized estimate for the remaining life of major components, along with funding methods for repair, replacement, or additions. The Board shall follow established procedures for calculating and establishing reserves to cover the costs of Common Area and Commonly Maintained Property components. Although budgeting is done on an accrual basis, the Association's books shall be maintained on a cash basis. The Board shall consider all relevant factors when preparing the budget, including but not limited to:

- a) Anticipated operating expenses for the fiscal year, such as landscaping, maintenance, utilities, insurance premiums, legal and accounting fees, administrative costs, and other necessary services.
- b) Reserves for the replacement or major repair of Common Area and Commonly Maintained Property components, taking into account the remaining useful life of these components and the estimated cost of replacement or repair.
- c) Contingency funds to cover unforeseen expenses or emergencies that may arise during the fiscal year.
- d) Any other specific assessments or charges applicable to certain Lots or Owners, as outlined in the Declaration or Bylaws.

The budget shall be provided to all Association members at least thirty (30) days prior to the start of the fiscal year. Members shall have the opportunity to review and comment on the proposed budget before its final approval by the Board.

**10.4.2 Allocation of Assessments.** The allocation of assessments for operating expenses, reserves, and any other specific purposes shall be determined based on the budget approved by the Board. The assessment for each Lot shall be determined in proportion to the ownership interest in the Common Area and Commonly Maintained Property assigned to that Lot.

**10.5 Special Assessments.** In addition to the annual assessments, the Association may levy special assessments to cover extraordinary expenses or capital improvements that are beyond the scope of the annual budget. Special assessments shall be approved by a majority vote of the Association members at a meeting specifically called for that purpose. Written notice of the meeting and the proposed special assessment shall be provided to all members at least thirty (30) days in advance.

**10.6 Late Payments and Collection Procedures.** Any assessments or charges not paid within thirty (30) days of the due date shall be considered delinquent. A late fee, as determined by the Board, may be imposed on delinquent payments. The Association may take necessary action to collect delinquent assessments, including but not limited to filing a lien against the delinquent Lot, pursuing legal action, or imposing other reasonable penalties as allowed by law.

**10.7 Right to Suspend Services.** In the event of non-payment of assessments, the Association may, after providing notice and an opportunity to be heard, suspend certain services or privileges

provided by the Association until the delinquency is resolved. The suspended services may include, but are not limited to, access to recreational facilities, use of common amenities, or participation in community events.

**10.8 Reserve Funds.** The Association shall establish and maintain reserve funds for the replacement, repair, or major maintenance of Common Area and Commonly Maintained Property components. The Board shall develop a funding plan to ensure that adequate reserves are available when needed. The funding plan may include regular contributions from annual assessments, special assessments, or other sources as deemed appropriate by the Board.

**10.9 Audit and Financial Statements.** The Association's financial records shall be audited annually by an independent certified public accountant or a qualified auditor as determined by the Board. The audited financial statements shall be made available to all members upon request.

**10.10 Fiscal Year.** The fiscal year of the Association shall begin on the first day of January and end on the last day of December, unless otherwise determined by the Association members through a vote.

**10.11 Association's Right to Rent or Receiver.** In the event of a foreclosure suit initiated by the Association to enforce a lien on a defaulting Owner's Lot, the Association shall have the following options:

a) Collection of Rent: The Association shall have the right to collect reasonable rent from the defaulting Owner for the use of their Lot during the foreclosure proceedings. The amount of rent shall be determined by the Board and should be fair and reasonable considering the market value of similar properties in the area.

b) Appointment of a Receiver: Alternatively, the Association may seek the appointment of a receiver. A receiver is an impartial third party appointed by the court to take control of the defaulting Owner's Lot and manage it during the foreclosure process. The receiver's duties may include collecting rent, maintaining the property, and ensuring compliance with the Association's rules and regulations.

The choice between collecting rent and appointing a receiver shall be at the discretion of the Association, and the decision will be based on the circumstances of the specific case. The Association shall follow the appropriate legal procedures and obtain the necessary court approval for either option.

The purpose of collecting rent or appointing a receiver is to mitigate any financial losses incurred by the Association due to the defaulting Owner's non-payment of assessments. The funds collected through rent or managed by the receiver may be used to cover the delinquent assessments, maintain the Lot, or cover any other necessary expenses associated with the foreclosure proceedings.

This provision aims to ensure that the Association has mechanisms in place to protect its financial interests and maintain the overall financial stability of the community

## **ARTICLE 11**

### **GENERAL PROVISIONS**

**11.1 Records.** The Board is responsible for preserving and maintaining accurate records of the Association's meetings, including those of the Association, the Board, and any committees. Additionally, the Board shall keep detailed and precise financial records, including individual assessment accounts of Owners, a balance sheet, and income and expense statements. The individual assessment accounts shall include the name and address of the Owner(s) of each Lot, the amount of each assessment when due, the payments made on the account, and the remaining balance on the assessments. All records, including minutes and financial documents, shall be

maintained within the state of Oregon and be reasonably accessible for review and copying by the Owners. The Association may charge a reasonable fee for providing copies of these records.

**11.2 Enforcement: Attorneys' Fees:** Both the Association and the Owners, as well as any mortgagee holding an interest in a Lot, have the right (though not the obligation) to enforce all the covenants, conditions, restrictions, reservations, easements, liens, and charges stated in this Declaration through legal or equitable proceedings. Failure to enforce any covenant, condition, or restriction shall not be considered a waiver of the right to do so in the future. In the event that a lawsuit or action is initiated to enforce the terms of this Declaration, including the collection of assessments, the prevailing party shall be entitled to recover actual administrative costs related to the matter or event in question, attorneys' fees, and costs as determined by the trial court. In case of an appeal, the costs of the appeal, along with reasonable attorneys' fees set by the appellate court, shall also be recoverable. Furthermore, the Association shall be entitled to reasonable attorneys' fees and costs incurred in any enforcement activity or in the collection of delinquent assessments, regardless of whether a lawsuit or action is filed.

**11.3 Construction Defect Claim Procedure:** No litigation against the Declarant (including any successor Declarant), contractor, builder of the Home, or any Lot Owner concerning alleged defects in a Home or Common Area shall be initiated except in compliance with the process outlined in ORS 701.560-701.595 and ORS 701.605.

**11.4 Severability:** The invalidation of any covenant, condition, or restriction by a court order or judgment shall not affect the validity of the remaining provisions, which shall remain in full force and effect.

**11.5 Duration:** The covenants, conditions, and restrictions stated in this Declaration shall remain in effect for a term of thirty-five (35) years from the date of its recording. After the initial term, these provisions shall be automatically extended for successive periods of ten (10) years, unless rescinded by a vote of at least ninety percent (90%) of the Owners and ninety percent...

(Note: The remaining content of Article 11 is missing from your message. If you can provide the complete text, I'll be happy to assist you with a better version of it.)

**11.6 Amendment:** This Declaration may be amended at any time by an instrument approved by a vote of not less than seventy-five percent (75%) of the total votes from each class of eligible voting members. Any amendment must be executed, recorded, and certified as required by law. However, it should be noted that no amendment of this Declaration can affect an amendment of the Bylaws or Articles without complying with the provisions stated in those documents, as well as the Oregon Nonprofit Corporation Act. Additionally, no amendment that affects the general plan of development or any other rights of the Declarant contained herein may be made without the express written consent of the Declarant or its successors and assigns. This includes the amendment of Section 11.6 itself.

**11.7 Release of Right of Control:** The Declarant has the authority to relinquish its right of control by providing written notice to the Association at any time.

**11.8 Unilateral Amendment by Declarant:** In addition to any other special rights granted to the Declarant in this Declaration, the Declarant may amend this Declaration to comply with the requirements of various entities such as the Federal Housing Administration of the United States, the Federal National Mortgage Association, the Government National Mortgage Association, the Federal Home Mortgage Loan Corporation, or any department, bureau, board, commission, or agency of the United States, the State of Oregon, or any other state where the Lots are marketed and sold. Such amendments may also be made to satisfy the approval of corporations wholly owned, directly or indirectly, by the United States, the State of Oregon, or any other state. These

amendments are necessary for the entities to insure, guarantee, or provide financing for the development of the Property and sale of Lots. Prior to the Turnover Meeting, no amendment of this nature shall require notice to or approval by any Class A member.

**11.9 Resolution of Document Conflicts:**

In the event of a conflict among the provisions of the documents governing Petras Homes Subdivision, the conflict shall be resolved by referring to the following documents in the specified order:

- (a) Declaration
- (b) Articles
- (c) Bylaws
- (d) Rules and Regulations

IN WITNESS WHEREOF, the undersigned have executed these Covenants, Conditions, and Restrictions as of the [date] year.

[Name of Association] By: \_\_\_\_\_ Title: \_\_\_\_\_

[Name of Property Owner] By: \_\_\_\_\_ Title: \_\_\_\_\_

## Exhibit J: Annexation Legal Description and Exhibit

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## EXHIBIT A

### City Annexation

A tract of land located in the Southeast One-Quarter of Section 12, Township 3 South, Range 1 West, Willamette Meridian, Clackamas County, Oregon, and being more particularly described as follows:

Commencing at the southeast corner of Parcel II of Partition Plat No. 1991-043, Clackamas County Records, also being on the west right-of-way line of SW Stafford Road (30.00 feet from centerline) and the City of Wilsonville city limits line; thence leaving said city limits line along said west right-of-way line, South  $01^{\circ}40'07''$  West 658.82 feet to the north line of Deed Document Number 2009-059360, Clackamas County Deed Records, and said city limits line and the Point of Beginning; thence continuing along said west right-of-way line and said city limits line, South  $01^{\circ}40'07''$  West 241.00 feet to the north right-of-way line of SW Frog Pond Lane (16.50 feet from centerline); thence along said north right-of-way line and said city limits line, North  $88^{\circ}35'24''$  West 365.12 feet the west line of said Deed; thence along said west line and said city limits line, North  $01^{\circ}41'37''$  East 241.00 feet to the north line of said Deed; thence along said north line and said city limits line, South  $88^{\circ}35'24''$  East 365.01 feet to the Point of Beginning.

The above described tract of land contains 2.02 acres, more or less.

The Basis of Bearings for this description is based on Survey Number SN2022-120, Clackamas County Survey Records.

