29799 SW Town Center Lo Phone: 503.682.490	are obsolete <b>LSONVILLE</b> <b>OREGON</b> Dop E, Wilsonville, OR 97070 60 Fax: 503.682.7025 wilsonville.or.us	Development Per Final action on development application of per ORS 227.175 or as otherwise required application types. A pre application conference may be requ	iired. wireless communication facilities or similar Vireless Facility Review Worksheet. pplications for public hearing or send the required materials are submitted.	
Name: CIS Trust, c/o Patrick Priest Company:		Name: Company:Mackenzie 1515 SE Wat		
Mailing Address:       P.O. Box 1469         Lake Oswego, OR 97035         City, State, Zip:         503-763-3810         Phone:       Fax:         E-mail:       PPRIEST@CISOREGON.ORG		1515 SE Wat         Mailing Addres         Ortland, Ore         City, State, Zip:         Phone:       503.224.9560         gfrask@mckr         E-mail:	gon 97214	
Property Owner:		Property Owner's Signature:		
Name:	Datrick Princt	Patrik put		
Name:			t	
Mailing Address: P.O. Box 1469				
Lake Oswego, OR 97035       Applicant's Signature: (if different from Property Owner)         City, State, Zip:				
503-763-3810 Phone: Fax:				
E-mail: PPRIEST@CISO	REGON.ORG	Printed Name:	Date:	
Site Location and Description:         Project Address if Available:       Future building address will be 30125 SW Kinsman RoadSuite/Unit         Project Location:       Southwest corner of SW Kinsman Rd & SW Wilsonville Rd				
Tax Map #(s):31W23B	Tax Lot #(s):	Count	y: 🗆 Washington 🙀 Clackamas	
Request: Consolidated Type III review for Stage II Final Plan Modification (of previously approved application DB09-0049), Site Design Review with Waiver for a new ~16,000 SF office building,Type B Tree Removal, and Class III Master Sign Plan Modification (of previously approved application DB09-0051).         Project Type: Class I □ Class III □ Class III ¥				
Residential	X Commercial	Industrial	□ Other:	
Application Type(s):				
□ Annexation	□ Appeal	Comp Plan Map Amend	□ Parks Plan Review	
□ Final Plat	<ul> <li>Major Partition</li> </ul>	<ul> <li>Minor Partition</li> <li>Deliverage Plat</li> </ul>	Request to Modify	
<ul> <li>Plan Amendment</li> <li>Besure for Special Masting</li> </ul>	<ul> <li>Planned Development</li> <li>Bestreet for Time Extension</li> </ul>	<ul> <li>Preliminary Plat</li> <li>Sime</li> </ul>	Conditions	
<ul> <li>Request for Special Meeting</li> <li>SPOZ/SPIB Basican</li> </ul>	□ Request for Time Extension	Signs	X Site Design Review	
□ SROZ/SRIR Review	□ Staff Interpretation	<ul> <li>Stage I Master Plan</li> </ul>	X Stage II Final Plan (Modify)	
□ Type C Tree Removal Plan	Tree Permit (B or C)	Temporary Use	□ Variance	
<ul> <li>Villebois SAP</li> <li>Zene Manual Annual Insula</li> </ul>	□ Villebois PDP	Villebois FDP	<ul> <li>Modify Master Sign Plan</li> </ul>	
Zone Map Amendment	X Waiver(s)	Conditional Use	City of Wilsonville	

# MACKENZIE.

STAGE II FINAL PLAN MODIFICATION, SITE DESIGN REVIEW, TYPE B TREE REMOVAL, WAIVER, AND CLASS 3 SIGN MASTER PLAN MODIFICATION

**To** City of Wilsonville

**For** CIS Collaboration Center

Dated December 1, 2023

Project Number 2220098.00



MACKENZIE Since 1960

RiverEast Center | 1515 SE Water Avenue, Suite 100, Portland, OR 97214 PO Box 14310, Portland, OR 97293 | T 503.224.9560 | www.mcknze.com

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# **EXHIBITS**

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- A. Application Form
- B. Title Report/ Proof of Ownership
- C. Aerial Map
- D. Zoning Map
- E. Colors and Materials Building Perspectives
- F. Plan Set (includes colors and materials board and lighting information)
- G. Preliminary Storm Report including Preliminary Geotechnical Report
- H. Waste Hauler (Republic Systems) Correspondence, pending
- I. Traffic Impact Study (prepared by DKS Associates), pending
- J. Wetland Delineation (prepared by Ecological Land Services) dated November 13, 2023
- K. Tree Inventory (prepared by ArborPro) dated June 2nd, 2022
- L. Tualatin Valley Fire & Rescue (TVF&R) Service Provider Letter

# I. PROJECT SUMMARY

Applicant & Owner:	CIS Trust, c/o Patrick Priest P.O. Box 1469 Lake Oswego, OR 97035
Site Address:	9770 SW Wilsonville Road <sup>1</sup> , Wilsonville OR 97070 Clackamas County tax lot 31W23B 00100
Assessor Site Acreage:	2.05 AC (89,298 SF)
Zoning:	Planned Development Industrial (PDI)
Comprehensive Plan:	Industrial
Adjacent Zoning:	West: Residential (across Industrial Way) North: Planned Development Industrial (across SW Wilsonville Road) East: Planned Development Industrial (across Kinsman Road)
Existing Structures:	Vacant
Request:	Stage II Final Plan Modification, Site Design Review with Waiver, Type B Tree Removal, and Class III Master Sign Plan Modification
Project Contact:	Mackenzie Gabriela Frask, Land Use Planner 1515 SE Water Avenue, Suite 100 Portland, OR 97214 (971) 346-3675 gfrask@mcknze.com

<sup>&</sup>lt;sup>1</sup> Clackamas County recently assigned a new site address: 30125 SW Kinsman Road

# II. INTRODUCTION

# **Description of Request**

Citycounty Insurance Services (CIS) requests approval to construct a new approximately 15,700 square foot (SF) headquarters building. The new building is proposed at the southwest corner of the SW Wilsonville Road and Kinsman Road intersection (Clackamas County Tax Map/Lot 31W23B 00100). The project development area is approximately 2.05 acres. **Figure II-1: Aerial Image**below identifies the subject site. The building will be located near the northeastern corner of the site, with the parking, landscaping, and associated site improvements located generally south and west of the building.

In order to construct the building and site improvements, the applicant requests approval of the following land use applications:

- 1. Stage II Final Plan Modification (of previously approved application DB09-0049)
- 2. Site Design Review with Waiver
- 3. Type B Tree Removal
- 4. Class III Master Sign Plan Modification (of previously approved application DB09-0051)

The applicant is applying for a consolidated land use application, subject to a Type III procedure.

A pre-application meeting for this project was held on October 12, 2023. The applicant has incorporated recommendations from that meeting into the proposal.

# **Existing Site and Surrounding Land Use**

The subject site is located on a 2.05-acre site. The site is zoned Planned Development Industrial (PDI). The property to the west is zoned Residential (R), and the properties to the north (across SW Wilsonville Road) and west (across Kinsman Road) are zoned Planned Development Industrial. Exhibit D contains a zoning detail map.

The proposed development area is on a portion of the site that has most recently been used as a staging area for a waterline project. Prior to being used as a staging area, the site was used for agricultural practices.

The site's topography is relatively flat, but for the Significant Resource Area (SROZ) generally along the western property boundary, where no development is proposed with this application. Coffee Lake Creek flows north-south generally along the western property edge.

No change is proposed to the site's existing access, a single driveway on Kinsman Road. The site is served by existing public water, sanitary sewer, and storm drainage systems. No addition or extension of a public service line is necessary to serve the proposed new building.

# **Description of Proposed Development**

Proposed development is limited to an area of 1.2 acres (52,144 SF) in the eastern two-thirds of the site. It will include a single new office building with floor area of approximately 15,700 SF. The applicant anticipates that the building's final size will be based on available budget and construction costs, potentially resulting in a constructed facility of less than 16,000 SF.



As shown on the applicant's site plan (Sheet C1.10 of Exhibit F), parking will be located to the south and west of the building, with the building located as close as feasible to SW Wilsonville Road to enhance the pedestrian and passerby experience. The proposed parking capacity will be 65 parking spaces, with 20% of the provided parking electric vehicle (EV) ready. The project also includes a trash enclosure located along the western portion of the parking area, as shown on the applicant's site plan.

In compliance with the City's stormwater regulations, a dispersed onsite stormwater treatment systems is proposed, consisting of a vegetated linear surface facility along the western portion of the parking area and a triangular vegetated surface facility centrally located within the parking area.

The new building will obtain water by connecting to a public water main in Kinsman Road. It will connect to an existing sewer main in the northwestern portion of the site, and outfall treated storm runoff to an existing outfall in the southwestern portion of the property. Details are provided on the utility plan, Sheet C1.30 of Exhibit F.

# Transportation System

SW Wilsonville Road, the site's north frontage, is classified as a Minor Arterial per Figure 3-2 of the Wilsonville TSP. SW Wilsonville Road is a fully developed road, including: two (2) 10-foot travel lanes, one (1) 12-foot center lane, a 6-foot bike lane and 2-foot bike lane buffer both sides, curb and gutter, planter, and sidewalk.

SW Kinsman Road, the site's east frontage, is classified as a Collector. SW Kinsman Road is a fully developed road, including: two (2) 12-foot travel lanes, one (1) 12-foot center lane, a 7-foot bike lane both sides, curb and gutter, planter, and sidewalk.

No changes are proposed or warranted to the adjacent fully developed roadways and bicycle facilities.



Figure II-1: Aerial Image



# III. NARRATIVE AND COMPLIANCE

# Prior Conditions of Approval (DB09-0048 through -0053, Approved June 21, 2010 by Wilsonville City Council Resolution No. 2235).

This property is a part of a previous PUD approval. In addition to the general applicability of Wilsonville code standards, there are specific conditions of approval that apply as a result of those prior decisions. A review of applicable conditions of approval follows.

<u>PDB2</u>: Landscaping on the subject site must meet the vision clearance requirements of Section 4.177. **Response:** Proposed plantings and maintenance will satisfy vision clearance requirements. The vision clearance area is shown on the site plan, Sheet C1.10 in Exhibit F.

<u>PDB3.</u> All utilities shall be placed underground per Subsections 4.300-4.320. **Response:** As shown on Sheet C1.30, all utilities will be placed underground. This condition is satisfied.

<u>PDB7:</u> Pursuant to Section 4.135(.05)E., future development of Parcel I (Phase 2) shall not include loading or unloading areas within 100 feet of the west property line.

**Response:** The subject property is located on Parcel 1 (Phase 2). No loading or unloading areas are proposed. The proposed development satisfies this condition.

<u>PDB12:</u> The initial construction associated with Phase 1 shall include landscaping on the Phase 2 site, including the SROZ mitigation, stormwater outfall area, and field grass seeding in the future development area as shown on the submitted landscape plan. A final landscape plan shall be submitted through a Class I Administrative review, which in addition to the landscaping as noted shall add plant materials as required along both street frontages (SW Wilsonville Road and SW Kinsman Road) in order to result in a five-foot wide Low Screen Landscape of Section 4.1 76(02)D.

**Response:** This application proposes full development of the Phase 2 site, which will effectively supersede this condition and render it moot. The proposed Phase 2 site development plans (Exhibit F) include landscaping in compliance with applicable standards.

<u>PDC2:</u> The Applicant/Owner shall provide a landscape hedge between the proposed parking lot on Parcel 1 (Phase 2) and the mitigation plantings. The hedge coupled with the mitigation tree planting shall meet the City's low screen landscape standards of Section 4.176(.02)D. (See Finding C23)

**Response:** The landscape plantings shown in the L-Series sheets of Exhibit F demonstrate compliance with this condition.