11/9/2022

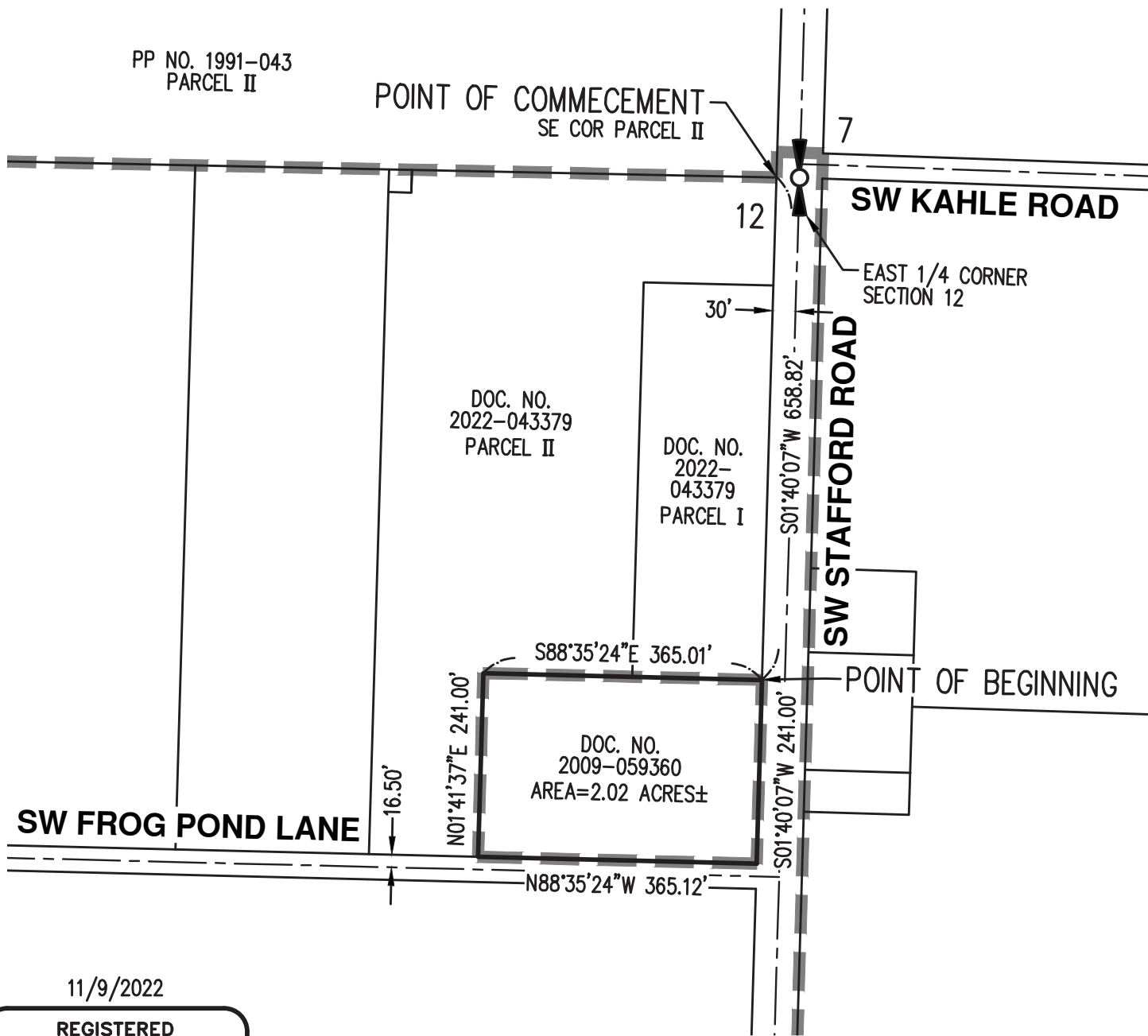
REGISTERED  
PROFESSIONAL  
LAND SURVEYOR

OREGON  
JANUARY 12, 2016  
MICHAEL S. KALINA  
89558PLS

RENEWS: 6/30/23

# EXHIBIT B

A TRACT OF LAND LOCATED IN THE SOUTHEAST 1/4 OF SECTION 12,  
TOWNSHIP 3 SOUTH, RANGE 1 WEST, WILLAMETTE MERIDIAN,  
CLACKAMAS COUNTY, OREGON



11/9/2022

REGISTERED  
PROFESSIONAL  
LAND SURVEYOR

*Michael S. Kalina*

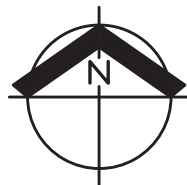
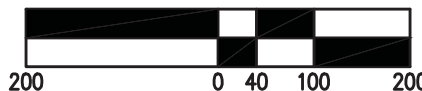
OREGON  
JANUARY 12, 2016  
MICHAEL S. KALINA  
89558PLS

RENEWS: 6/30/23

## LEGEND

--- CITY OF WILSONVILLE CITY LIMITS LINE

SCALE: 1" = 200 FEET



AKS ENGINEERING & FORESTRY, LLC  
12965 SW HERMAN RD, STE 100  
TUALATIN, OR 97062  
503.563.6151 WWW.AKS-ENG.COM



CITY ANNEXATION

DRWN: WCB	CHKD: MSK
AKS JOB: 9338	EXHIBIT B



## EXHIBIT A

### Metro Annexation

A tract of land located in the Southeast One-Quarter of Section 12, Township 3 South, Range 1 West, Willamette Meridian, Clackamas County, Oregon, and being more particularly described as follows:

Commencing at the southeast corner of Parcel II of Partition Plat No. 1991-043, Clackamas County Records, also being on the west right-of-way line of SW Stafford Road (30.00 feet from centerline) and the Metro boundary limits line; thence leaving said boundary limits line along said west right-of-way line, South 01°40'07" West 141.79 feet to the north line of Parcel I of Deed Document Number 2022-043379, Clackamas County Deed Records, and said boundary limits line; thence continuing along said west right-of-way line and said boundary limits line, South 01°40'07" West 517.03 feet the north line of Deed Document Number 2009-059360, Clackamas County Deed Records, and the Point of Beginning; thence continuing along said west right-of-way line and said boundary limits line, South 01°40'07" West 241.00 feet to the north right-of-way line of SW Frog Pond Lane (16.50 feet from centerline); thence along said north right-of-way line and said boundary limits line, North 88°35'24" West 365.12 feet the west line of said Deed; thence along said west line and said boundary limits line, North 01°41'37" East 241.00 feet to the north line of said Deed; thence along said north line and said boundary limits line, South 88°35'24" East 194.96 feet to the west line of said Parcel I; thence leaving said boundary limits line along said north line, South 88°35'24" East 170.05 feet to the Point of Beginning.

The above described tract of land contains 2.02 acres, more or less.

The Basis of Bearings for this description is based on Survey Number SN2022-120, Clackamas County Survey Records.

11/9/2022

REGISTERED  
PROFESSIONAL  
LAND SURVEYOR

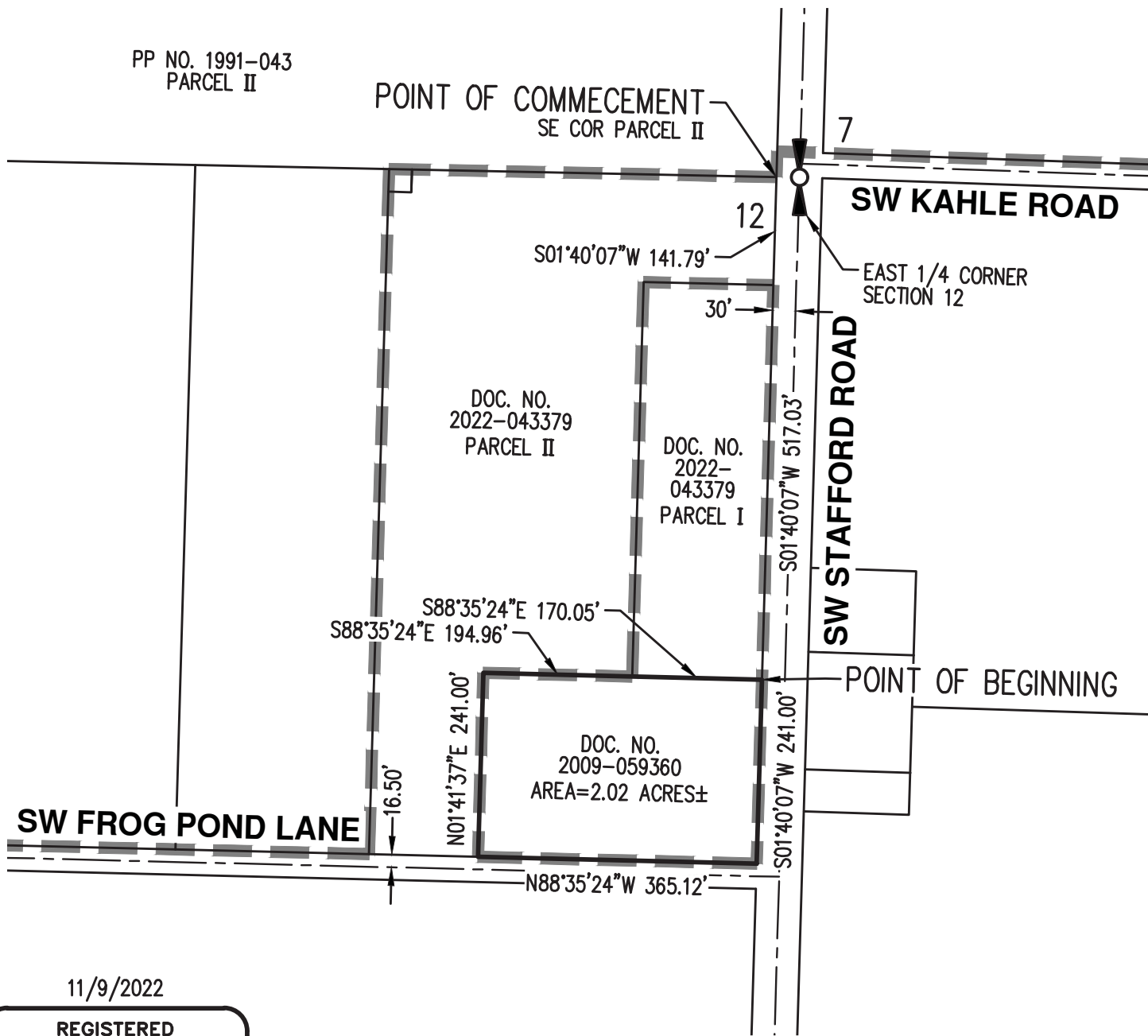
OREGON  
JANUARY 12, 2016  
MICHAEL S. KALINA  
89558PLS

RENEWS: 6/30/23



# EXHIBIT B

A TRACT OF LAND LOCATED IN THE SOUTHEAST 1/4 OF SECTION 12,  
TOWNSHIP 3 SOUTH, RANGE 1 WEST, WILLAMETTE MERIDIAN,  
CLACKAMAS COUNTY, OREGON



11/9/2022

REGISTERED  
PROFESSIONAL  
LAND SURVEYOR

*Michael S. Kalina*

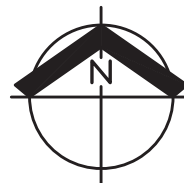
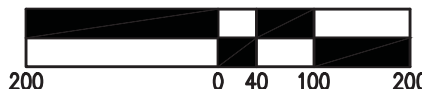
OREGON  
JANUARY 12, 2016  
MICHAEL S. KALINA  
89558PLS

RENEWS: 6/30/23

## LEGEND

--- METRO BOUNDARY LIMITS LINE

SCALE: 1" = 200 FEET



AKS ENGINEERING & FORESTRY, LLC  
12965 SW HERMAN RD, STE 100  
TUALATIN, OR 97062  
503.563.6151 WWW.AKS-ENG.COM



METRO ANNEXATION

DRWN: WCB	CHKD: MSK
AKS JOB: 9338	EXHIBIT B

## **Exhibit K: Annexation County Certifications**

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## EXHIBIT A

### City Annexation

A tract of land located in the Southeast One-Quarter of Section 12, Township 3 South, Range 1 West, Willamette Meridian, Clackamas County, Oregon, and being more particularly described as follows:

Commencing at the southeast corner of Parcel II of Partition Plat No. 1991-043, Clackamas County Records, also being on the west right-of-way line of SW Stafford Road (30.00 feet from centerline) and the City of Wilsonville city limits line; thence leaving said city limits line along said west right-of-way line, South  $01^{\circ}40'07''$  West 658.82 feet to the north line of Deed Document Number 2009-059360, Clackamas County Deed Records, and said city limits line and the Point of Beginning; thence continuing along said west right-of-way line and said city limits line, South  $01^{\circ}40'07''$  West 241.00 feet to the north right-of-way line of SW Frog Pond Lane (16.50 feet from centerline); thence along said north right-of-way line and said city limits line, North  $88^{\circ}35'24''$  West 365.12 feet the west line of said Deed; thence along said west line and said city limits line, North  $01^{\circ}41'37''$  East 241.00 feet to the north line of said Deed; thence along said north line and said city limits line, South  $88^{\circ}35'24''$  East 365.01 feet to the Point of Beginning.

The above described tract of land contains 2.02 acres, more or less.

The Basis of Bearings for this description is based on Survey Number SN2022-120, Clackamas County Survey Records.

11/9/2022

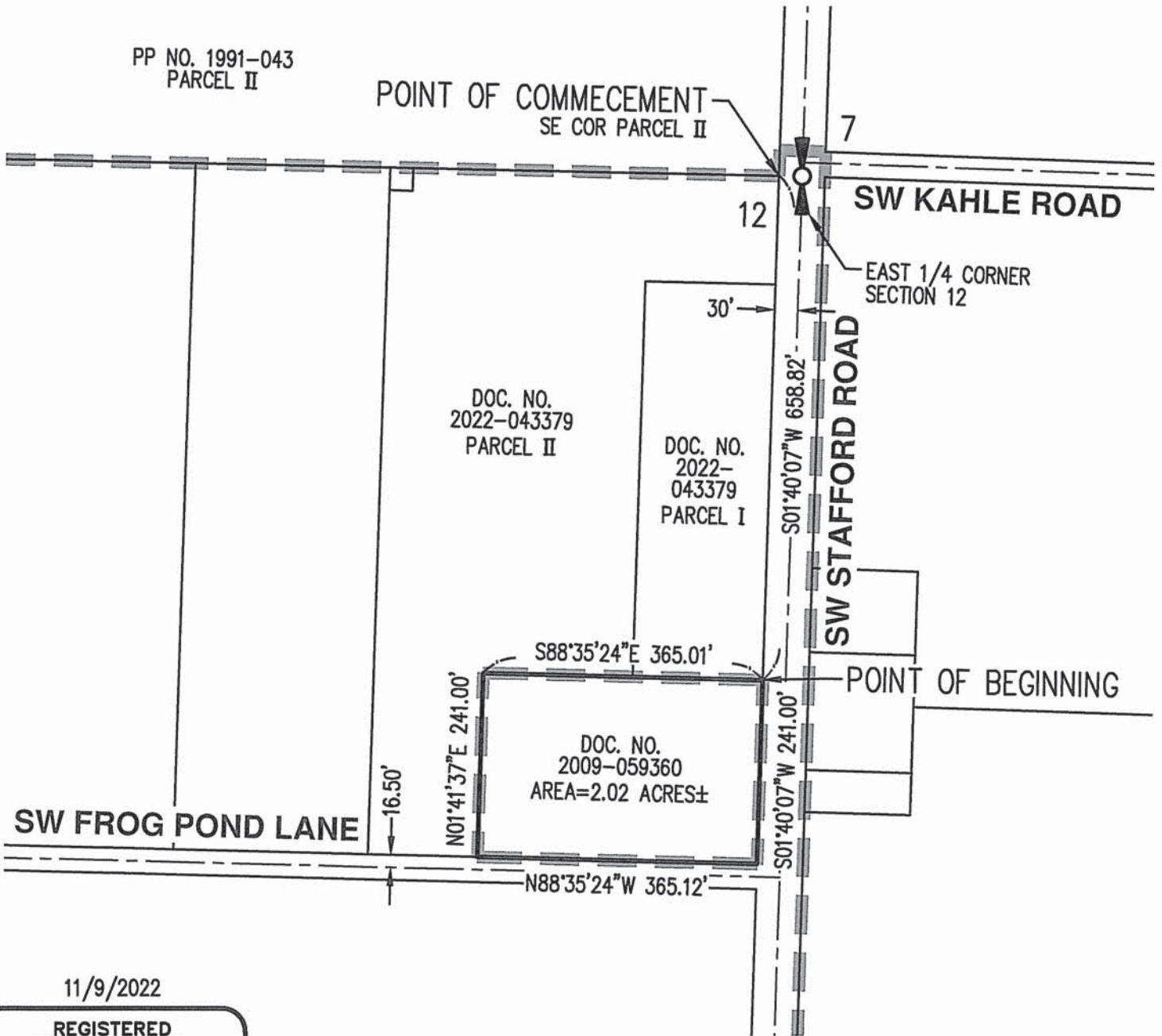
REGISTERED  
PROFESSIONAL  
LAND SURVEYOR

OREGON  
JANUARY 12, 2016  
MICHAEL S. KALINA  
89558PLS

RENEWS: 6/30/23

# EXHIBIT B

A TRACT OF LAND LOCATED IN THE SOUTHEAST 1/4 OF SECTION 12,  
TOWNSHIP 3 SOUTH, RANGE 1 WEST, WILLAMETTE MERIDIAN,  
CLACKAMAS COUNTY, OREGON



11/9/2022

**REGISTERED  
PROFESSIONAL  
LAND SURVEYOR**

*Michael S. Kalina*

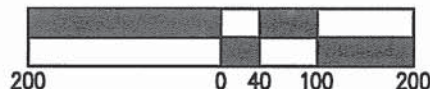
**OREGON  
JANUARY 12, 2016  
MICHAEL S. KALINA  
89558PLS**

RENEWS: 6/30/23

## LEGEND

--- CITY OF WILSONVILLE CITY LIMITS LINE

SCALE: 1" = 200 FEET



AKS ENGINEERING & FORESTRY, LLC  
12965 SW HERMAN RD, STE 100  
TUALATIN, OR 97062  
503.563.6151 WWW.AKS-ENG.COM




CITY ANNEXATION

DRWN: WCB	CHKD: MSK
AKS JOB: 9338	EXHIBIT B

**PETITION FOR ANNEXATION**

We, the undersigned owner(s) of the property described in **Exhibit A** and/or elector(s) residing at the referenced location(s), hereby petition for, and give consent to, Annexation of said property to the City of Wilsonville:

**NOTE: This petition may be signed by any qualified persons even though they may not know their property description or precinct number.**

SIGNATURE	PRINTED NAME	I AM A: *			PROPERTY ADDRESS	PROPERTY DESCRIPTION			PRECINCT #	DATE	
		PO	RV	OV		LOT #	¼ SEC	T			R
	ADRIAN RETRAYS	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	No Situs Wilsonville, OR 97070	200	12	3S	1W	323	10/24/22
		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>							
		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>							
		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>							
		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>							

\* PO - Property Owner  
 RV - Registered Voter  
 OV - Property Owner & Registered Voter

RECORDING REQUESTED BY:

GRANTOR:  
Oleta M. Anderson and James L. Byer not as  
tenants in common but with rights of survivorship  
2034 Columbia Blvd #103  
St. Helens, OR 97051

GRANTEE:  
Adrian Petras and Ana Campean as tenants by  
the entirety  
19674 Wildwood Dr.  
West Linn, OR 97068

SEND TAX STATEMENTS TO:  
Adrian Petras and Ana Campean  
**19674 Wildwood Dr**  
**West Linn, OR 97068**

AFTER RECORDING RETURN TO:  
Adrian Petras and Ana Campean  
19674 Wildwood Dr  
West Linn, OR 97068

Escrow No: 3626074510NT1-TTPOR45

Vacant Land  
Wilsonville, OR 97070

SPACE ABOVE THIS LINE FOR RECORDER'S USE

**STATUTORY WARRANTY DEED**

Oleta M. Anderson and James L. Byer not as tenants in common but with rights of survivorship, Grantor,  
conveys and warrants to

Adrian Petras and Ana Campean as tenants by the entirety, Grantee, the following described real  
property, free and clear of encumbrances except as specifically set forth below, situated in the County of  
Clackamas, State of Oregon:

A tract of land situated in the Southeast one-quarter of Section 12, Township 3 South, Range 1  
West of the Willamette Meridian, Clackamas County, Oregon, being more particularly described  
as follows:

Commencing at a 3-1/4-inch diameter brass monument marking the Southeast corner of said  
Section 12; thence North 00° 04' 48" East along the East line of said Section 12 a distance of  
1749.00 feet; thence leaving said East line, South 89° 48' 48" West a distance of 30.00 feet to the  
true point of beginning, said point being on the Northerly right of way line of Frogpond Land  
(County Road No. 2362); thence South 89° 48' 48" West along said Northerly right of way line a  
distance of 365.00 feet to a set 5/8-inch iron rod with yellow plastic cap stamped "Andy Paris and  
Assoc. Inc."; thence leaving said right of way line, North 00° 04' 48" East parallel with the East line  
of said Section 12 a distance of 241.00 feet to a set 5/8-inch iron rod with yellow plastic cap  
stamped "Andy Paris and Assoc., Inc."; thence North 89° 48' 48" East a distance of 365.00 feet to  
a set 5/8-inch iron rod with yellow plastic cap stamped "Andy Paris and Assoc., Inc." on the  
Westerly right of way line of Stafford Road (Market Road No. 12); thence South 00° 04' 48" West  
along said Westerly right of way line a distance of 241.00 feet to the true point of beginning.

THE TRUE AND ACTUAL CONSIDERATION FOR THIS CONVEYANCE IS \$320,000.00. (See  
ORS 93.030)

3626074510NT1-TTPOR45  
Deed (Warranty-Statutory)

Recorded by TICOR TITLE 3626074510NT1

**Subject to and excepting:**

Covenants, Conditions, Restrictions, Reservations, set back lines, Power of Special Districts, and easements of Record, if any.