<u>PDC12</u>: All HVAC equipment shall be inconspicuous and designed to be screened from off-site view. This includes, to the greatest extent possible, private utilities such as natural gas and electricity. The City reserves the right to require further screening of the equipment and utilities if they should be visible from off-site after occupancy is granted.

**Response:** The proposed building's HVAC equipment will be mounted on the roof and screened from view as shown on Sheet A2.10 of Exhibit F. The applicant's design team has made every effort to work with utility service providers to locate necessary utility service facilities, such as ground-mounted transformers, at locations that can be screened while meeting service capacity and maintenance access requirements. This condition is met.



<u>PDE7</u>: Approval is granted for two (2) freestanding signs; one (I) on Parcel I and one (1) on Parcel 2. Each freestanding sign shall measure 4 ft. by 8 ft. or 32 square feet and shall be approximately six feet tall measured from grade. Freestanding signs shall be consistent with Sheet Al .2 of Exhibit B2.

**Response:** This application includes a request to modify the DB09-0051 approval to add one (1) freestanding sign for the subject property near its sole driveway, on the Kinsman Road frontage. See in Exhibit F the proposed sign location (C-series sheets) and details (Sheet A5.17).

<u>NRC4:</u> All mitigation landscaping (Sheet LMI.0), required by Case Number 99AR02, shall be completed as part of the Phase 1 improvements. Maintenance of the mitigation area shall be the responsibility of the applicant, including: Submitting a site preparation and maintenance plan for approval by the Natural Resources Program Manager; Preparing the site by removing invasive plants species; Providing water during the establishment period (i.e. first two years) of the plants; and Replacing any required plant material that dies within the first year of planting.

**Response:** The Phase I development occurred timely following land use approval in June 2010. Plantings, including replacement plantings for failed specimens, were completed at that time. The applicant for this development has assessed conditions in the mitigation planting area, and has proposed replacement plantings as appropriate to establish or restore an appropriate plant community.

# 1. Stage II Final Plan Modification

# Section 4.117. Standards Applying To Industrial Developments In Any Zone

(.01) All industrial developments, uses, or activities are subject to performance standards. If not otherwise specified in the Planning and Development Code, industrial developments, uses, and activities shall be subject to the performance standards specified in Section 4. 135 (.05) (PDI Zone).

**Response:** The proposal is for commercial office development consistent with the 2010 Stage I approval for an office building of up to 21,700 square feet (SF) on the Phase 2 portion of the DB09 – 0048-0053 approval. This standard is not applicable because the site's proposed land use is not industrial.

# Section 4.118. Standards Applying to 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:

- A. Restrict or regulate the height or building design consistent with adequate provision of fire protection and fire-fighting apparatus height limitations.
- *B.* To provide buffering of low density developments by requiring the placement of three or more story buildings away from the property lines abutting a low density zone.
- C. To regulate building height or design to protect scenic vistas of Mt. Hood or the Willamette River.

**Response:** The proposal is not located in an "S" overlay zone. This standard does not apply.

(.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:** All underground utilities will comply with City of Wilsonville standards as detailed in the responses to Sections 4.300 to 4.320, below.

(.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:

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- 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.

**Response:** The applicant is proposing one (1) waiver to the minimum front and side setback (yard) standards, which are items listed above. The Waiver request is detailed in the Applicant's response to Section 4.140.01 and 4.139.11. This criterion is met.

- 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...;
  - 2. minimum density standards of residential zones...;
  - 3. minimum landscape, buffering, and screening standards;

**Response:** This proposal is not located in a residential area and the applicant is not proposing waivers to these standards. This criterion does not apply.

- 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 applicant is not proposing waivers to these standards. This criterion does not apply.

D. Locate individual building, accessory buildings, off-street parking and loading facilities, open space and landscaping and screening without reference to lot lines; and

**Response:** As shown in Exhibit F, the applicant is proposing to construct a building, associated parking, screening, and landscaping areas. The applicant is requesting a setback Waiver as part of this Planned Development application.

- *E.* Adopt other requirements or restrictions, inclusive of, but not limited to, the following:
  - 1. Percent coverage of land by buildings and structures in relationship to property boundaries to provide stepped increases in densities away from low-density development.



- 2. Parking ratios and areas expressed in relation to use of various portions of the property and/or building floor area.
- 3. The locations, width and improvement of vehicular and pedestrian access to various portions of the property, including portions within abutting street or private drive. [amended by Ord. 682, 9/9/10]
- 4. Arrangement and spacing of buildings and structures to provide appropriate open spaces around buildings.
- 5. Location and size of off-street loading areas and docks.
- 6. Uses of buildings and structures by general classification, and by specific designation when there are unusual requirements for parking, or when the use involves noise, dust, odor, fumes, smoke, vibration, glare or radiation incompatible with present or potential development of surrounding property. Such incompatible uses may be excluded in the amendment approving the zone change or the approval of requested permits.
- 7. Measures designed to minimize or eliminate noise, dust, odor, fumes, smoke, vibration, glare, or radiation which would have an adverse effect on the present or potential development on surrounding properties.
- 8. Schedule of time for construction of the proposed buildings and structures and any stage of development thereof to insure consistency with the City's adopted Capital Improvements Plan and other applicable regulations.
- 9. A waiver of the right of remonstrance by the applicant to the formation of a Local Improvement District (LID) for streets, utilities and/or other public purposes.
- 10. Modify the proposed development in order to prevent congestion of streets and/or to facilitate transportation.
- 11. Condition the issuance of an occupancy permit upon the installation of landscaping or upon a reasonable scheduling for completion of the installation of landscaping. In the latter event, a posting of a bond or other security in an amount equal to one hundred ten percent (110%) of the cost of the landscaping and installation may be required.
- 12. A dedication of property for streets, pathways, and bicycle paths in accordance with adopted Facilities Master Plans or such other streets necessary to provide proper development of adjacent properties.

**Response:** The applicant acknowledges that the Development Review Board may impose other requirements or restrictions, including but not limited to those specified above; however, given the nature of the proposed commercial (office) use, the applicant believes it is unnecessary to impose special restrictions or conditions of approval on the development.

(.04) The Planning Director and Development Review Board shall, in making their determination of compliance in attaching conditions, consider the effects of this action on availability and cost. 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 development. However, consideration of these factors shall not prevent the Board from imposing conditions of approval necessary to meet the minimum requirements of the Comprehensive Plan and Code.

**Response:** The applicant acknowledges that the Development Review Board must consider the effects of availability and cost when considering the attachment of conditions as described in Section 4.118 of the WDC. If imposition of conditions depends on consideration of cost factors, the applicant will participate in development cost estimates to inform that discussion; however, the applicant is not aware of any such issues at the time of submitting a complete application package.



(.05) The Planning Director, Development Review Board, or on appeal, the City Council, may as a condition of approval for any development for which an application is submitted, require that portions of the tract or tracts under consideration be set aside, improved, conveyed or dedicated for the following uses:

- A. Recreational Facilities: The Director, Board, or Council, as the case may be, may require that suitable area for parks or playgrounds be set aside, improved or permanently reserved for the owners, residents, employees or patrons of the development consistent with adopted Park standards and Parks and Recreation Master Plan.
- B. Open Space Area: Whenever private and/or common open space area is provided, the City shall require that an association of owners or tenants be established which shall adopt such Articles of Incorporation, By-Laws or other appropriate agreement, and shall adopt and impose such Declaration of Covenants and Restrictions on such open space areas and/or common areas that are acceptable to the Development Review Board. Said association shall be formed and continued for the purpose of maintaining such open space area. Such an association, if required, may undertake other functions. It shall be created in such a manner that owners of property shall automatically be members and shall be subject to assessments levied to maintain said open space area for the purposes intended. The period of existence of such association shall be not less than twenty (20) years and it shall continue thereafter and until a majority vote of the members shall terminate it, and the City Council formally votes to accept such termination.
- C. Easements: Easements necessary to the orderly extension of public utilities, and the protection of open space, may be required as a condition of approval. When required, such easements must meet the requirements of the City Attorney prior to recordation.

**Response:** The applicant acknowledges that the Planning Director and Development Review Board have this authority; however, establishment of recreational facilities or open space areas would be inconsistent with the City's planning for industrial use of this property. The applicant will provide public utility easements to adjoining public streets as necessary, as depicted in the C-series drawing sheets in Exhibit F. This standard is met.

(.06) Nothing in this Code shall prevent the owner of a site that is less than two (2) acres in size from filing an application to rezone and develop the site as a Planned Development. Smaller properties may or may not be suitable for such development, depending upon their particular sizes, shapes, locations, and the nature of the proposed development, but Planned Developments shall be encouraged at any appropriate location.

**Response:** The subject property is larger than two (2) acres. This standard does not apply.

(.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:** The applicant is not proposing a density transfer. 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:** As identified in the enclosed Wetland Delineation (Exhibit J), a wetland (Wetland A) was delineated in the northern portion of the site. Wetland A is a depressional, emergent, and totals 768 SF. Along the western boundary line of the site, Coffee Lake Creek flows from north to south. It originates in the Tualatin-Sherwood area and flows south through Wilsonville to the Willamette River. Development



impacts within the required 50' buffer area is limited to plantings, tree removal, and stormwater treatment which will provide ecological benefit to the SROZ.

(.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:** As shown in Exhibit F, the proposed development incorporates the following Habitat-Friendly Development Practices from *Table NR-2: Habitat-Friendly Development Practices:* 

- A.4. Landscape with rain gardens to provide on-lot detention, filtering of rainwater and groundwater re-charge.
- A.8. Use multi-functional open drainage systems in lieu of more conventional curb and gutter systems.
- C.2. Locate landscaping adjacent to SROZ.
- *C.3. Reduce light spill-off into SROZ areas from development* (see Exhibit Error! Reference s ource not found.).
- C.4. Preserve and maintain existing trees and tree canopy coverage, and plant trees, where appropriate, to maximize future tree canopy coverage.

# Section 4.140. Planned Development Regulations

# (.01) Purpose:

A. The provisions of Section 4.140 shall be known as the Planned Development Regulations. The purposes of these regulations are to encourage the development of tracts of land sufficiently large to allow for comprehensive master planning, and to provide flexibility in the application of certain regulations in a manner consistent with the intent of the Comprehensive Plan and general provisions of the zoning regulations and to encourage a harmonious variety of uses through mixed use design within specific developments thereby promoting the economy of shared public services and facilities and a variety of complimentary activities consistent with the land use designation on the Comprehensive Plan and the creation of an attractive, healthful, efficient and stable environment for living, shopping or working.

# *B.* It is the further purpose of the following Section:

1. To take advantage of advances in technology, architectural design, and functional land use design;

2. To recognize the problems of population density, distribution and circulation and to allow a deviation from rigid established patterns of land uses, but controlled by defined policies and objectives detailed in the comprehensive plan;

3. To produce a comprehensive development equal to or better than that resulting from traditional lot land use development.



4. To permit flexibility of design in the placement and uses of buildings and open spaces, circulation facilities and off-street parking areas, and to more efficiently utilize potentials of sites characterized by special features of geography, topography, size or shape or characterized by problems of flood hazard, severe soil limitations, or other hazards;

5. To permit flexibility in the height of buildings while maintaining a ratio of site area to dwelling units that is consistent with the densities established by the Comprehensive Plan and the intent of the Plan to provide open space, outdoor living area and buffering of low-density development.
6. To allow development only where necessary and adequate services and facilities are available or provisions have been made to provide these services and facilities.