BEFORE SIGNING OR ACCEPTING THIS INSTRUMENT, THE PERSON TRANSFERRING FEE TITLE SHOULD INQUIRE ABOUT THE PERSON'S RIGHTS, IF ANY, UNDER ORS 195.300, 195.301 AND 195.305 TO 195.336 AND SECTIONS 5 TO 11, CHAPTER 424, OREGON LAWS 2007, SECTIONS 2 TO 9 AND 17, CHAPTER 855, OREGON LAWS 2009, AND SECTIONS 2 TO 7, CHAPTER 8, OREGON LAWS 2010. THIS INSTRUMENT DOES NOT ALLOW USE OF THE PROPERTY DESCRIBED IN THIS INSTRUMENT IN VIOLATION OF APPLICABLE LAND USE LAWS AND REGULATIONS. BEFORE SIGNING OR ACCEPTING THIS INSTRUMENT, THE PERSON ACQUIRING FEE TITLE TO THE PROPERTY SHOULD CHECK WITH THE APPROPRIATE CITY OR COUNTY PLANNING DEPARTMENT TO VERIFY THAT THE UNIT OF LAND BEING TRANSFERRED IS A LAWFULLY ESTABLISHED LOT OR PARCEL, AS DEFINED IN ORS 92.010 OR 215.010, TO VERIFY THE APPROVED USES OF THE LOT OR PARCEL, TO DETERMINE ANY LIMITS ON LAWSUITS AGAINST FARMING OR FOREST PRACTICES, AS DEFINED IN ORS 30.930, AND TO INQUIRE ABOUT THE RIGHTS OF NEIGHBORING PROPERTY OWNERS, IF ANY, UNDER ORS 195.300, 195.301 AND 195.305 TO 195.336 AND SECTIONS 5 TO 11, CHAPTER 424, OREGON LAWS 2007, SECTIONS 2 TO 9 AND 17, CHAPTER 855, OREGON LAWS 2009, AND SECTIONS 2 TO 7, CHAPTER 8, OREGON LAWS 2010.

DATED: 3/27/15

*Oleta M. Anderson By  
James L. Byer her attorney  
in Fact*  
\_\_\_\_\_  
Oleta M. Anderson, by James L. Byer, her Attorney  
in Fact  
*James L. Byer*  
\_\_\_\_\_  
James L. Byer

State of OREGON

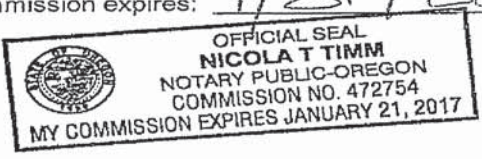
COUNTY of Clatsop

This instrument was acknowledged before me on 3/27, 2015

by James L. Byer and Olet M. Anderson, by her Power of Attorney James L. Byer

*(Signature)*  
\_\_\_\_\_  
Notary Public - State of Oregon

My commission expires: 1/21/2017







\$46.00

01335907200900593600040043

08/18/2009 03:15:20 PM

AFTER RECORDING, RETURN TO:  
SEND TAX STATEMENTS TO:

D-D Cnt=1 Stn=1 TIFFANYCLA  
\$20.00 \$10.00 \$16.00

4pg. PAUL & JANENE CHANEY CO-TRUSTEES

27227 SW STAFFORD RD

WILSONVILLE, OR 97070

STATUTORY BARGAIN AND SALE DEED

PAUL C. CHANEY and JANENE C. CHANEY, CO-TRUSTEES OF THE PAUL C. CHANEY and JANENE PARIS CHANEY RLT, Grantor, conveys to PAUL C. CHANEY and JANENE C. CHANEY, CO-TRUSTEES OF THE PAUL C. CHANEY and JANENE PARIS CHANEY RLT, Grantee, the following described real property situated in Clackamas County, State of Oregon, to wit:

SEE ATTACHED EXHIBIT A

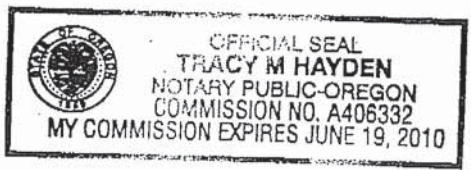
BEFORE SIGNING OR ACCEPTING THIS INSTRUMENT, THE PERSON TRANSFERRING FEE TITLE SHOULD INQUIRE ABOUT THE PERSON'S RIGHTS, IF ANY, UNDER ORS 197.300, 195.301 AND 305 TO 195.336 AND SECTIONS 5 TO 11, CHAPTER 424, OREGON LAWS 2007. THIS INSTRUMENT DOES NOT ALLOW USE OF THE PROPERTY DESCRIBED IN THIS INSTRUMENT IN VIOLATION OF APPLICABLE LAND USE LAWS AND REGULATIONS. BEFORE SIGNING OR ACCEPTING THIS INSTRUMENT, THE PERSON ACQUIRING FEE TITLE TO THE PROPERTY SHOULD CHECK WITH THE APPROPRIATE CITY OR COUNTY PLANNING DEPARTMENT TO VERIFY THAT THE UNIT OF LAND BEING TRANSFERRED IS A LAWFULLY ESTABLISHED LOT OR PARCEL, AS DEFINED IN ORS 92.010 OR 215.010, TO VERIFY THE APPROVED USES OF THE LOT OR PARCEL, TO DETERMINE ANY LIMITS ON LAWSUITS AGAINST FARMING OR FOREST PRACTICES AS DEFINED IN ORS 30.930 AND TO INQUIRE ABOUT THE RIGHTS OF NEIGHBORING PROPERTY OWNERS, IF ANY, UNDER ORS 195.300, 195.301 AND 195.305 TO 195.336 AND SECTIONS 5 TO 11, CHAPTER 424, OREGON LAWS 2007

The true consideration for this conveyance in terms of actual dollars is NONE. The purpose of this deed is to complete a lot line adjustment of those properties acquired by deeds recorded July 26, 2001, Fee No. 2001-058933 and 2001-058932, pursuant to Clackamas County Case File No. Z0267-09-PLA. This is an adjustment between Tax Account Nos. 3S1W12D 0100, 0200, and 201.

STATE OF Oregon )  
 ) ss.  
COUNTY OF Washington )

On this 18 day of August, 2009, personally appeared the herein Paul C. Chaney Co-trustee of the Paul C. Chaney and Janene Paris Chaney RLT who acknowledged the herein instrument to be his voluntary act and deed.

Before me:



Tracy M. Hayden  
NOTARY PUBLIC FOR THE STATE OF OREGON

My Commission Expires: June 19, 2010

STATE OF Oregon )  
 ) ss.  
COUNTY OF Washington )



On this 18 day of August, 2009, personally appeared the herein Janene P. Chaney Co-trustee of the Paul C. Chaney and Janene Paris Chaney RLT who acknowledged the herein instrument to be her voluntary act and deed.

Before me:

Tracy M. Hayden  
NOTARY PUBLIC FOR THE STATE OF OREGON

My Commission Expires: June 19, 2010

Dated: Aug. 18, 2009

Paul C. Chaney Co-trustee

Paul C. Chaney, co-trustee of the  
Paul C. Chaney and Janene Paris Chaney RLT

Janene P. Chaney Co-Trustee

Janene C. Chaney, co-trustee of the  
Paul C. Chaney and Janene Paris Chaney RLT

ANDY PARIS & ASSOCIATES, INC.  
REGISTERED PROFESSIONAL LAND SURVEYORS

PROPERTY: A Portion of Tax Lots 100, 200 & 201 - Assessor's Map No. 3 1W 12D

LOCATION: Stafford Road

DATE: August 4, 2009

PROJECT: 09055

Clackamas County Planning File No. Z0267-09-PLA

Tract 2

FOR USE ON LEGAL INSTRUMENT

**EXHIBIT "A"**

A tract of land situated in the Southeast one-quarter of Section 12, Township 3 South, Range 1 West of the Willamette Meridian, Clackamas County, Oregon, being more particularly described as follows:

Commencing at a 3-1/4" diameter brass monument marking the southeast corner of said Section 12; thence North 00°04'48" East along the east line of said Section 12 a distance of 1749.00 feet; thence leaving said east line, South 89°48'48" West a distance of 30.00 feet to the **TRUE POINT OF BEGINNING**, said point being on the northerly right of way line of Frogpond Lane (County Road No. 2362); thence South 89°48'48" West along said northerly right of way line a distance of 365.00 feet to a set 5/8" iron rod with yellow plastic cap stamped "ANDY PARIS & ASSOC. INC"; thence leaving said right of way line, North 00°04'48" East parallel with the east line of said Section 12 a distance of 241.00 feet to a set 5/8" iron rod with yellow plastic cap stamped "ANDY PARIS & ASSOC., INC"; thence North 89°48'48" East a distance of 365.00 feet to a set 5/8" iron rod with yellow plastic cap stamped "ANDY PARIS & ASSOC., INC" on the westerly right of way line of Stafford Road (Market Road No. 12; thence South 00°04'48" West along said westerly right of way line a distance of 241.00 feet to the **True Point of Beginning**;

Containing 2.02 acres, more or less.



# CERTIFICATION OF LEGAL DESCRIPTION AND MAP

I hereby certify that the description of the property included within the attached petition (located on Assessor's Map 31W 12D) has been checked by me and it is a true and exact description of the property under consideration, and the description corresponds to the attached map indicating the property under consideration.

NAME: JOSHUA BOLL  
TITLE: GIS CARTOGRAPHER II  
DEPARTMENT: ASSESSMENT  
COUNTY OF: CLACKAMAS  
DATE: 1/10/23



# CERTIFICATION OF PROPERTY OWNERSHIP

I hereby certify that the attached petition for annexation contains the names of the owners<sup>1</sup> (as shown on the last available complete assessment roll) of 100% of the land area of the territory proposed for annexation as described in the attached petition.

NAME: JOSHUA BOLL  
TITLE: GIS CARTOGRAPHER II  
DEPARTMENT: ASSESSMENT  
COUNTY OF: CLACKAMAS  
DATE: 1/10/23



---

<sup>1</sup> "Owner" means the legal owner of record or, where there is a recorded a land contract which is in force, the purchaser thereunder. If there is a multiple ownership in a parcel of land each consenting owner shall be counted as a fraction to the same extent as the interest of the owner in the land bears in relation to the interest of the other owners and the same fraction shall be applied to the parcel's land mass and assessed value for purposes the consent petition. If a corporation owns land in territory proposed to be annexed, the corporation shall be considered the individual owner of that land.

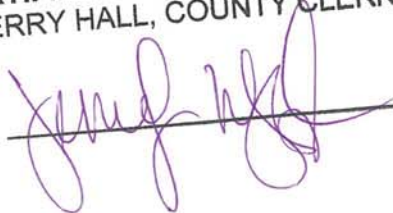
# CERTIFICATION OF REGISTERED VOTERS

I hereby certify that the attached petition contains the names of at least 50% of the electors registered in the territory proposed for annexation as described in the attached petition.

NAME: Jennifer Wessels  
TITLE: Elections specialist, Sr.  
DEPARTMENT: Elections  
COUNTY OF: Clackamas  
DATE: 1-10-23



**CERTIFIED COPY OF THE ORIGINAL  
SHERRY HALL, COUNTY CLERK**

BY: 





**Exhibit L:**  
**Zoning Change Legal Description and Exhibit**

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## EXHIBIT A

### Zoning Change Description

A tract of land located in the Southeast One-Quarter of Section 12, Township 3 South, Range 1 West, Willamette Meridian, Clackamas County, Oregon, and being more particularly described as follows:

Commencing at the southeast corner of Parcel II of Partition Plat No. 1991-043, Clackamas County Records, also being on the west right-of-way line of SW Stafford Road (30.00 feet from centerline) and the City of Wilsonville city limits line; thence leaving said city limits line along said west right-of-way line, South 01°40'07" West 658.82 feet to the north line of Deed Document Number 2009-059360, Clackamas County Deed Records, and said city limits line and the Point of Beginning; thence continuing along said west right-of-way line and said city limits line, South 01°40'07" West 241.00 feet to the north right-of-way line of SW Frog Pond Lane (16.50 feet from centerline); thence along said north right-of-way line and said city limits line, North 88°35'24" West 365.12 feet to the west line of said Deed; thence along said west line and said city limits line, North 01°41'37" East 241.00 feet to the north line of said Deed; thence along said north line and said city limits line, South 88°35'24" East 365.01 feet to the Point of Beginning.

The above described tract of land contains 2.02 acres, more or less.

The Basis of Bearings for this description is based on Survey Number SN2022-120, Clackamas County Survey Records.

1/6/2023

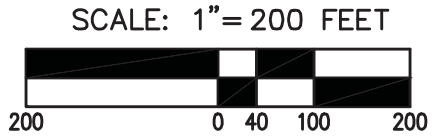
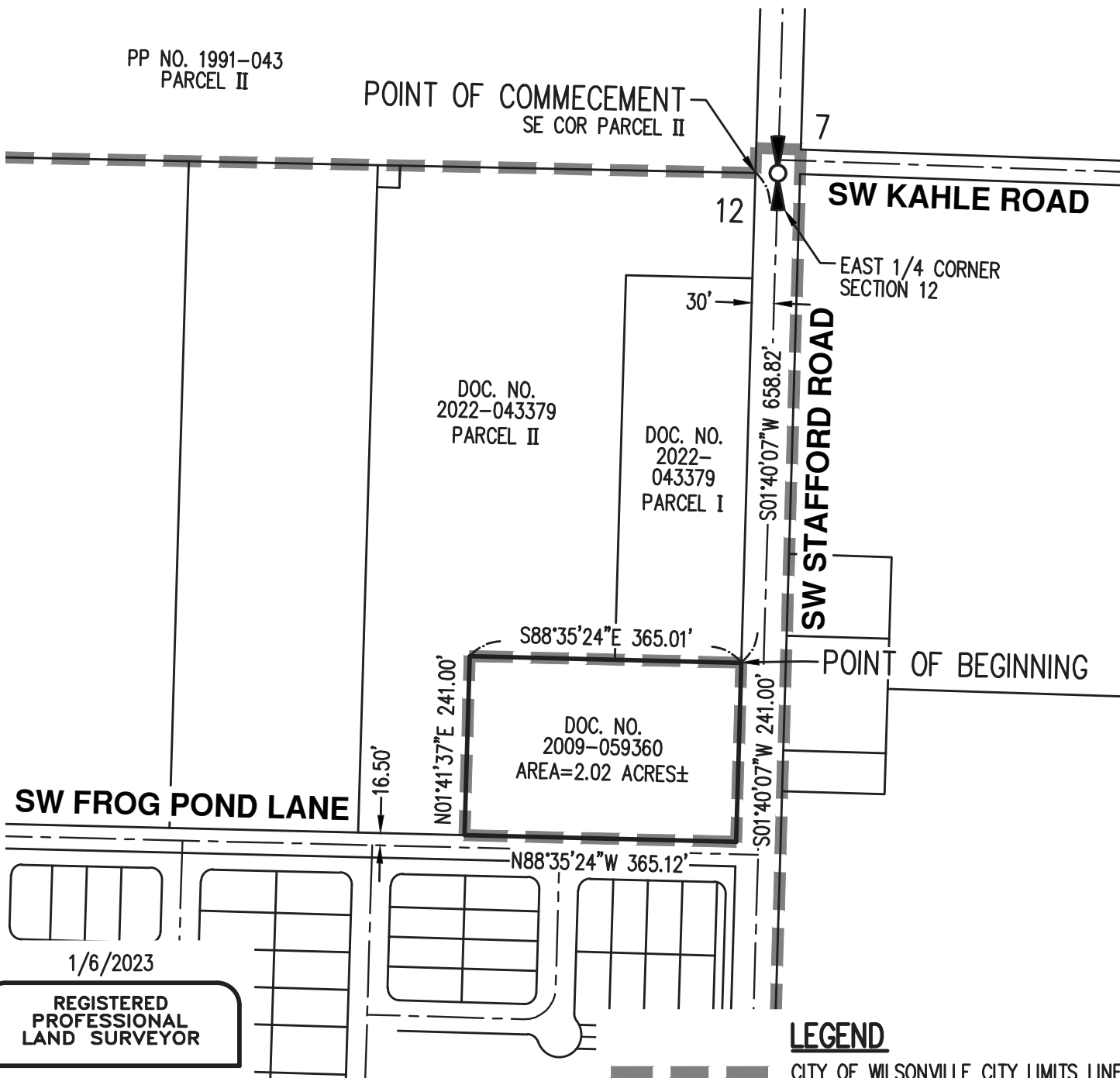
REGISTERED  
PROFESSIONAL  
LAND SURVEYOR

OREGON  
JANUARY 12, 2016  
MICHAEL S. KALINA  
89558PLS

RENEWS: 6/30/23

# EXHIBIT B

A TRACT OF LAND LOCATED IN THE SOUTHEAST 1/4 OF SECTION 12,  
TOWNSHIP 3 SOUTH, RANGE 1 WEST, WILLAMETTE MERIDIAN,  
CLACKAMAS COUNTY, OREGON



AKS ENGINEERING & FORESTRY, LLC  
12965 SW HERMAN RD, STE 100  
TUALATIN, OR 97062  
503.563.6151 WWW.AKS-ENG.COM



ZONING CHANGE MAP

TL 31W12D 00200	
DRWN: WCB	CHKD: MSK
AKS JOB: 9338	EXHIBIT B

## **Exhibit M: Preliminary Conceptual Elevations**

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8800 SE Sunnyside Rd.  
 Suite 213N  
 Clackamas, Oregon 97015  
 Phone: 503-646-8600  
 www.petras.com

**Frog Pond Duplex's**  
 New Duplex Homes  
 Wilsonville, Oregon 97070  
 Petra's Homes LLC.

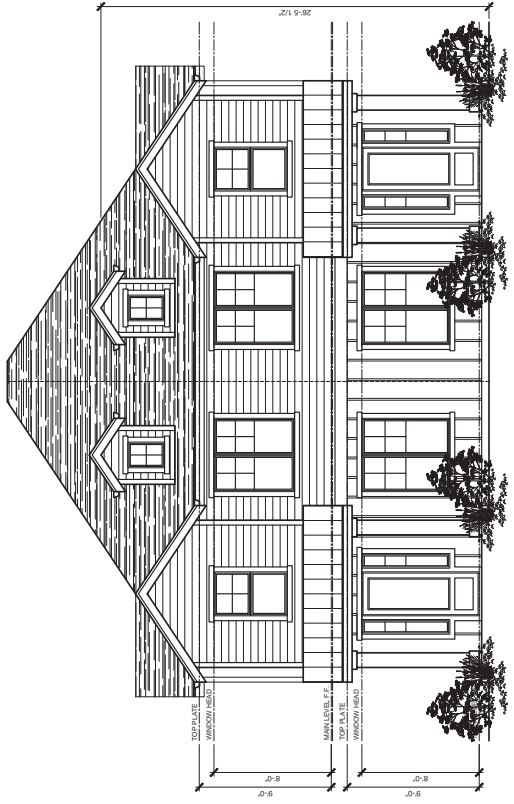
These plans and the designs  
 herein are copyrighted under  
 Federal Law by EPR DESIGN LLC.

**BUILDING  
 ELEVATIONS**  
 REVISED:

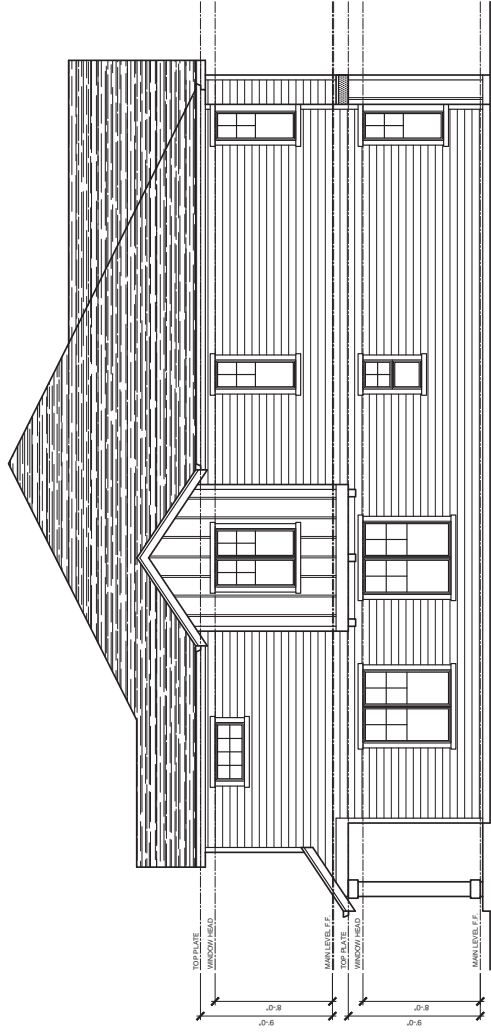
DATED: 3/8/2023

DRAWN BY:

SHEET: **A2.0**



**A FRONT ELEVATION**  
 A2.0 SCALE: 1/4" = 1'-0"



**B RIGHT SIDE ELEVATION**  
 A2.0 SCALE: 1/4" = 1'-0"



8800 SE Sunnyside Rd.  
 Suite 213N  
 Clackamas, Oregon 97015  
 Phone: 503.646.4600  
 www.petras.com

**Frog Pond Duplex's**  
 New Duplex Homes  
 Wilsonville, Oregon 97070  
 Petra's Homes LLC.

These plans and the designs  
 herein are copyrighted under  
 Federal Law by EPR DESIGN LLC.