7. To permit mixed uses where it can clearly be demonstrated to be of benefit to the users and can be shown to be consistent with the intent of the Comprehensive Plan.

8. To allow flexibility and innovation in adapting to changes in the economic and technological climate.

- (.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." All sites which are greater than two (2) 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 site exceeds two (2) acres and is designated Industrial in the Comprehensive Plan; it is therefore designated for planned development. This standard applies.

- (.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 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 site is one (1) lot with one (1) owner. A title report is included as Exhibit B. This standard is 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 certifies that appropriate professionals have been utilized including Oregonlicensed/registered architects, landscape architects, an American Institute of Certified Planner (AICP) and a professional planner, and professional engineer. More particularly, the design team leadership includes the following Mackenzie staff:

- Architect/Project Manager: Jeff Humphreys, AIA
- Landscape Architect: Nicole Ferriera, PLA
- Planner: Lee Leighton, AICP; Gabriela Frask
- Civil Engineer: Greg Mino, PE

This standard is met.

- (.05) Planned Development Permit Process.
  - A. All parcels of land exceeding two (2) 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.
  - *B.* Zone change and amendment to the zoning map are governed by the applicable provisions of the Zoning Sections, inclusive of Section 4.197
  - 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. When a zone change is necessary, application for such change shall be made simultaneously with an application for preliminary approval to the Board; and
    - 3. Final (Stage II) review by the Development Review Board
    - 4. In the case of a zone change and zone boundary amendment, City Council approval is required to authorize a Stage I preliminary plan.

**Response:** The site meets the criteria for a planned development. The site is subject to the following prior approvals:

- DB09-0047: Zone Map Amendment
- DB09-0048: Stage I Development Plan
- DB09-0049: Stage II Final Development Plan
- DB09-0051: Master Sign Plan



This consolidated application seeks approval of a Stage II Final Development Plan (DB09-0049), Site Design Review with one Waiver, Class III Master Sign Plan Modification and Type B Tree Removal. These provisions allow applicants to combine approval requests in this manner. These provisions are satisfied.

(.06) Staff Report:

Α.

- A. The planning staff shall prepare a report of its findings and conclusions as to whether the use contemplated is consistent with the land use designated on the Comprehensive Plan. If there is a disagreement as to whether the use contemplated is consistent, the applicant, by request, or the staff, may take the preliminary information provided to the Development Review Board for a use interpretation.
- B. The applicant may proceed to apply for Stage I Preliminary Approval upon determination by either staff or the Development Review Board that the use contemplated is consistent with the Comprehensive Plan.

**Response:** The applicant is requesting Stage II Modification and Site Design Review approvals as part of this application, and requests prompt review of the complete application package.

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

**Response:** The subject site has a valid Stage One Preliminary Approval (DB09-0048). No modification to the Stage I Preliminary approval is sought as part of this application package.

- 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.
  - 4. A stage development schedule demonstrating that the developer intends receive Stage II approval within two (2) years of receiving Stage I approval, and to commence construction within two (2) 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:** The subject site has a valid Stage One Preliminary Approval (DB09-0048). No modification to the Stage I Preliminary approval is sought as part of this application package.

- C. An application for a Stage I approval shall be considered by the Development Review Board as follows:
  - 1. A public hearing as provided in Section 4.013.
  - 2. After such hearing, the Board shall determine whether the proposal conforms to the permit criteria set forth in this Code, and may approve or disapprove the application and the accompanying preliminary development plan or require such changes therein or impose such conditions of approval as are in its judgment, necessary to ensure conformity to said criteria and regulations. In so doing, the Board may, in its discretion, authorize submission of the final development plan in stages, corresponding to different units or elements of the development. It shall do so only upon evidence assuring completion of the entire development in accordance with the preliminary development plan and stage development schedule.
  - 3. A final decision on a complete application and preliminary plan shall be rendered within one hundred and twenty (120) days after the application is deemed complete unless a continuance is agreed upon by the applicant and the appropriate City decision-making body.
  - 4. The determination of the Development Review Board shall become final at the end of the appeal period for the decision, unless appealed to the City Council in accordance with Section 4.022 of this Code.

**Response:** This provision provides procedural guidance for implementation and requires no evidence within the applicant's narrative.

(.09) Final Approval (Stage Two):

[Note: Outline Number is incorrect.]

- A. Unless an extension has been granted by the Development Review Board, within two (2) 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.
- B. After such hearing, the Development Review Board 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.



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:** The applicant is requesting approval of a Stage II Modification, together with Site Design Review, as part of this application. Accordingly, the final plan provides sufficient information regarding conformance with both the Stage II Final Approval and Site Design Review. This standard is met.

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

**Response:** As the applicant is requesting Stage II Modification approval as part of this application, the Development Review Board has not yet required dedication or reservation of public facilities. The proposed development does not propose the construction of any new public utility facilities and there is no reason to form a homeowner's association or other entity to support this office development. This standard does not apply.

F. Within thirty (30) days after the filing of the final development plan, the Planning staff shall forward such development plan and the original application to the Tualatin Valley Fire and Rescue District, if applicable, and other agencies involved for review of public improvements, including streets, sewers and drainage. The Development Review Board shall not act on a final development plan until it has first received a report from the agencies or until more than thirty (30) days have elapsed since the plan and application were sent to the agencies, whichever is the shorter period.

**Response:** This provision provides procedural guidance for implementation and requires no evidence from the applicant.

- *G.* Upon receipt of the final development plan, the Development Review Board shall conduct a public hearing and examine such plan and determine:
  - 1. Whether it conforms to all applicable criteria and standards; and
  - 2. Whether it conforms in all substantial respects to the preliminary approval; or
  - 3. Require such changes in the proposed development or impose such conditions of approval as are in its judgment necessary to insure conformity to the applicable criteria and standards.
- H. If the Development Review Board permits the applicant to revise the plan, it shall be resubmitted as a final development plan within sixty (60) days. If the Board approves, disapproves or grants such permission to resubmit, the decision of the Board shall become final at the end of the appeal period for the decision, unless appealed to the City Council, in accordance with Sections 4.022 of this Code.

**Response:** As the applicant is requesting Stage II Modification approval as part of this application, the final development plan is integrally consistent with the preliminary development plan. The applicant's narrative and accompanying plans and reports demonstrate conformance with applicable approval standards for the Planned Development and Site Design Review. This standard is met.

I. All Stage II Site Development plan approvals shall expire two years after their approval date, if substantial development has not occurred on the property prior to that time. Provided, however, that the Development Review Board may extend these expiration times for up to three (3) additional periods of not more than one (1) year each.



Applicants seeking time extensions shall make their requests in writing at least thirty (30) days in advance of the expiration date. Requests for time extensions shall only be granted upon (1) a showing that the applicant has in good faith attempted to develop or market the property in the preceding year or that development can be expected to occur within the next year, and (2) payment of any and all Supplemental Street SDCs applicable to the development. Upon such payment, the development shall have vested traffic generation rights under 4.140 (.10), provided however, that if the Stage II approval should expire, the vested right to use trips is terminated upon City repayment, without interest, of Supplemental Street SDCs. For purposes of this Ordinance, "substantial development" is deemed to have occurred if the required building permits or public works permits have been issued for the development, and the development has been diligently pursued, including the completion of all conditions of approval established for the permit. [Amended by Ord 561, adopted 12/15/03.]

**Response:** The applicant intends to construct the proposed building in one (1) implementation phase promptly after land use approval, and well within the allotted time period. To that end, the applicant is requesting Stage II Modification approval, together with Site Design Review and other land use requests, as part of this consolidated application. This standard is met.

- J. A planned development permit may be granted by the Development Review Board 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.

**Response:** The subject site is located in the PDI zone. The prior land use approvals approved "office" as an allowed use on this specific subject site. The location, design and site plan of the proposed development complies with applicable zoning regulations as described in the responses to Section 4.154-4.199. Additionally, the base zone, PDI, allows for "any use allowed in the PDC zone," and office is a typically permitted use in the PDC zone per Section 4.131. This standard is met.

- 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; [Added by Ord. 561, adopted 12/15/03.]

- 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. [Amended by Ord 561, adopted 12/15/03.]
- b. The following are exempt from meeting the Level of Service D criteria standard:
  - *i.* A planned development or expansion thereof which generates three (3) 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. [Added by Ord 561, adopted 12/15/03.]
- d. Exemptions under 'b' of this subsection shall not exempt the development or expansion from payment of system development charges or other applicable regulations. [Added by Ord 561, adopted 12/15/03.]
- e. In no case will development be permitted that creates an aggregate level of traffic at LOS "F". ([Added by Ord 561, adopted 12/15/03.]

**Response:** The City's traffic engineering consulting firm, DKS Associates, prepared a Traffic Impact Study (TIS), pending as Exhibit I. Statements will be provided in the applicant's incompleteness response in the future. This standard is 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 City's traffic engineering consulting firm, DKS Associates, prepared a Traffic Impact Study (TIS), pending as Exhibit I. Statements will be provided in the applicant's incompleteness response in the future.

For all the above reasons, the "establishments to be accommodated will be adequately served by existing or immediately planned facilities and services" as required by this standard. This standard is met.

K. Mapping: Whenever a Planned Development permit has been granted, and so long as the permit is in effect, the boundary of the Planned Development shall be indicated on the Zoning Map of the City of Wilsonville as the appropriate "PD" Zone.

**Response:** This provision provides procedural guidance to staff for implementation and requires no evidence from the applicant.



(.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.

**Response:** This application is for a Modification of a Stage II PD Plan, requiring a public hearing before the Design Review Board (DRB). The applicant has requested consolidation with other required approvals.

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.

**Response:** The Applicant intends to comply with the approved plan and participate with staff in framing reasonable and clear conditions of approval to facilitate the implementation process (or something similar). The applicant understands that failure to comply may, after notice and hearing, result in revocation of a Planned Development Permit. No evidence from the Applicant, at this time, is required to show compliance with this provision.

*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 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 nonconforming. 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.

**Response:** As the site is currently vacant, it does not fall under any of the situations outlined in Subsection C. For this reason, this standard is not applicable.

*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.

**Response:** No residential development is proposed. This standard is not applicable.

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.

**Response:** No residential development is proposed. This standard is not applicable.

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 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:** No residential development is proposed. This standard is not applicable.

(.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:** The applicant is not proposing to vest trips or utilize vested trips. This standard does not apply.



# Section 4.133.00. - Wilsonville Road Interchange Area Management Plan (IAMP) Overlay Zone.

#### Section 4.133.01. - Purpose.

The purpose of the IAMP Overlay Zone is the long-range preservation of operational efficiency and safety of the Wilsonville Road Interchange, which provides access from and to Interstate 5 for residents and businesses in south Wilsonville. The Wilsonville Road Interchange is a vital transportation link for regional travel and freight movement and provides connectivity between the east and west side of the community. Preserving capacity and ensuring safety of this interchange and the transportation system in its vicinity is essential to existing businesses and residents in the southern parts of the City and to the continued economic and community growth and development in the vicinity of Wilsonville Road and the interchange.

**Response:** The Subject Site is in the IAMP Overlay Zone Boundary as shown in Exhibit **Error! Reference s** ource not found.

#### Section 4.133.02. - Where these Regulations Apply.

The provisions of this Section shall apply to land use applications subject to Section 4.004, Development Permit Required, for parcels wholly or partially within the IAMP Overlay Zone, as shown on Figure I-1. Any conflict between the standards of the IAMP Overlay Zone and those contained within other chapters of the Development Code shall be resolved in favor of the Overlay Zone.

**Response:** The subject site is located in the IAMP Overlay Zone Boundary as shown in Exhibit **Error! R** eference source not found. The provisions of this Section are applicable, unless otherwise specified.

#### Section 4.133.03. - Permitted Land Uses.

# Uses allowed in the underlying zoning districts are allowed subject to other applicable provisions in the Code and this Section.

**Response:** The base zone, PDI, allows for "any use allowed in the PDC zone," which office is a typically permitted use in the PDC zone per Section 4.131. The office use was approved in the prior Planned Development Stage I and II Approvals. This standard is met.

#### Section 4.133.04. - Access Management.

In addition to the standards and requirements of Section 4.237 for land divisions and Street Improvement Standards in Section 4.177, parcels wholly or partially within the IAMP Overlay Zone are governed by the Access Management Plan in the Wilsonville Road Interchange Area Management Plan. The following applies to land use and development applications subject to Sections 4.133.02 Applicability. The provisions of Section 4.133.04 apply to:

(.01) Development or redevelopment proposals for parcels two acres or less that are subject to the requirements of Section 4.004 Development Permit.

**Response:** The subject site is greater than 2 acres. This standard is not applicable.

(.02) Planned Development applications, pursuant to Section 4.140, as part of Preliminary Approval (Stage One).

**Response:** This application for a Stage II Final Plan Modification and Site Design Review. This standard is not applicable.



(.03) Final Approval (Stage Two) Planned Development applications, pursuant to Section 4.140, to the extent that subsequent phases of development differ from the approved preliminary development plan, or where one or more of the following elements are not identified for subsequent phases:

- A. Land uses.
- B. Building location.
- C. Building size.
- D. Internal circulation.

**Response:** This application for a Stage II Final Plan Modification, Site Design Review with Waiver, and Stage III Master Sign Plan Modification. The prior Stage II Final Plan Modification approved (conceptually) a two-story office building of approximately 21,700 SF; with this Stage II Final Plan Modification, the Applicant proposes a single-story office building of approximately 15,700 SF.

# Section 4.133.05. - Administration.

Section 4.133.05 delineates the responsibilities of the City, in coordination with ODOT, to monitor and evaluate vehicle trip generation impacts on the Wilsonville Road Interchange from development approved under this Section.

(.01) Traffic Impact Analysis:

A. Purpose. The purpose of this section of the Code is to implement Section 660-012-0045 (2) (e) of the State Transportation Planning Rule that requires the City to adopt a process to apply conditions to development proposals in order to minimize adverse impacts to and protect transportation facilities. This section establishes the standards for when a proposal in the IAMP Overlay Zone must be reviewed for potential traffic impacts; when a Traffic Impact Analysis must be submitted with a development application in order to determine whether conditions are needed to minimize impacts to and protect transportation facilities; what must be in a Traffic Impact Study; and who is qualified to prepare the Study.

B. Typical Average Daily Trips. The latest edition of the Trip Generation Manual, published by the Institute of Transportation Engineers (ITE) shall be used as standards by which to gauge average daily vehicle trips, unless a specific trip generation study is approved by the City Engineer. A trip generation study could be used to determine trip generation for a specific land use which is not well represented in the ITE Trip Generation Manual and for which a similar facility is available to count.

*C.* When required, a Traffic Impact Analysis shall be required to be submitted to the City with a land use application, when the following conditions apply:

- 1. The development application involves one or more of the following actions:
  - a. A change in zoning or a plan amendment designation; or
  - b. The development requires a Development Permit pursuant to Section 4.004; or

c. The development may cause one or more of the following effects to access or circulation, which can be determined by site observation, traffic impact analysis or study, field measurements, and information and studies provided by the local reviewing jurisdiction and/or ODOT:

i. The location of the access driveway does not meet minimum intersection sight distance requirements, or is located where vehicles entering or leaving the property are restricted, or such vehicles queue or hesitate, creating a safety hazard; or



- *ii.* The location of the access driveway does not meet the access spacing standard of the roadway on which the driveway is located; or
- *iii.* The location of the access driveway is inconsistent with the Wilsonville Road Interchange Area Management Plan Access Management Plan.
- *iv.* A change in internal traffic patterns that may cause safety problems, such as back up onto the highway or traffic crashes in the approach area.

**Response:** This proposal requires a Development Permit pursuant to Section 4.004. DKS, the City's traffic consultant, has prepared a traffic analysis for the proposed development; pending Exhibit I. This standard is satisfied.

# D. Traffic Impact Analysis Requirements:

1. Preparation. A Traffic Impact Analysis shall be prepared by a professional engineer under retainer to the City. The traffic analysis will be paid for by the applicant.

2. Transportation Planning Rule Compliance. The traffic impact analysis shall be sufficient in detail to determine compliance with Oregon Administrative Rule (OAR) 660-012-0060.

3. Traffic Impact Analysis Scoping. The applicant will coordinate with the Wilsonville City Engineer prior to submitting an application that requires a Traffic Impact Analysis. The City has the discretion to determine the required elements of the TIA and the level of analysis expected. Coordination with ODOT is advisable and is at the City's discretion.

**Response:** DKS, the City's traffic consultant, has prepared a traffic analysis for the proposed development. This standard is satisfied.

# E. Approval Criteria:

1. Criteria. When a Traffic Impact Analysis is required, approval of the development proposal requires satisfaction of the following criteria:

a. The Traffic Impact Analysis was prepared by a professional engineer selected by the City; and b. If the proposed development meets the criteria in Section C, above, or other traffic hazard or negative impact to a transportation facility, the Traffic Impact Analysis shall include mitigation measures that meet the City's performance standards (i.e. Level-of-Service and/or Volume/Capacity ratio) and are satisfactory to the City Engineer and ODOT; and

c. The proposed site design and traffic and circulation design and facilities, for all transportation modes, including any mitigation measures, are designed to:

*i.* Have the least negative impact on all applicable transportation facilities; and

*ii.* Accommodate and encourage non-motor vehicular modes of transportation to the extent practicable; and

iii. Make the most efficient use of land and public facilities as practicable; and

*iv.* Provide the most direct, safe and convenient routes practicable between on-site destinations, and between on-site and off-site destinations; and

v. Otherwise comply with applicable requirements of the City of Wilsonville's Development Code.

*F.* Conditions of Approval. The City may deny, approve, or approve a development proposal with appropriate conditions.

1. Where the existing transportation system will be impacted by the proposed development, dedication of land for streets, transit facilities, sidewalks, bikeways, paths, or access ways may be required to ensure that the transportation system is adequate to handle the additional burden caused by the proposed use.

2. Where the existing transportation system is shown to be burdened by the proposed use, improvements such as paving, curbing, installation or contribution to traffic signals, construction of sidewalks, bikeways, access ways, paths, or streets that serve the proposed use may be required.



3. Where planned local street connectivity is required to improve local circulation for the betterment of interchange function, local street system improvements will be required.

**Response:** The City's traffic engineering consulting firm, DKS Associates, prepared a Traffic Impact Study (TIS); pending as Exhibit I. Statements will be provided in the applicant's incompleteness response in the future.

# (.02) Land Use Review Coordination:

A. The City shall not deem the land use application complete unless it includes a Traffic Impact Analysis prepared in accordance with the requirements of this Section.

B. The City shall provide written notification to ODOT when the application within ten calendar days of receiving a complete Class II Permit application.

C. ODOT shall have at least 20 calendar days, measured from the date completion notice was mailed, to provide written comments to the City. If ODOT does not provide written comments during this 20-day period, the City staff report will be issued without consideration of ODOT comments.

**Response:** This provision provides guidance to City staff for the processing of this application. No evidence is required from the Applicant.

# Section 4.133.06. - Comprehensive Plan and Zoning Map Amendments.

*This Section applies to all Comprehensive Plan Map and Zoning Map amendments to parcels wholly or partially within the IAMP Overlay Zone.* 

(.01) IAMP Amendment. If the proposed land use is inconsistent with the current Comprehensive Plan Map or Zoning Map land use designation the applicant will be required to undertake a legislative process to amend and update the Wilsonville Road Interchange Area Management Plan in order to demonstrate that the proposed amendment will be consistent with the planned improvements in the Overlay Zone. **Response:** The proposed Office Use is consistent with the Zoning Map, Development Code, and prior Approval. No Comprehensive Plan and Zoning Map Amendments are proposed. This standard is not applicable.

(.02) Transportation Planning Rule Requirements:

**Response:** No Comprehensive Plan Amendment, zone change, or land use regulation change is proposed. This standard is not applicable.

#### Section 4.135. - PDI—Planned Development Industrial Zone.

(.01) Purpose. The purpose of the PDI zone is to provide opportunities for a variety of industrial operations and associated uses.

(.02) The PDI Zone shall be governed by Section 4.140, Planned Development Regulations, and as otherwise set forth in this Code.

- (.03) Uses that are typically permitted:
  - A. Warehouses and other buildings for storage of wholesale goods, including cold storage plants.
  - *B.* Storage and wholesale distribution of agricultural and other bulk products, provided that dust and odors are effectively contained within the site.
  - C. Assembly and packing of products for wholesale shipment.
  - D. Manufacturing and processing.



- E. Motor vehicle services, or other services complementary or incidental to primary uses, and which support the primary uses by allowing more efficient or cost-effective operations.
- *F. Manufacturing and processing of electronics, technical instrumentation components and health care equipment.*
- G. Fabrication.
- H. Office complexes—Technology.
- I. Corporate headquarters.
- J. Call centers.
- *K. Research and development.*
- L. Laboratories.
- *M.* Repair, finishing and testing of product types manufactured or fabricated within the zone.
- N. Industrial services.
- *O.* Any use allowed in a PDC Zone, subject to the following limitations:
  - 1. Service Commercial uses (defined as professional services that cater to daily customers such as financial, insurance, real estate, legal, medical or dental offices) not to exceed 5,000 square feet of floor area in a single building, or 20,000 square feet of combined floor area within a multi-building development.
  - 2. Office Complex Use (as defined in Section 4.001) shall not exceed 30 percent of total floor area within a project site.
  - 3. Retail uses, not to exceed 5,000 square feet of indoor and outdoor sales, service or inventory storage area for a single building and 20,000 square feet of indoor and outdoor sales, service or inventory storage area for multiple buildings.
  - 4. Combined uses under Subsections 4.135(.03)(O.)(1.) and (3.) shall not exceed a total of 5,000 square feet of floor area in a single building or 20,000 square feet of combined floor area within a multi-building development.
- *P.* Training facilities whose primary purpose is to provide training to meet industrial needs.
- Q. Public facilities.
- *R.* Accessory uses, buildings and structures customarily incidental to any permitted uses.
- S. Temporary buildings or structures for uses incidental to construction work. Such structures to be removed within 30 days of completion or abandonment of the construction work.
- *T.* Other similar uses, which in the judgment of the Planning Director, are consistent with the purpose of the PDI Zone.

**Response:** The base zone, PDI, allows for "*any use allowed in the PDC zone …,*" and Office is a permitted use in the PDC zone per Section 4.131. Additionally, the applicant seeks approval that any of the uses allowed in 4.135.03, be allowed on the subject site. As the applicant seeks approval of allowed uses, this standard is met with this proposal.

(.04) Block and access standards. The PDI zone shall be subject to the same block and access standards as the PDC zone, Section 4.131(.02) and (.03).

**Response:** No new block or access creation is proposed as part of this application. The lot access and block configuration were approved as part of the prior approvals (DB09-0078 to DB09-0053). The block standards of 4.131.03 pertain to residential or mixed-use development; therefore, those standards are not applicable to this commercial development proposal.