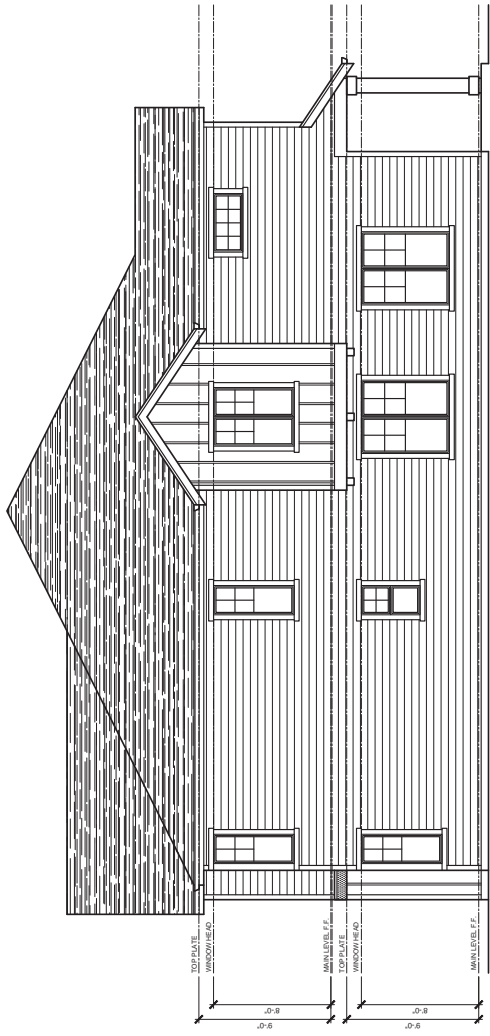


**BUILDING  
 ELEVATIONS**  
 REVISED:

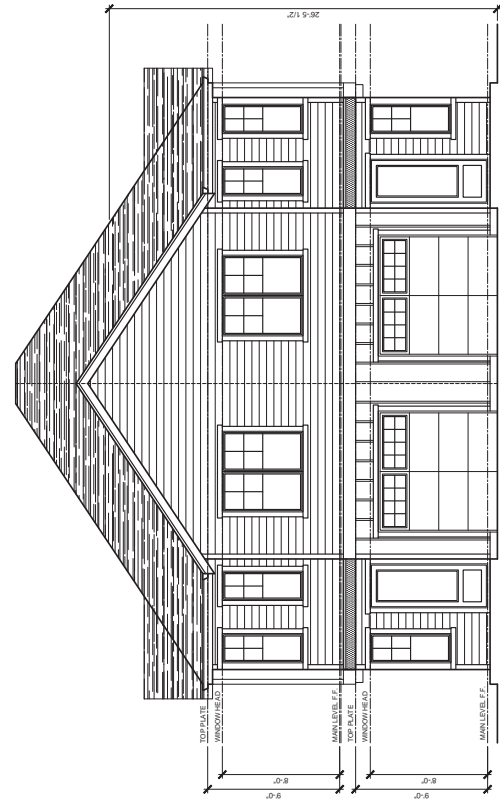
DATED: 3/8/2023

DRAWN BY:

SHEET: **A2.1**



**C LEFT SIDE ELEVATION**  
 A2.1 SCALE: 1/4" = 1'-0"



**D REAR ELEVATION**  
 A2.1 SCALE: 1/4" = 1'-0"



8800 SE Sunnyside Rd.  
 Suite 213N  
 Clackamas, Oregon 97015  
 Phone: 503.646.8600  
 www.petrasign.com

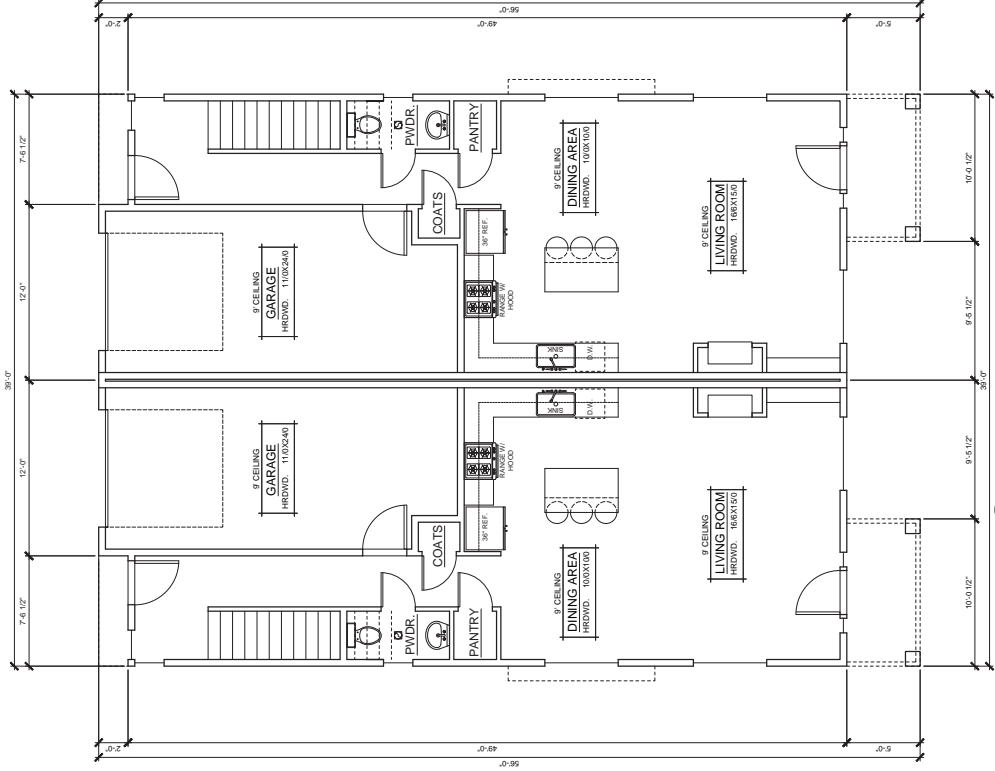
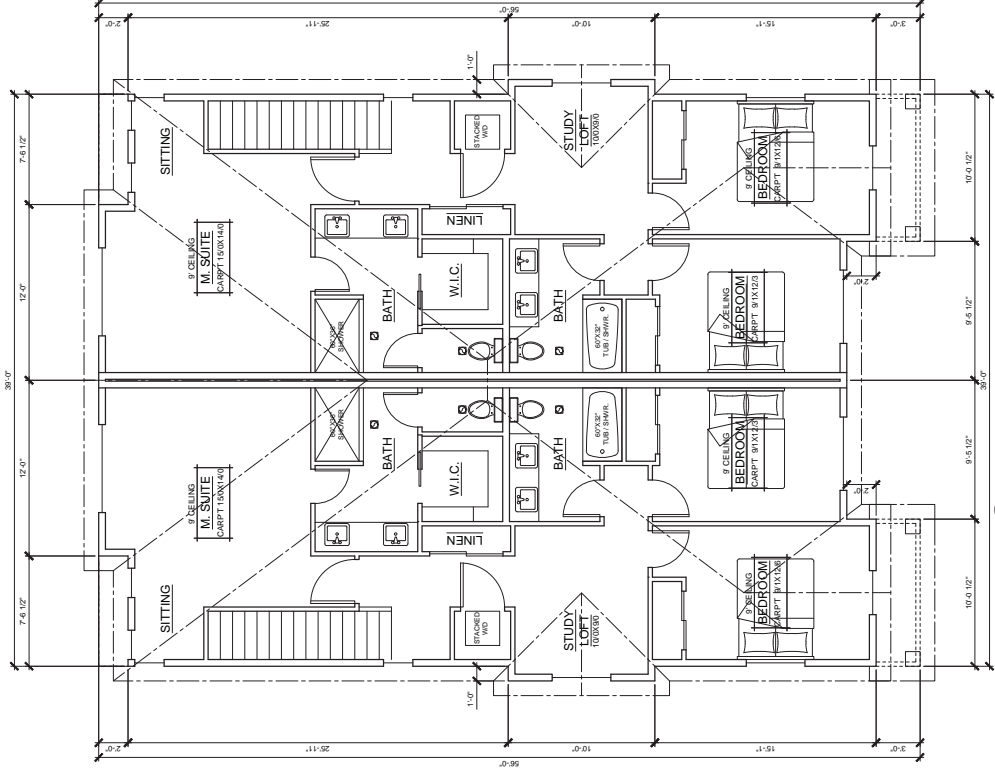
**Frog Pond Duplex's**  
 New Duplex Homes  
 Wilsonville, Oregon 97070  
 Petras Homes LLC.

These plans and the designs  
 herein are copyrighted under  
 Federal Law by EPR DESIGN LLC.