(.05) Performance Standards. The following performance standards apply to all industrial properties and sites within the PDI Zone, and are intended to minimize the potential adverse impacts of industrial



activities on the general public and on other land uses or activities. They are not intended to prevent conflicts between different uses or activities that may occur on the same property.

- A. All uses and operations except storage, off-street parking, loading and unloading shall be confined, contained, and conducted wholly within completely enclosed buildings, unless outdoor activities have been approved as part of Stage II, Site Design or Administrative Review.
- B. Vibration. Every use shall be so operated that the ground vibration inherently and recurrently generated from equipment other than vehicles is not perceptible without instruments at any boundary line of the property on which the use is located.
- C. Emission of odorous gases or other odorous matter in quantities as detectable at any point on any boundary line of the property on which the use is located shall be prohibited.
- D. Any open storage shall comply with the provisions of Section 4.176, and this Section.
- E. No building customarily used for night operation, such as a baker or bottling and distribution station, shall have any opening, other than stationary windows or required fire exits, within 100 feet of any residential district and any space used for loading or unloading commercial vehicles in connection with such an operation shall not be within 100 feet of any residential district.
- F. Heat and Glare:
  - 1. Operations producing heat or glare shall be conducted entirely within an enclosed building.
  - 2. Exterior lighting on private property shall be screened, baffled, or directed away from adjacent residential properties. This is not intended to apply to street lighting.
- G. Dangerous Substances. Any use which involves the presence, storage or handling of any explosive, nuclear waste product, or any other substance in a manner which would cause a health or safety hazard for any adjacent land use or site shall be prohibited.
- H. Liquid and Solid Wastes:
  - 1. Any storage of wastes which would attract insects or rodents or otherwise create a health hazard shall be prohibited.
  - 2. Waste products which are stored outside shall be concealed from view from any property line by a sight-obscuring fence or planting as required in Section 4.176.
  - 3. No connection with any public sewer shall be made or maintained in violation of applicable City or State standards.
  - 4. No wastes conveyed shall be allowed to or permitted, caused to enter, or allowed to flow into any public sewer in violation of applicable City or State standards.
  - 5. All drainage permitted to discharge into a street gutter, caused to enter or allowed to flow into any pond, lake, stream, or other natural water course shall be limited to surface waters or waters having similar characteristics as determined by the City, County, and State Department of Environmental Quality.
  - 6. All operations shall be conducted in conformance with the City's standards and ordinances applying to sanitary and storm sewer discharges.
- I. Noise. Noise generated by the use, with the exception of traffic noises from automobiles, trucks, and trains, shall not violate any applicable standards adopted by the Oregon Department of Environmental Quality and W.C. 6.204 governing noise control in the same or similar locations.
- J. Electrical Disturbances. Except for electrical facilities wherein the City is preempted by other governmental entities, electrical disturbances generated by uses within the PDI



zone which interfere with the normal operation of equipment or instruments within the PDI Zone are prohibited. Electrical disturbances which routinely cause interference with normal activity in abutting residential use areas are also prohibited.

- K. Discharge Standards. There shall be no emission of smoke, fallout, fly ash, dust, vapor, gases, or other forms of air pollution that may cause a nuisance or injury to human, plant, or animal life, or to property. Plans of construction and operation shall be subject to the recommendations and regulations of the State Department of Environmental Quality. All measurements of air pollution shall be by the procedures and with equipment approved by the State Department of Environmental Quality or equivalent and acceptable methods of measurement approved by the City. Persons responsible for a suspected source of air pollution upon the request of the City shall provide quantitative and qualitative information regarding the discharge that will adequately and accurately describe operation conditions.
- L. Open burning is prohibited.
- M. Storage:
  - 1. Outdoor storage must be maintained in an orderly manner at all times.
  - 2. Outdoor storage area shall be gravel surface or better and shall be suitable for the materials being handled and stored. If a gravel surface is not sufficient to meet the performance standards for the use, the area shall be suitably paved.
  - 3. Any open storage that would otherwise be visible at the property line shall be concealed from view at the abutting property line by a sight obscuring fence or planting not less than six feet in height.
- N. Landscaping:
  - 1. Unused property, or property designated for expansion or other future use, shall be landscaped and maintained as approved by the Development Review Board. Landscaping for unused property disturbed during construction shall include such things as plantings of ornamental shrubs, lawns, native plants, and mowed, seeded fieldgrass.
  - 2. Contiguous unused areas of undisturbed fieldgrass may be maintained in their existing state. Large stands of invasive weeds such as Himalayan blackberries, English ivy, cherry Laurel, reed canary grass or other identified invasive plants shall be removed and/or mowed at least annually to reduce fire hazard. These unused areas, located within a phased development project or a future expansion cannot be included in the area calculated to meet the landscape requirements for the initial phase(s) of the development.
  - 3. Unused property shall not be left with disturbed soils that are subject to siltation and erosion. Any disturbed soil shall be seeded for complete erosion cover germination and shall be subject to applicable erosion control standards.

**Response:** The proposed office building and site development are not seeking approval to conduct any outdoor activities, or any on-site activities that would violate the performance standards of this Section. No open storage, dangerous substances, or liquid or solid wastes are proposed. The only impacts anticipated are those from vehicular circulation, as allowed by this Standard. No discharge or open burning is proposed to occur on site. As shown on Sheet C1.10 of Exhibit F, the site will be fully developed but for the western portion of the site, which is classified as Significant Resource Area (SROZ). This standard is met.

(.06) Other Standards:



A. Minimum Individual Lot Size. No limit save and except as shall be consistent with the other provisions of this Code (e.g., landscaping, parking, etc.).

**Response:** The subject site is approximately two (2) acres. As described in this narrative, other provisions of the code, including: landscaping, parking, yard areas, and access are satisfied with the site layout as shown on Sheet C1.10 of Exhibit F.

B. Maximum Lot Coverage. No limit, save and except as shall be consistent with the other provisions of this Code (e.g., landscaping, parking, etc.).

**Response:** The subject site is approximately two (2) acres. As described in this narrative, other provisions of the code, including landscaping, parking, yard areas, and access are satisfied with the site layout as shown on Sheet C1.10 of Exhibit F.

- C. Front Yard Setback. Thirty (30) feet. Structures on corner or through lots shall observe the minimum front yard setback on both streets. Setbacks shall also be maintained from the planned rights-of-way shown on any adopted City street plan.
- D. Rear and Side Yard Setback. Thirty (30) feet. Structures on corner or through lots shall observe the minimum rear and side yard setbacks on both streets. Setbacks shall also be maintained from the planned rights-of-way shown on any adopted City street plan.

**Response:** The site's front yard setback is along SW Wilsonville Road and its side yard setback is along SW Kinsman Road. The Applicant requests a waiver to reduce both the front and the side yard setbacks to allow a minimum 0' yard setback at both locations, for the reasons described below:

- In furthering the purpose of Section 4.140.B.3., the PDI zone contains the development standards for more industrially focused development, uses that generally benefit from or require separation from the pedestrian realm. On the other hand, appropriate for this specific site at a prominent street intersection corner, the proposed office building provides an inviting façade along the SW Wilsonville Road frontage that will contribute to an inviting pedestrian streetscape.
- The western portion of the site is heavily encumbered by sensitive lands (SROZ). Section 4.139.01 allows for a reduction in the front, rear, and side yard setbacks when doing so contributes to protecting the significant resource. As shown in the enclosed site plan (Sheet C1.10 of Exhibit F), the site has been designed to locate the most intensive site development (the building) as far from the SROZ as practicable. The proposed building's position requires a reduced front yard setback.
- The Applicant understands that the yard standards of Section 4.135 (PDI Zone) apply in lieu of the yard standards of Section 4.116 (PDC Zone) to the extent Section 4.135 provides specific setback standards. But notably in this context, the specific site has previously been approved for Office development consistent PDC Zone provisions because the site is suitable for such development. If the site were in the PDC Zone, there would be no required front, side or rear yard setbacks as the site does not abut a more restrictive zoning district. Although the proposed development is located in the PDI zone, the impact of the development is more akin to the impacts associated with office development in the PDC zone. Allowing relief from the minimum setbacks required for industrial uses is reasonable and appropriate in this case.

Based on these reasons, the Applicant requests that the front and side yard setbacks be reduced to 0' for the proposed development. The site plan proposes to locate the building wall a minimum 22' (variable) from the site's property line adjacent to SW Wilsonville Road, a minimum 10' from the unusual, angular property boundary at the site's northeast corner, and a minimum 14' (variable) from



the site's property line adjacent to SW Kinsman Road. With the approval of this Waiver request, this standard is met.

# E. No setback is required when side or rear yards abut on a railroad siding.

**Response:** The site's side or rear yards do not abut on a railroad siding. This standard is not applicable.

F. Corner Vision: Corner lots shall have no sight obstruction to exceed the vision clearance standards of Section 4.177.

**Response:** Corner Vision is shown on Sheet C1.10 and L1.10 of Exhibit F. Compliance with this standard is further detailed in the Applicant's responses within Section 4.177.

# G. Off-Street Parking and Loading: As provided in Section 4.155.

**Response:** On site parking is provided as shown on Sheet C1.10 of Exhibit F. Compliance with the Off-Street Parking and Loading standards are explained in the Applicant's responses within Section 4.155.

# H. Signs: As provided in Sections 4.156.01 through 4.156.11.

**Response:** The Applicant is requesting a Type III Master Sign Plan Modification as part of this application. This request is further detailed in the Applicant's responses to Section 4.156.

# 2. Site Design Review

# Section 4.139.00. - Significant Resource Overlay Zone (SROZ) Ordinance.

# Section 4.139.02. - Where these Regulations Apply.

The regulations of this Section apply to the portion of any lot or development site, which is within a Significant Resource Overlay Zone and its associated "Impact Areas". The text provisions of the Significant Resource Overlay Zone ordinance take precedence over the Significant Resource Overlay Zone maps. The Significant Resource Overlay Zone is described by boundary lines shown on the City of Wilsonville Significant Resource Overlay Zone Map. For the purpose of implementing the provisions of this Section, the Wilsonville Significant Resource Overlay Zone Map is used to determine whether a Significant Resource Impact Report (SRIR) is required. Through the development of an SRIR, a more specific determination can be made of possible impacts on the significant resources.

Unless otherwise exempted by these regulations, any development proposed to be located within the Significant Resource Overlay Zone and/or Impact Area must comply with these regulations. Where the provisions of this Section conflict with other provisions of the City of Wilsonville Planning and Land Development Ordinance, the more restrictive shall apply.

The SROZ represents the area within the outer boundary of all inventoried significant natural resources. The Significant Resource Overlay Zone includes all land identified and protected under Metro's UGMFP Title 3 Water Quality Resource Areas and Title 13 Habitat Conservation Areas, as currently configured, significant wetlands, riparian corridors, and significant wildlife habitat that is inventoried and mapped on the Wilsonville Significant Resource Overlay Zone Map.

**Response:** As shown in Exhibits F and J, a portion of the site, along the western property boundary, is located within the SROZ. This Section is applicable as described in the Applicant's responses to Section 4.139.

# Section 4.139.03. - Administration.



(.01) Resources. The text provisions of this section shall be used to determine whether applications may be approved within the Significant Resource Overlay Zone. The following maps and documents may be used as references for identifying areas subject to the requirements of this Section:

A. Metro's UGMFP Title 3 Water Quality Resource Area maps.

- B. The Federal Emergency Management Agency (FEMA) Flood Insurance Rate Maps (FIRM).
- C. The Wilsonville Local Wetland Inventory (LWI) (1998).
- D. The Wilsonville Riparian Corridor Inventory (RCI) (1998).
- E. Locally adopted studies or maps.
- F. City of Wilsonville slope analysis maps.
- G. Clackamas and Washington County soils surveys.
- H. Metro's UGMFP Title 13 Habitat Conservation Area Map.

(.02) Impact Area. The "Impact Area" is the area adjacent to the outer boundary of a Significant Resource within which development or other alteration activities may be permitted through the review of an SRIR (Significant Resource Impact Report). Where it can be clearly determined by the Planning Director that development is only in the Impact Area and there is no impact to the Significant Resource, development may be permitted without SRIR review. The impact area is 25 feet wide unless otherwise specified in this ordinance or by the decision making body. Designation of an Impact Area is required by Statewide Planning Goal 5. The primary purpose of the Impact Area is to ensure that development does not encroach into the SROZ.

**Response:** As shown in Exhibit F the limits of grading extend into the SROZ, but only exempt activities, per Section 4.139(.04) discussed below, are proposed within the SROZ.

(.03) Significant Resource Impact Report (SRIR). For proposed non-exempt development within the SROZ, the applicant shall submit a Significant Resource Impact Report (SRIR) as part of any application for a development permit.

**Response:** Only activities exempt per Section 4.139(.04) are proposed within the SROZ, as shown on Sheet C1.10 of Exhibit F; therefore, an SRIR is not required under this provision.

(.04) Prohibited Activities. New structures, development and construction activities shall not be permitted within the SROZ if they will negatively impact significant natural resources. Gardens, lawns, application of chemicals, uncontained areas of hazardous materials as defined by DEQ, domestic animal waste, dumping of materials of any kind, or other activities shall not be permitted within the SROZ if they will negatively impact water quality.

**Response:** As shown on Sheet C1.10 of Exhibit F, a small amount of grading is proposed for the stormwater facility along the western boundary of the parking area. The stormwater facility will be planted as shown on Sheets L1.10 and L1.11 of Exhibit F. The proposed plantings will enhance the SROZ area and provide stormwater treatment.

Unauthorized land clearing or grading of a site to alter site conditions is not allowed, and may result in the maximum requirement of mitigation/enhancement regardless of pre-existing conditions.

**Response:** As shown on Sheet C1.10 of Exhibit F, no new structures, development, or construction activities are proposed within the SROZ. No work that would negatively impact water quality is proposed. This standard is met.

(.05) Habitat-Friendly Development Practices. To the extent practicable, development and construction activities that encroach within the Significant Resource Overlay Zone and/or Impact Area shall be designed, located and constructed to:

A. Minimize grading, removal of native vegetation, disturbance and removal of native soils, and impervious area;



B. Minimize adverse hydrological impacts on water resources, such as using the practices described in Part (a) of Table NR-2, 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. Minimize impacts on wildlife corridors and fish passage, such as by using the practices described in Part (b) of Table NR-2; and* 

D. Consider using the practices described in Part (C) of Table NR-2.

**Response:** As shown in Exhibit F, the proposed development incorporates the following Habitat-Friendly Development Practices from *Table NR-2: Habitat-Friendly Development Practices:* 

A.4. Landscape with rain gardens to provide on-lot detention, filtering of rainwater and groundwater re-charge.

A.8. Use multi-functional open drainage systems in lieu of more conventional curb and gutter systems.

C.2. Locate landscaping adjacent to SROZ.

*C.3. Reduce light spill-off into SROZ areas from development* (see lighting analysis, Sheet E1.10 in Exhibit F).

C.4. Preserve and maintain existing trees and tree canopy coverage, and plant trees, where appropriate, to maximize future tree canopy coverage.

#### Section 4.139.04. - Uses and Activities Exempt from These Regulations

A request for exemption shall be consistent with the submittal requirements listed under Section 4.139.06 (.01)(B—I), as applicable to the exempt use and activity.

(.01) Emergency procedures or emergency activities undertaken which are necessary for the protection of public health, safety, and welfare. Measures to remove or abate hazards and nuisances. Areas within the SROZ that are disturbed because of emergency procedures or activities should be repaired and mitigated.

(.02) Maintenance and repair of buildings, structures, yards, gardens or other activities or uses that were in existence prior to the effective date of these regulations.

(.03) Alterations of buildings or accessory structures which do not increase building coverage.

(.04) The following agricultural activities lawfully in existence as of the effective date of this ordinance:

A. Mowing of hay, grass or grain crops.

B. Tilling, disking, planting, seeding, harvesting and related activities for pasture, tree crops, commercial woodlots, food crops or business crops, provided that no additional lands within the SROZ are converted to these uses after the effective date of this ordinance.

(.05) Operation, maintenance, and repair of irrigation and drainage ditches, constructed ponds, wastewater facilities, stormwater detention or retention facilities, and water facilities consistent with the Stormwater Master Plan or the Comprehensive Plan.

(.06) Maintenance and repair of streets and utility services within rights-of way, easements, access drives or other previously improved areas.

(.07) Normal and routine maintenance and repair of any public improvement or public recreational area regardless of its location.

(.08) The construction of new roads, pedestrian or bike paths into the SROZ in order to provide access to the sensitive area or across the sensitive area, provided the location of the crossing is consistent with the intent of the Wilsonville Comprehensive Plan. Roads and paths shall be constructed so as to minimize and repair disturbance to existing vegetation and slope stability.



(.09) Maintenance and repair of existing railroad tracks and related improvements.

(.10) The removal of invasive vegetation such as Himalayan Blackberry, English Ivy, Poison Oak, Scots (Scotch) Broom or as defined as invasive in the Metro Native Plant List.

(.11) The planting or propagation of any plant identified as native on the Metro Native Plant List. See Wilsonville Planning Division to obtain a copy of this list.

(.12) Grading for the purpose of enhancing the Significant Resource as approved by the City.

(.13) Enhancement of the riparian corridor or wetlands for water quality or quantity benefits, fish, or wildlife habitat as approved by the City and other appropriate regulatory authorities.

(.14) Flood control activities pursuant to the Stormwater Master Plan, save and except those stormwater facilities subject to Class II Administrative Review, as determined by the Planning Director, to ensure such facilities meet applicable standards under federal, state and local laws, rules and regulations.

(.15) Developments that propose a minor encroachment into the Significant Resource Overlay Zone. The purpose of this adjustment would be to allow for minor encroachments of impervious surfaces such as accessory buildings, eave overhangs, building appurtenances, building access and exiting requirements or other similar feature. The total adjustment shall not exceed 120 square feet in cumulative area.

(.16) The expansion of an existing single family dwelling or duplex not exceeding 600 square feet in area. The expansion of an existing single family dwelling or duplex or structures that are accessory to a single family dwelling or duplex inside the SROZ, provided that the following criteria have been satisfied. An SRIR is not required to evaluate and reach a decision on the issuance of a permit to expand a single-family residence under this paragraph.

A. The expansion of a single family or duplex structure or improvement (including decks and patios) shall not be located any closer to the stream or wetland area than the existing structure or improvement; and

B. The coverage of all structures within the SROZ on the subject parcel shall not be increased by more than 600 square feet, based on the coverage in existence prior to the effective date of this ordinance; and,

*C.* The applicant must obtain the approval of an erosion and sediment control plan from the City's Building and Environmental Services Divisions; and,

D. No part of the expansion is located within the Metro UGMFP Title 3 Water Quality Area.

(.17) New Single-Family Dwelling or Duplex. The construction of a new single family dwelling or duplex, including a duplex created through conversion of an existing detached single-family dwelling, is exempt unless the building encroaches into the Impact Area and/or the SROZ.

A. If the proposed building encroaches only into the Impact Area then an abbreviated SRIR may be required as specified in Section 4.139.05, unless it can be clearly determined by the Planning Director that the development proposal will have no impact on the Significant Resource. The primary purpose of the Impact Area is to insure that development does not encroach into the SROZ. Development otherwise in compliance with the Planning and Land Development Ordinance may be authorized within the Impact Area.

*B.* If the proposed building encroaches into the SROZ, then a complete or abbreviated SRIR report is required.

(.18) Private or public service connection laterals and service utility extensions.

(.19) A Stage II development permit or other development permits issued by the City and approved prior to the effective date of this ordinance.

(.20) The installation of public streets and utilities specifically mapped within a municipal utility master plan, the Transportation Systems Plan or a capital improvement plan.



(.21) Structures which are non-conforming to the standards of this Section may be re-built in the event of damage due to fire or other natural hazard subject to Sections 4.189—4.192 of the Planning and Land Development Ordinance, provided that the structure is placed within the same foundation lines (See Figure NR-6.). An SRIR is not required to evaluate and reach a decision on the issuance of a permit to replace a structure subject to this paragraph.

(.22) Any impacts to resource functions from the above excepted activities, such as gravel construction pads, erosion/sediment control materials or damaged vegetation, shall be mitigated using appropriate repair or restoration/enhancement techniques.

**Response:** This proposal includes the following listed exempt activities within the SROZ: removal of invasive species (.10); native and non-native planting (.11); grading for the purposes of enhancing the SROZ (.12); and enhancement of the riparian corridor for water quality benefits (.13).

As shown in the Plan Set (Exhibit F), limited work is proposed within the SROZ. At the recommendation of staff, the Applicant has designed a distributed surface stormwater system for the site, with a triangular facility located in the middle of the parking area and a linear vegetated facility located along the western edge of the parking boundary. As part of the proposed plantings within the SROZ, invasive species within the SROZ area will be removed, an allowed exempt activity per (.10). As shown on the L-Series Sheets of Exhibit F, the plantings in the SROZ will consist of both native and non-native plantings, per recommendation of the licensed landscape architect. Grading, as shown on Sheet C1.20 of Exhibit F, is proposed within the SROZ for the purpose of enhancing the Significant Resource through the installation of a vegetated stormwater facility and associated replanting including native species. The vegetated stormwater facility is positioned to provide enhancement of the SROZ corridor while also meeting the water quality and flow control requirements as described in the preliminary stormwater report (Exhibit G). The proposed activities within the SROZ will include removal of invasive plants, regrading consistent with SROZ buffer enhancement, and restorative plantings as detailed in the L-Series Sheets of Exhibit F.

As shown on Sheet L0.02, the proposed grading, landscaping, and construction of the linear stormwater management facility will affect 226 SF of a previously approved 2,514 SF mitigation planting area situated on both sides of a river-rock lined storm drainage corridor located west of the existing driveway. The proposed planting plan mitigates for that limited impact with 226 SF of adjacent native plantings just north of the existing mitigation planting area and west of the linear water quality facility, with a one-to-one mitigation planting ratio.

The proposed work in the SROZ supports the City's efforts, and the Code's intent, to restore, maintain, and enhance the City's Significant Resources. The proposed activities and improvements are consistent with exempt activities listed in this Section, and therefore exempt from review under this chapter.

# Section 4.139.05. - Significant Resource Overlay Zone Map Verification.

The map verification requirements described in this Section shall be met at the time an applicant requests a building permit, grading permit, tree removal permit, land division approval, or other land use decision. Map verification shall not be used to dispute whether the mapped Significant Resource Overlay Zone boundary is a significant natural resource. Map refinements are subject to the requirements of Section 4.139.10(.01)(D).

(.01) In order to confirm the location of the Significant Resource Overlay Zone, map verification shall be required or allowed as follows:



A. Development that is proposed to be either in the Significant Resource Overlay Zone or less than 100 feet outside of the boundary of the Significant Resource Overlay Zone, as shown on the Significant Resource Overlay Zone Map.