**FLOOR PLANS**  
 REVISED:  
 DATED: 3/8/2023  
 DRAWN BY:

SHEET:  
**A3.0**









## **Exhibit N: 250-Foot Radius Notification Labels**

---

31W12D 00401  
WEST HILLS LAND DEVELOPMENT LLC  
3330 NW YEON STE 200  
PORTLAND, OR 97210

31W12DD17400  
VENTURE PROPERTIES INC  
4230 GALEWOOD ST #100  
LAKE OSWEGO, OR 97035

31W12DD17800  
VENTURE PROPERTIES INC  
4230 GALEWOOD ST #100  
LAKE OSWEGO, OR 97035

31W12DD17900  
VENTURE PROPERTIES INC  
4230 GALEWOOD ST #100  
LAKE OSWEGO, OR 97035

31W12DD18000  
VENTURE PROPERTIES INC  
4230 GALEWOOD ST #100  
LAKE OSWEGO, OR 97035

31W12DD14800  
RICHMOND AMERICAN HOMES OF  
222 NE PARK PLACE DR STE 127  
VANCOUVER, WA 98684

31W12DD14900  
RICHMOND AMERICAN HOMES OF  
222 NE PARK PLACE DR STE 127  
VANCOUVER, WA 98684

31W12DD15000  
RICHMOND AMERICAN HOMES OF  
222 NE PARK PLACE DR STE 127  
VANCOUVER, WA 98684

31W12DD15100  
RICHMOND AMERICAN HOMES OF  
222 NE PARK PLACE DR STE 127  
VANCOUVER, WA 98684

31W12DD15200  
RICHMOND AMERICAN HOMES OF  
222 NE PARK PLACE DR STE 127  
VANCOUVER, WA 98684

31W12DD15300  
RICHMOND AMERICAN HOMES OF  
222 NE PARK PLACE DR STE 127  
VANCOUVER, WA 98684

31W12DD15400  
RICHMOND AMERICAN HOMES OF  
222 NE PARK PLACE DR STE 127  
VANCOUVER, WA 98684

31W12DD15500  
RICHMOND AMERICAN HOMES OF  
222 NE PARK PLACE DR STE 127  
VANCOUVER, WA 98684

31W12DD16800  
RICHMOND AMERICAN HOMES OF  
222 NE PARK PLACE DR STE 127  
VANCOUVER, WA 98684

31W12DD16900  
RICHMOND AMERICAN HOMES OF  
222 NE PARK PLACE DR STE 127  
VANCOUVER, WA 98684

31W12DD17100  
RICHMOND AMERICAN HOMES OF  
222 NE PARK PLACE DR STE 127  
VANCOUVER, WA 98684

31W12DD17200  
RICHMOND AMERICAN HOMES OF  
222 NE PARK PLACE DR STE 127  
VANCOUVER, WA 98684

31W12DD17300  
RICHMOND AMERICAN HOMES OF  
222 NE PARK PLACE DR STE 127  
VANCOUVER, WA 98684

31W12D 00100  
PULTE HOMES OF OREGON INC  
3535 FACTORIA BLVD SE STE 600  
BELLEVUE, WA 98006

31W12D 00300  
PULTE HOMES OF OREGON INC  
3535 FACTORIA BLVD SE STE 600  
BELLEVUE, WA 98006

31W12DD16600  
PETROFF NICOLE  
6701 SW LUPINE WAY  
WILSONVILLE, OR 97070

31W12D 00200  
PETRAS ADRIAN & ANA CAMPEAN  
3673 SW HOMESTEADER RD  
WEST LINN, OR 97068

31W12DD16700  
NELSON TYLER & ERIKA  
6653 SW LUPINE WAY  
WILSONVILLE, OR 97070

31E07 00800  
FROGPOND GRANGE #111  
28750 SW ASHLAND LOOP APT 155  
WILSONVILLE, OR 97070

31E07 00900  
FROGPOND GRANGE #111  
28750 SW ASHLAND LOOP APT 155  
WILSONVILLE, OR 97070

31W12DD17000  
DUNGEY MATTHEW & ALLISON KANTOR  
27352 SW MARIGOLD TER  
WILSONVILLE, OR 97070

31E07 00600  
ANDERSON SPARKLE FULLER TRUSTEE  
27480 SW STAFFORD RD  
WILSONVILLE, OR 97070

31E07 00601  
ANDERSON SPARKLE FULLER TRUSTEE  
27480 SW STAFFORD RD  
WILSONVILLE, OR 97070

31E07 00700  
ANDERSON SPARKLE FULLER TRUSTEE  
27480 SW STAFFORD RD  
WILSONVILLE, OR 97070

TLID	OWNER1	OWNERADDR	OWNERADDR2	OWNERCITY	OWNERSTATE	OWNERZIP	SITEADDR	SITECITY	SITEZIP
31W12D 00401	WEST HILLS LAND DEVELOPMENT LLC	3330 NW YEON STE 200		PORTLAND	OR	97210	6725 SW FROG POND LN	WILSONVILLE	97070
31W12DD17400	VENTURE PROPERTIES INC	4230 GALEWOOD ST #100		LAKE OSWEGO	OR	97035	NO SITUS	ADDRESS	97070
31W12DD17800	VENTURE PROPERTIES INC	4230 GALEWOOD ST #100		LAKE OSWEGO	OR	97035	27375 SW MARIGOLD TER	WILSONVILLE	97070
31W12DD17900	VENTURE PROPERTIES INC	4230 GALEWOOD ST #100		LAKE OSWEGO	OR	97035	27399 SW MARIGOLD TER	WILSONVILLE	97070
31W12DD18000	VENTURE PROPERTIES INC	4230 GALEWOOD ST #100		LAKE OSWEGO	OR	97035	27423 SW MARIGOLD TER	WILSONVILLE	97070
31W12DD14800	RICHMOND AMERICAN HOMES OF	222 NE PARK PLACE DR STE 127		VANCOUVER	WA	98684	6510 SW FROG POND LN	WILSONVILLE	97070
31W12DD14900	RICHMOND AMERICAN HOMES OF	222 NE PARK PLACE DR STE 127		VANCOUVER	WA	98684	6534 SW FROG POND LN	WILSONVILLE	97070
31W12DD15000	RICHMOND AMERICAN HOMES OF	222 NE PARK PLACE DR STE 127		VANCOUVER	WA	98684	6558 SW FROG POND LN	WILSONVILLE	97070
31W12DD15100	RICHMOND AMERICAN HOMES OF	222 NE PARK PLACE DR STE 127		VANCOUVER	WA	98684	6582 SW FROG POND LN	WILSONVILLE	97070
31W12DD15200	RICHMOND AMERICAN HOMES OF	222 NE PARK PLACE DR STE 127		VANCOUVER	WA	98684	6581 SW LUPINE LN	WILSONVILLE	97070
31W12DD15300	RICHMOND AMERICAN HOMES OF	222 NE PARK PLACE DR STE 127		VANCOUVER	WA	98684	6557 SW LUPINE LN	WILSONVILLE	97070
31W12DD15400	RICHMOND AMERICAN HOMES OF	222 NE PARK PLACE DR STE 127		VANCOUVER	WA	98684	6533 SW LUPINE LN	WILSONVILLE	97070
31W12DD16800	RICHMOND AMERICAN HOMES OF	222 NE PARK PLACE DR STE 127		VANCOUVER	WA	98684	6509 SW LUPINE LN	WILSONVILLE	97070
31W12DD16900	RICHMOND AMERICAN HOMES OF	222 NE PARK PLACE DR STE 127		VANCOUVER	WA	98684	6629 SW LUPINE WAY	WILSONVILLE	97070
31W12DD17100	RICHMOND AMERICAN HOMES OF	222 NE PARK PLACE DR STE 127		VANCOUVER	WA	98684	6605 SW LUPINE WAY	WILSONVILLE	97070
31W12DD17200	RICHMOND AMERICAN HOMES OF	222 NE PARK PLACE DR STE 127		VANCOUVER	WA	98684	27376 SW MARIGOLD TER	WILSONVILLE	97070
31W12DD17300	RICHMOND AMERICAN HOMES OF	222 NE PARK PLACE DR STE 127		VANCOUVER	WA	98684	27400 SW MARIGOLD TER	WILSONVILLE	97070
31W12D 00100	PULTE HOMES OF OREGON INC	3535 FACTORIA BLVD SE STE 600		BELLEVUE	WA	98006	27424 SW MARIGOLD TER	WILSONVILLE	97070
31W12D 00300	PULTE HOMES OF OREGON INC	3535 FACTORIA BLVD SE STE 600		BELLEVUE	WA	98006	27227 SW STAFFORD RD	WILSONVILLE	97070
31W12DD16600	PETROFF NICOLE	6701 SW LUPINE WAY		WILSONVILLE	OR	97070	NO SITUS	ADDRESS	97070
31W12D 00200	PETRAS ADRIAN & ANA CAMPEAN	3673 SW HOMESTEADER RD		WEST LINN	OR	97068	6701 SW LUPINE WAY	WILSONVILLE	97070
31W12DD16700	NELSON TYLER & ERIKA	6653 SW LUPINE WAY		WILSONVILLE	OR	97070	NO SITUS	ADDRESS	97070
31E07 00800	FROGPOND GRANGE #111	28750 SW ASHLAND LOOP APT 155		WILSONVILLE	OR	97070	6653 SW LUPINE WAY	WILSONVILLE	97070
31E07 00900	FROGPOND GRANGE #111	28750 SW ASHLAND LOOP APT 155		WILSONVILLE	OR	97070	27350 SW STAFFORD RD	WILSONVILLE	97070
31W12DD17000	DUNGEY MATTHEW & ALLISON KANTOR	27352 SW MARIGOLD TER		WILSONVILLE	OR	97070	27350 SW STAFFORD RD	WILSONVILLE	97070
31E07 00600	ANDERSON SPARKLE FULLER TRUSTEE	27480 SW STAFFORD RD		WILSONVILLE	OR	97070	27352 SW MARIGOLD TER	WILSONVILLE	97070
31E07 00601	ANDERSON SPARKLE FULLER TRUSTEE	27480 SW STAFFORD RD		WILSONVILLE	OR	97070	NO SITUS	ADDRESS	97070
31E07 00700	ANDERSON SPARKLE FULLER TRUSTEE	27480 SW STAFFORD RD		WILSONVILLE	OR	97070	27480 SW STAFFORD RD	WILSONVILLE	97070

## **Exhibit O: Service Provider Letters**

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**FIRE CODE / LAND USE / BUILDING REVIEW  
APPLICATION**



**North Operating Center**  
11945 SW 70<sup>th</sup> Avenue  
Tigard, OR 97223  
Phone: 503-649-8577

**South Operating Center**  
8445 SW Elligsen Rd  
Wilsonville, OR 97070  
Phone: 503-649-8577

REV 6-30-20

**Project Information**

Applicant Name: Glen Southerland – AKS Engineering & Forestry  
 Address: 12965 SW Herman Road, Suite 100, Tualatin  
 Phone: (503) 563-6151  
 Email: southerlandg@aks-eng.com  
 Site Address: No situs address  
 City: Wilsonville  
 Map & Tax Lot #: 3 1W 12D Tax Lot 200  
 Business Name: Petras Homes  
 Land Use/Building Jurisdiction: Current: RRRF5, Future: RN  
 Land Use/ Building Permit #: PRE22-0020  
 Choose from: Beaverton, Tigard, Newberg, Tualatin, North Plains, West Linn, Wilsonville, Sherwood, Rivergrove, Durham, King City, Washington County, Clackamas County, Multnomah County, Yamhill County

**Project Description**

11-lot residential subdivision with 10 attached and one detached single-family homes (21 total dwellings), stormwater facility, alley, pedestrian accesses, landscaping.

**Permit/Review Type (check one):**

- Land Use / Building Review - Service Provider Permit
- Emergency Radio Responder Coverage Install/Test
- LPG Tank (Greater than 2,000 gallons)
- Flammable or Combustible Liquid Tank Installation (Greater than 1,000 gallons)
  - \* Exception: Underground Storage Tanks (UST) are deferred to DEQ for regulation.
- Explosives Blasting (Blasting plan is required)
- Exterior Toxic, Pyrophoric or Corrosive Gas Installation (in excess of 810 cu.ft.)
- Tents or Temporary Membrane Structures (in excess of 10,000 square feet)
- Temporary Haunted House or similar
- OLCC Cannabis Extraction License Review
- Ceremonial Fire or Bonfire (For gathering, ceremony or other assembly)

**For Fire Marshal's Office Use Only**

TVFR Permit #: 2023-0080  
 Permit Type: SPP-Wilsonville  
 Submittal Date: 6/15/2023  
 Assigned To: McGladrey  
 Due Date: 6/16/2023  
 Fees Due: \$  
 Fees Paid: \$

**Approval/Inspection Conditions**  
(For Fire Marshal's Office Use Only)

**This section is for application approval only**

McGladrey 6/16/2023  
 Fire Marshal or Designee Date

Conditions: TVFR Final Inspection Required.  
Hydrant flow deferred.

See Attached Conditions:  Yes  No  
 Site Inspection Required:  Yes  No

**This section used when site inspection is required**

Inspection Comments:

Final TVFR Approval Signature & Emp ID Date



**NOTES:**

- TRACT B SHALL BE A PRIVATE ALLEY TO BE MAINTAINED BY THE ADJACENT PROPERTY OWNERS AS A PUBLIC ACCESS AND UTILITY EASEMENT OVER ITS ENTIRE WIDTH.
- TRACTS A AND B ARE INTENDED TO BE OWNED AND MAINTAINED BY A HOMEOWNERS ASSOCIATION AS OPEN SPACE AND ARE SUBJECT TO A PUBLIC PEDESTRIAN AND BICYCLE EASEMENT AND PUBLIC UTILITY EASEMENT OVER THEIR ENTIRETY.
- TRACT C IS SUBJECT TO A STORMWATER FACILITY AND ACCESS EASEMENT TO THE BENEFIT OF THE CITY OF WILSONVILLE OVER ITS ENTIRETY.
- TRACT E IS FOR LANDSCAPE BUFFER PURPOSES.
- THE APPROVAL OF THE WIDE HOUSING LAND DIVISION IS PURSUANT TO ORS 92.240 TO 92.192, AS APPLICABLE.

**EASEMENT LEGEND**

ENTRANCE	ENTRY MONUMENT EASEMENT
PAVE	PUBLIC ACCESS AND UTILITY EASEMENT
SIDE	SIDEWALK EASEMENT

**LOT COVERAGE SUMMARY**

SUBDISTRICT 10	R-5
MAX. LOT COVERAGE*	60%

\*LOT COVERAGE INCLUDES BUILDINGS ONLY.

**LOT SIZE SUMMARY**

SUBDISTRICT 10	R-5
MIN. LOT SIZE*	4,000 SF

\*SUBJECT TO 6,000 SQ. FT. (1/2) MINIMUM PER CITY OF WILSONVILLE MUNICIPAL CODE SECTION 4.127, TABLE 2, MORE A.K.A.