B.A lot or parcel that:

1. Either contains the Significant Resource Overlay Zone, or any part of which is less than 100 feet outside the boundary of the Significant Resource Overlay Zone, as shown on the Significant Resource Overlay Zone Map; and

2.Is the subject of a land use application for a partition, subdivision, or any land use application that the approval of which would authorize new development on the subject lot or parcel.

(.02)An application for Significant Resource Overlay Zone Map Verification may be submitted even if one is not required pursuant to Section 4.139.05(.01).

(.03)If a lot or parcel or parcel is subject to Section 4.139.05(.01), an application for Significant Resource Overlay Zone Map Verification shall be filed concurrently with the other land use applications referenced in Section 4.139.05(.01)(B)(2) unless a previously approved Significant Resource Overlay Zone Map Verification for the subject property remains valid.

(.04)An applicant for Significant Resource Overlay Zone Map Verification shall use one or more of the following methods to verify the Significant Resource Overlay Zone boundary:

A.The applicant may concur with the accuracy of the Significant Resource Overlay Zone Map of the subject property;

B.The applicant may demonstrate a mapping error was made in the creation of the Significant Resource Overlay Zone Map; and

*C.The applicant may demonstrate that the subject property was developed lawfully prior to June 7, 2001.* 

(.05)The Planning Director shall determine the location of any Significant Resource Overlay Zone on the subject property by considering information submitted by the applicant, information collected during any site visit that may be made to the subject property, information generated by Significant Resource Overlay Zone Map Verification that has occurred on adjacent properties, and any other relevant information that has been provided.

(.06)For applications filed pursuant to Section 4.139.05(.04)(A) and (C), a Significant Resource Overlay Zone Map Verification shall be consistent with the submittal requirements listed under Section 4.139.06(.01)(B-H).

(.07)For applications filed pursuant to Section 4.139.05(.04)(B), a Significant Resource Overlay Zone Map Verification shall be consistent with the submittal requirements listed under Section 4.139.06(.02)(D)(1). **Response:** The application materials include a Wetland Delineation (Exhibit J) that confirms the SROZ boundary established by the City. No change in the SROZ boundary is proposed with this application.

Section 4.139.10. - Development Review Board (DRB) Process.

Section 4.139.11. - Special Provisions.



(.01) Reduced front, rear and side yard setback. Applications on properties containing the SROZ may reduce the front, rear and side yard setback for developments or additions to protect the significant resource, as approved by the Development Review Board.

**Response:** As shown in Exhibit F and Exhibit J, the western portion of the site is located within the SROZ. In order to locate the building on the site, while accommodating stormwater facilities, parking, vehicle, and pedestrian circulation, reduced front and side yard setbacks are requested through the City's Waiver application process. The site design, with the reduced front and side yard setbacks, allows for preservation and plantings within the SROZ.

(.02) Density Transfer. For residential development proposals on lands zoned Planned Development Residential (PDR) which contain land within the SROZ, a transfer of density shall be permitted within the Stage I Master Plan area. Density can only be transferred to land outside the SROZ and within the Stage I Master Plan area. The formula in A. through B. below shall be used to calculate the density that may be transferred.

A. Step 1. Calculate Expected Maximum Density. The Expected Maximum Density (EMD) is calculated by multiplying the gross acreage of the Stage I Master Plan area within the SROZ but outside any BPA easements by the maximum density for the Zoning Designation as shown in Table 1 of Section 4.124.

B. Step 2. Reduce the EMD obtained in Step 1 by 50 percent and then round down to the nearest whole number. This is the density (number of units) able to be transferred from the SROZ area to elsewhere in the Stage I Master Plan area provided applicable standards for the zone are still met including, but not limited to, allowed uses, setbacks, standards for outdoor living area, landscaping, building height and parking.

**Response:** No residential development is proposed. This standard is not applicable.

(.03) Alteration of constructed drainageways. Alteration of constructed drainageways may be allowed provided that such alterations do not adversely impact stream flows, flood storage capacity and in stream water quality and provide more efficient use of the land as well as provide improved habitat value through mitigation, enhancement and/or restoration. Such alterations must be evaluated through an SRIR and approved by the City Engineer and Development Review Board.

**Response:** No alteration of a constructed drainageway is proposed. This standard is not applicable.

#### 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.
    - 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:** As illustrated on sheet C1.10 of Exhibit F, a continuous ADA-compliant pathway will connect all building entrances, providing site connection to SW Kinsman Road. The proposed pathway provides direct access to the building entrance while safely directing pedestrians away from the driveway edge, and away from vehicle circulation areas. The parking area is less than three (3) acres in size, and therefore an internal bicycle and pedestrian pathway is not required. This standard is met.

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:** As illustrated on sheet C1.10 of Exhibit F, the pedestrian path does not abut a driveway or street. In areas where the pedestrian path abuts vehicular parking spaces, the pedestrian path is curb separated and elevated 6" above the vehicle parking space. In the area where the pedestrian walkway abuts the internal vehicle circulation area, a curb ramp is provided as shown on Sheet C1.10 of Exhibit F. This standard is met.

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:** No pathway crossing of a parking area or driveway is proposed; therefore, no crosswalks are proposed or required. 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 (5) feet wide. Secondary pathways and pedestrian trails may have an alternative surface except as otherwise required by the ADA.

**Response:** As shown on Sheet C1.10 of Exhibit F, the pathway will be constructed of concrete, and will measure at least 5' in width. No alternative surfacing is proposed. This standard is met.

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

**Response:** Signage is not necessary to identify the path because it is framed by a building on one side and vehicle parking area on the other. This standard is met.

#### Section 4.155. General Regulations - Parking, Loading and Bicycle Parking

- (.02) General Provisions:
  - A. The provision and maintenance of off-street parking spaces is a continuing obligation of the property owner. The standards set forth herein shall be considered by the Development Review Board as minimum criteria.



- 1. The Board shall have the authority to grant variances or planned development waivers to these standards in keeping with the purposes and objectives set forth in the Comprehensive Plan and this Code.
- 2. Waivers to the parking, loading, or bicycle parking standards shall only be issued upon a findings that the resulting development will have no significant adverse impact on the surrounding neighborhood, and the community, and that the development considered as a whole meets the purposes of this section.

**Response:** The applicant acknowledges the continuing obligation to provide and maintain parking for site users. No waivers to the parking, loading, or bicycle parking standards are requested.

B. No area shall be considered a parking space unless it can be shown that the area is accessible and usable for that purpose, and has maneuvering area for the vehicles, as determined by the Planning Director.

**Response:** As illustrated on Sheet C1.10 in Exhibit B, all parking spaces are proposed to be hardsurfaced as required, and off-street maneuvering space is provided in drive aisles that comply with the City's dimensional requirements. This standard is met.

C. In cases of enlargement of a building or a change of use from that existing on the effective date of this Code, the number of parking spaces required shall be based on the additional floor area of the enlarged or additional building, or changed use, as set forth in this Section. Current development standards, including parking area landscaping and screening, shall apply only to the additional approved parking area.

**Response:** No building enlargement or change of use is proposed, since this is a proposal for a new building. This standard does not apply.

D. In the event several uses occupy a single structure or parcel of land, the total requirement for off-street parking shall be the sum of the requirements of the several uses computed separately, except as modified by subsection "E," below.

**Response:** Only one use, Office Use, is proposed within the proposed office building. This standard is not applicable.

E. Owners of two (2) or more uses, structures, or parcels of land may utilize jointly the same parking area when the peak hours of operation do not overlap, provided satisfactory legal evidence is presented in the form of deeds, leases, or contracts securing full and permanent access to such parking areas for all the parties jointly using them.

**Response:** The applicant does not propose sharing parking with nearby uses. This standard does not apply.

*F.* Off-street parking spaces existing prior to the effective date of this Code may be included in the amount necessary to meet the requirements in case of subsequent enlargement of the building or use to which such spaces are necessary.

**Response:** The site will be completely redeveloped, and no existing parking spaces will remain. This standard does not apply.

G. Off-Site Parking. Except for single-family dwellings, the vehicle parking spaces required by this Chapter may be located on another parcel of land, provided the parcel is within 500 feet of the use it serves and the DRB has approved the off-site parking through the Land Use Review. The distance from the parking area to the use shall be measured from the nearest parking space to the main building entrance, following a sidewalk or other



pedestrian route. The right to use the off-site parking must be evidenced in the form of recorded deeds, easements, leases, or contracts securing full and permanent access to such parking areas for all the parties jointly using them.

**Response:** No offsite parking is proposed. This standard does not apply.

H. The conducting of any business activity shall not be permitted on the required parking spaces, unless a temporary use permit is approved pursuant to Section 4.163.

**Response:** The applicant is not requesting authorization to perform business activities within required parking spaces. This standard does not apply.

I. Where the boundary of a parking lot adjoins or is within a residential district, such parking lot shall be screened by a sight-obscuring fence or planting. The screening shall be continuous along that boundary and shall be at least six (6) feet in height.

**Response:** The boundary of the parking area does not adjoin or is not located within a residential district. This standard is not applicable.

J. Parking spaces along the boundaries of a parking lot shall be provided with a sturdy bumper guard or curb at least six (6) inches high and located far enough within the boundary to prevent any portion of a car within the lot from extending over the property line or interfering with required screening or sidewalks.

**Response:** As illustrated on Sheet C1.10 in Exhibit F, all parking spaces adjacent to property lines have a six-inch curb at the front to ensure adequate space for landscaping and sidewalks and to prevent vehicles from crossing the property line. This standard is met.

K. All areas used for parking and maneuvering of cars shall be surfaced with asphalt, concrete, or other surface, such as pervious materials (i. e. pavers, concrete, asphalt) that is found by the City's authorized representative to be suitable for the purpose. In all cases, suitable drainage, meeting standards set by the City's authorized representative, shall be provided. [Amended by Ord. # 674 11/16/09]

**Response:** As noted on Sheet C1.10 in Exhibit F, all parking and maneuvering areas are proposed to be paved. Sheet C1.30 of Exhibit F illustrates the required stormwater management system. This standard is met.

L. Artificial lighting which may be provided shall be so limited or deflected as not to shine into adjoining structures or into the eyes of passers-by.

**Response:** As illustrated on the lighting plan (see Exhibit **Error! Reference source not found.**), t he applicant intends to comply using the prescriptive approach. This standard is met.

M. Off-street parking requirements for types of uses and structures not specifically listed in this Code shall be determined by the Development Review Board if an application is pending before the Board. Otherwise, the requirements shall be specified by the Planning Director, based upon consideration of comparable uses.

**Response:** Pursuant to the City of Wilsonville's response to OAR 660-012-0440, the subject site is located in an area of the City which is exempt from the minimum parking requirements. This standard does not apply.

N. Up to forty percent (40%) of the off-street spaces may be compact car spaces as identified in Section 4.001 - "Definitions," and shall be appropriately identified.

**Response:** As illustrated on Sheet C1.10 in Exhibit F, 22 compact parking spaces are proposed. This standard is met. The compact parking spaces meet the dimensional requirements as



defined in Section 4.001. As shown on Sheet C1.10 in Exhibit F, the parking spaces will have a ground marking to identify the select parking spaces as compact parking spaces. This standard is met.

O. Where off-street parking areas are designed for motor vehicles to overhang beyond curbs, planting areas adjacent to said curbs shall be increased to a minimum of seven (7) feet in depth. This standard shall apply to a double row of parking, the net effect of which shall be to create a planted area that is a minimum of seven (7) feet in depth.

**Response:** Landscape islands and pedestrian walkways abutting parking spaces have been designed to provide adequate width to meet standards, assuming a 2' bumper overhang. This standard is met.