**SUMMARY OF LAND USES**

LAND USE	SF	PERCENTAGE OF PROPERTY
1. GROSS AREA IN PLAT	87,980	—
2. LANDSCAPE AREA/ OPEN SPACE	10,791	12%
3. ROW	13,056	15%
4. LOT AREA	49,348	56%
5. ALLEY	8,804	10%
6. STORMWATER TREATMENT FACILITY	5,960	7%

**R-5 SETBACKS**

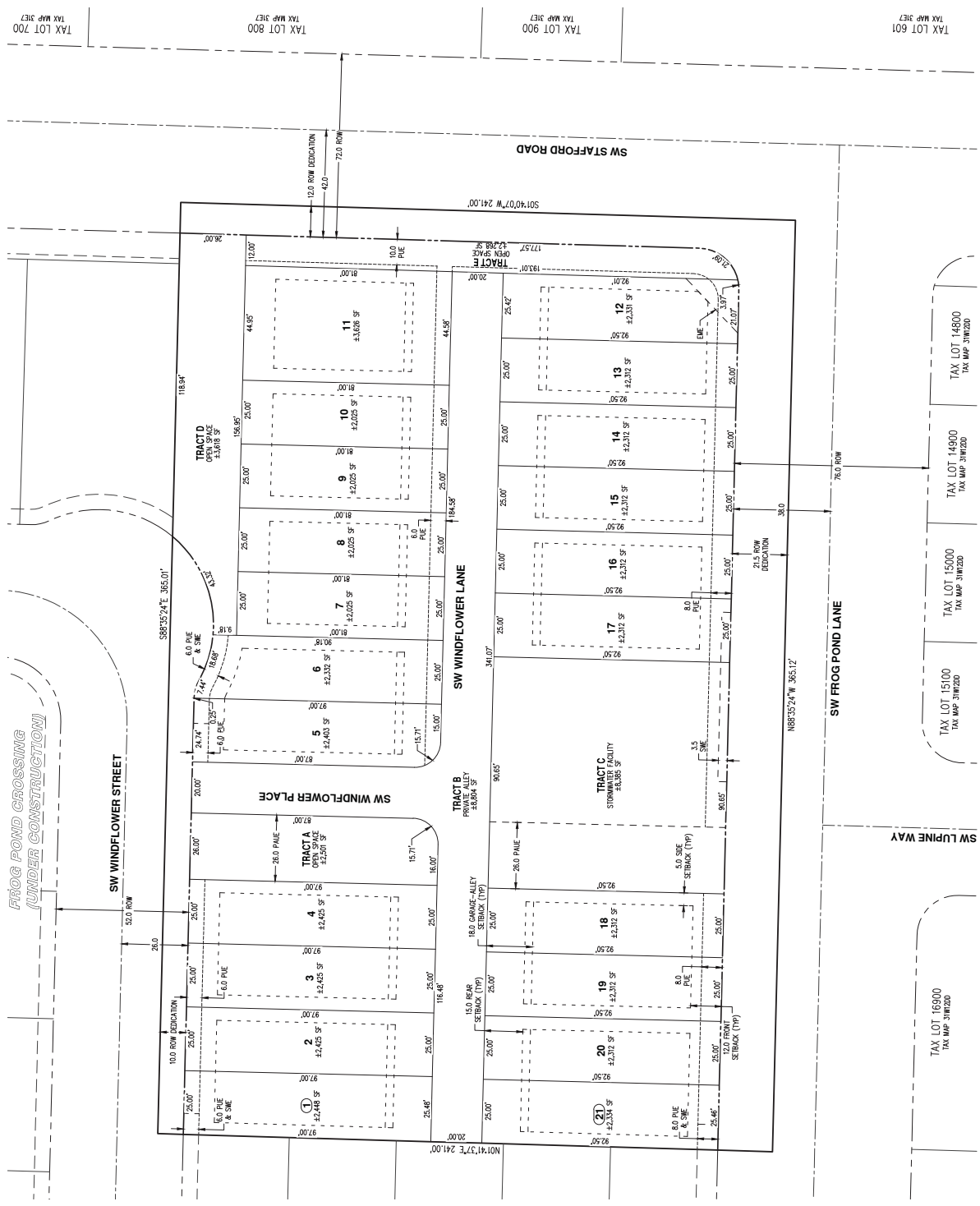
FRONT	12 FT
REAR	15 FT
SIDE - INTERNAL	5 FT
SIDE - CORNER	10 FT
GARAGE - FROM STREET	20 FT
GARAGE - FROM ALLEY	18 FT
FRONT PORCH	7 FT

**DISCLAIMER:**

THE PURPOSE OF THIS PRELIMINARY DIMENSIONED PLAN IS TO SHOW LOT DIMENSIONS AND AREAS FOR PLANNING PURPOSES. THIS IS NOT AN OFFICIAL RECORDED FINAL PLAT AND IS NOT TO BE USED FOR SURVEY PURPOSES. ALL DIMENSIONS ARE SUBJECT TO CHANGE.



SCALE: 1" = 20 FEET  
 ORIGINAL PAGE SIZE: 11" x 17"



TAX LOT 14800 TAX MAP 31W020
TAX LOT 14900 TAX MAP 31W020
TAX LOT 15000 TAX MAP 31W020
TAX LOT 15100 TAX MAP 31W020
TAX LOT 16900 TAX MAP 31W020

**EASEMENT LEGEND**  
 PUE PUBLIC UTILITY EASEMENT  
 PAE PUBLIC ADDRESS AND UTILITY EASEMENT  
 SUE SIDEWALK EASEMENT

**PRELIMINARY COMPOSITE UTILITY PLAN**  
**PETRAS HOMES SUBDIVISION**  
**PETRAS HOMES, LLC.**  
**WILSONVILLE, OREGON**

**PROFESSIONAL SEAL**  
 ENGINEER  
 STATE OF OREGON  
 NO. 12345  
 EXPIRES 12/31/2025

DATE: 06/27/2023  
 JOB NUMBER: 9338  
 DRAWN BY: JAA  
 CHECKED BY: JAA  
 DESIGNED BY: JAA

P-08

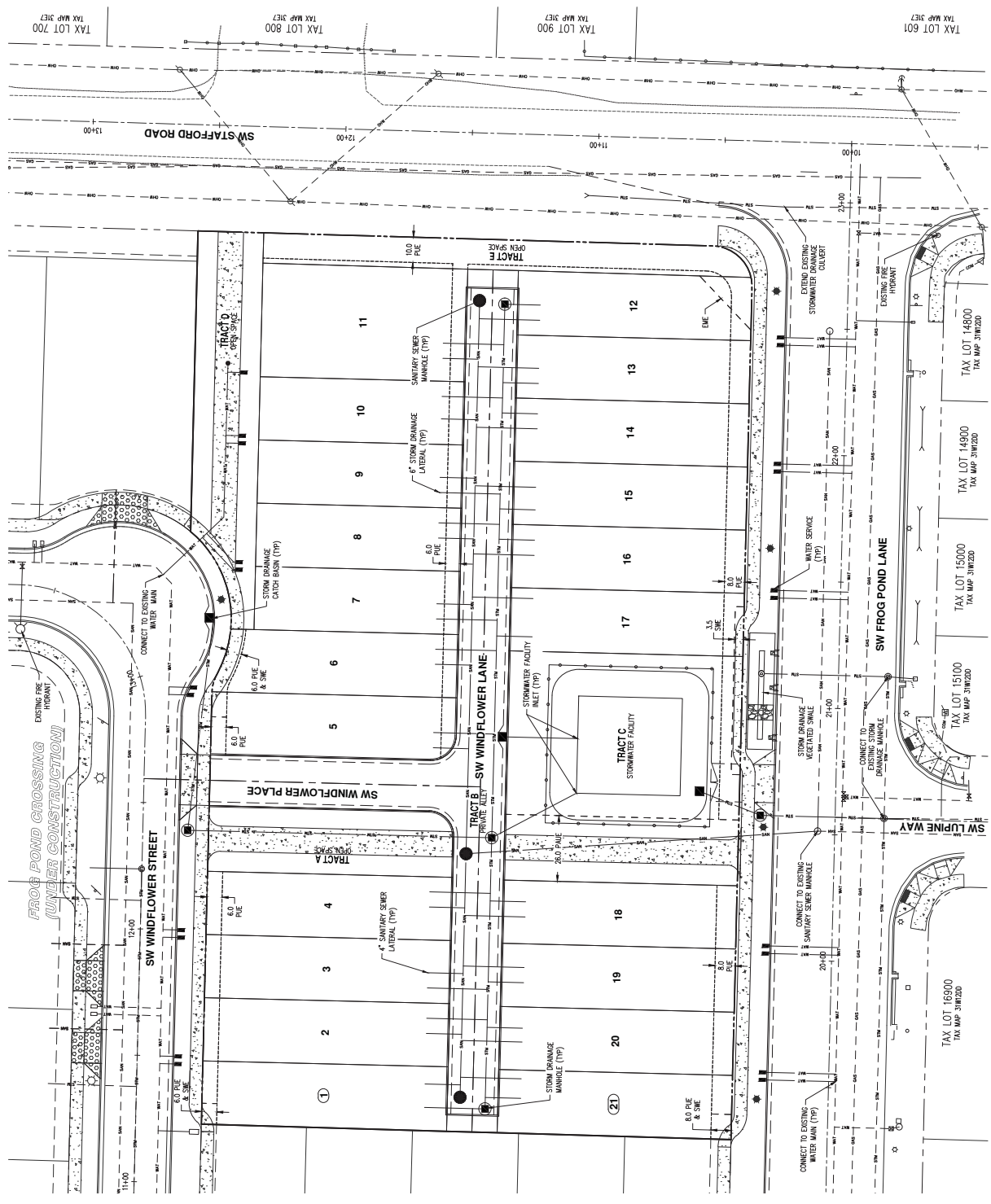


TVF&R Permit #2023-0080



SCALE: 1"=20' FEET  
 ORIGINAL PAGE SIZE OF 11" X 17"

Note: TVF&R final inspection required.  
 Fire hydrant flow deferred.







11215 Southwest Parkway, Suite 200, Clackamas, OR 97029  
www.republic.com | 800.451.1111 | REPUBLIC.SERVICES.COM

June 29, 2023

Nathan Ahrend  
AKS Engineering & Forestry, LLC

Re: Petras Homes Subdivision  
Frog Pong Development  
Wilsonville, OR 97070

Dear Nathan,

Thank you, for sending us the preliminary site plans for this proposed development in Wilsonville OR.

My Company: Republic Services of Clackamas and Washington Counties has the franchise agreement to service this area with the City of Wilsonville. We will provide complete commercial waste removal and recycling services as needed on a weekly basis for this location

We have reviewed your design plans for 21 residential duplexes situated west of SW Stafford Rd. between SW Windflower St. (north) and SW Frog Pond Ln. (south)

Curbside receptacle placement for residential trash and recycle collection service will be: lots 1 – 11 SW Windflower St., lots 12 – 21 SW Frog Pond Ln. Receptacles must be clear of any of obstructions including parked vehicles on the determined collection service days.

Thanks Nathan, for your help and concerns for our services prior to this project being developed.

Sincerely,

A handwritten signature in blue ink, appearing to read "Kelly Herrod".

Kelly Herrod  
Operations Supervisor  
Republic Services Inc.