- (.03) Minimum and Maximum Off-Street Parking Requirements:
  - A. Parking and loading or delivery areas shall be designed with access and maneuvering area adequate to serve the functional needs of the site and shall:
    - 1. Separate loading and delivery areas and circulation from customer and/or employee parking and pedestrian areas. Circulation patterns shall be clearly marked.
    - 2. To the greatest extent possible, separate vehicle and pedestrian traffic.

**Response:** As shown on Sheet C1.10 of Exhibit F, the parking area is designed with access and maneuvering area adequate to serve the office building. No regular deliveries are anticipated; therefore, no loading zone has been provided (detailed in the Applicant's response to 4.155.05 below). This standard is met.

- B. Parking and loading or delivery areas shall be landscaped to minimize the visual dominance of the parking or loading area, as follows:
  - 1. Landscaping of at least ten percent (10%) of the parking area designed to be screened from view from the public right-of-way and adjacent properties. This landscaping shall be considered to be part of the fifteen percent (15%) total landscaping required in Section 4.176.03 for the site development.
  - 2. Landscape tree planting areas shall be a minimum of eight (8) feet in width and length and spaced every eight (8) parking spaces or an equivalent aggregated amount.
    - a. Trees shall be planted in a ratio of one (1) tree per eight (8) parking spaces or fraction thereof, except in parking areas of more than two hundred (200) spaces where a ratio of one (1) tree per six (six) spaces shall be applied as noted in subsection (.03)(B.)(3.). A landscape design that includes trees planted in areas based on an aggregated number of parking spaces must provide all area calculations.
    - b. Except for trees planted for screening, all deciduous interior parking lot trees must be suitably sized, located, and maintained to provide a branching minimum of seven (7) feet clearance at maturity.

**Response:** As shown on Sheet C1.10 of Exhibit F, overall site landscaping of 31.9% is provided, exceeding the minimum 15% requirement. Parking area landscaping is provided at 5,213 SF, which is 22.6% of site area devoted to parking areas, exceeding the minimum 10% requirement. Parking area landscape areas have been counted as contributing to overall site landscaping, consistent with this provision. This standard is met.



Landscape tree planting areas are provided in the aggregate, as allowed by 4.155.03(B)(2)(a). Planter islands are at least 8' in width and length. Interior parking lot trees are shown on Sheets L1.10 and L1.11 of Exhibit F. This standard is met.

3. Due to their large amount of impervious surface, new development with parking areas of more than two hundred (200) spaces that are located in any zone, and that may be viewed from the public right of way, shall be landscaped to the following additional standards:

**Response:** As illustrated on Sheet C1.10 of Exhibit B, 65 parking spaces are proposed, which is fewer than 200 parking spaces. This standard does not apply.

C. Off Street Parking shall be designed for safe and convenient access that meets ADA and ODOT standards. All parking areas which contain ten (10) or more parking spaces, shall for every fifty (50) standard spaces., provide one ADA-accessible parking space that is constructed to building code standards, Wilsonville Code 9.000.

**Response:** As illustrated on Sheet C1.10 of Attachment F, 38 standard vehicle parking spaces, 22 compact parking spaces are proposed, and 3 accessible spaces are proposed to comply with provisions of the ADA and Oregon Structural Specialty Code. This standard is met.

D. Where possible, parking areas shall be designed to connect with parking areas on adjacent sites so as to eliminate the necessity for any mode of travel of utilizing the public street for multiple accesses or cross movements. In addition, on-site parking shall be designed for efficient on-site circulation and parking.

**Response:** As shown on Sheet C1.10 of Exhibit F, the site is surrounded by rights-of-way and is not adjacent to any other site. This standard is not applicable.

E. In all multi-family dwelling developments, there shall be sufficient areas established to provide for parking and storage of motorcycles, mopeds and bicycles. Such areas shall be clearly defined and reserved for the exclusive use of these vehicles.

**Response:** No multi-family residences are proposed as part of this development. This standard does not apply.

F. On-street parking spaces, directly adjoining the frontage of and on the same side of the street as the subject property, may be counted towards meeting the minimum off-street parking standards.

**Response:** No on-street parking is proposed in SW Wilsonville Road or SW Kinsman Road along the subject site's frontage. The applicant has not proposed to count on-street parking to satisfy the minimum parking standard. This standard does not apply.

G. Table 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.

**Response:** Pursuant to the City of Wilsonville's response to OAR 660-012-0440, the subject site is located in an area of the City that is exempt from minimum parking requirements. No parking structures or on-street parking are proposed. This standard does not apply.



- H. Electrical Vehicle Charging Stations:
  - 1. Parking spaces designed to accommodate and provide one or more electric vehicle charging stations on site may be counted towards meeting the minimum off-street parking standards.
  - 2. Modification of existing parking spaces to accommodate electric vehicle charging stations on site is allowed outright.

**Response:** As shown on Sheet C1.10 of Exhibit F, two (2) Electric Vehicle (EV) parking spaces are proposed. Pursuant to the City of Wilsonville's response to OAR 660-012-0440, the subject site is located in an area of the City that is exempt from the minimum parking requirements. This standard does not apply.

- I. Motorcycle parking:
  - 1. Motorcycle parking may substitute for up to 5 spaces or 5 percent of required automobile parking, whichever is less. For every 4 motorcycle parking spaces provided, the automobile parking requirement is reduced by one space.
  - 2. Each motorcycle space must be at least 4 feet wide and 8 feet deep. Existing parking may be converted to take advantage of this provision.

**Response:** No motorcycle parking is proposed. This standard does not apply.

- (.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.
    - 2. Bicycle parking spaces are not required for accessory buildings. If a primary use is listed in Table 5, bicycle parking is not required for the accessory use.
    - 3. When there are two or more primary uses on a site, the required bicycle parking for the site is the sum of the required bicycle parking for the individual primary uses.
    - 4. Bicycle parking space requirements may be waived by the Development Review Board per Section 4.118(.03)(A.)(9.) and (10.).

**Response:** Based on the proposed building size of approximately 15,744 SF of office use, the ratio in Table 5 requires the proposed development to provide at least four (4) bicycle parking spaces. As shown on Sheet C1.10 and L1.10 of Exhibit F, four (4) bicycle parking spaces are proposed near the main building entrance. This standard is met.

- B. Standards for Required Bicycle Parking
  - 1. Each space must be at least 2 feet by 6 feet in area and be accessible without moving another bicycle.
  - 2. An aisle at least 5 feet wide shall be maintained behind all required bicycle parking to allow room for bicycle maneuvering. Where the bicycle parking is adjacent to a sidewalk, the maneuvering area may extend into the right-of-way.
  - 3. When bicycle parking is provided in racks, there must be enough space between the rack and any obstructions to use the space properly.
  - 4. Bicycle lockers or racks, when provided, shall be securely anchored.
  - 5. Bicycle parking shall be located within 30 feet of the main entrance to the building or inside a building, in a location that is easily accessible for bicycles. For multi-tenant developments, with multiple business entrances, bicycle parking may be distributed on-site among more than one main entrance.

**Response:** As illustrated on Sheets C1.10 and L1.10 of Exhibit F, all required bicycle parking measures 2' by 6' in area and is accessible without moving another bicycle. There is a 5' aisle



maintained behind all required bike parking and space between the rack and the landscape areas to maneuver the bicycle(s). A bike parking detail is shown on Sheet C5.10 of Exhibit F. Lastly, bicycle parking is located within 30' of the building entrance. This standard is met.

- C. Long-term Bicycle Parking
  - 1. Long-term bicycle parking provides employees, students, residents, commuters, and others who generally stay at a site for several hours a weather-protected place to park bicycles.
  - 2. For a proposed multi-family residential, retail, office, or institutional development, or for a park and ride or transit center, where six (6) or more bicycle parking spaces are required pursuant to Table 5, 50% of the bicycle parking shall be developed as long-term, secure spaces. Required long-term bicycle parking shall meet the following standards:
    - a. All required spaces shall meet the standards in subsection (B.) above, and must be covered in one of the following ways: inside buildings, under roof overhangs or permanent awnings, in bicycle lockers, or within or under other structures.
    - b. All spaces must be located in areas that are secure or monitored (e.g., visible to employees, monitored by security guards, or in public view).
    - c. Spaces are not subject to the locational criterion of (B.)(5.).

**Response:** Based on the building size of approximately 15,744 SF, only four (4) bicycle parking spaces are required. As less than six (6) bicycle parking spaces are required, this standard is not applicable.

TABLE 5: PARKING STANDARDS (excerpt)						
Use		Use	Parking Minimums	Parking Maximums	Bicycle Minimums	
е.		Commercial				
	5.	<i>Office or flex space (except medical or dental)</i>	2.7 per 1,000 sq. ft.	4.1 per 1000 sq. ft.	1 per 5,000 sq. ft. Min. of 2	

- (.05) Minimum Off-Street Loading Requirements:
  - A. Every building that is erected or structurally altered to increase the floor area, and which will require the receipt or distribution of materials or merchandise by truck or similar vehicle, shall provide off-street loading berths on the basis of minimum requirements as follows:
    - 2. Restaurants, office buildings, hotels, motels, hospitals and institutions, schools and colleges, public buildings, recreation or entertainment facilities, and any similar use which has a gross floor area of 30,000 square feet or more, shall provide off-street truck loading or unloading berths in accordance with the following table:

Square feet of Floor Area	Number of Berths Required
Less than 30,000	0
30,000 - 100,000	1
100,000 and over	2



- 3. A loading berth shall contain space twelve (12) feet wide, thirty-five (35) feet long, and have a height clearance of fourteen (14) feet. Where the vehicles generally used for loading and unloading exceed these dimensions, the required length of these berths shall be increased to accommodate the larger vehicles.
- 4. If loading space has been provided in connection with an existing use or is added to an existing use, the loading space shall not be eliminated if elimination would result in less space than is required to adequately handle the needs of the particular use.
- 5. Off-street parking areas used to fulfill the requirements of this Ordinance shall not be used for loading and unloading operations except during periods of the day when not required to meet parking needs.

**Response:** The proposed office use will not require the receipt or distribution of materials or merchandise by truck or similar vehicle. The proposed office building is less than 30,000 SF; therefore, per 4.155.05.A.2., no loading space is required. No loading space is proposed. This standard is met.

- B. Exceptions and Adjustments.
  - 1. The Planning Director or Development Review Board may approve a loading area adjacent to or within a street right-of-way where it finds that loading and unloading operations:
    - a. Are short in duration (i.e., less than one hour);
    - b. Are infrequent (less than three operations daily);
    - c. Do not obstruct traffic during peak traffic hours;
    - d. Do not interfere with emergency response services or bicycle and pedestrian facilities; and
    - *e.* Are acceptable to the applicable roadway authority.

**Response:** The applicant is not proposing to perform loading operations adjacent to or within the street. This standard does not apply.

(.06) Carpool and Vanpool Parking Requirements:

Α.

- Carpool and vanpool parking spaces shall be identified for the following uses:
  - 1. New commercial and industrial developments with seventy-five (75) or more parking spaces,
  - 2. New institutional or public assembly uses, and
  - 3. Transit park-and-ride facilities with fifty (50) or more parking spaces.
- B. Of the total spaces available for employee, student, and commuter parking, at least five percent, but not fewer than two, shall be designated for exclusive carpool and vanpool parking.
- C. Carpool and vanpool parking spaces shall be located closer to the main employee, student or commuter entrance than all other parking spaces with the exception of ADA parking spaces.
- D. Required carpool/vanpool spaces shall be clearly marked "Reserved Carpool/Vanpool Only."

**Response:** As illustrated on Sheet C1.10 of Exhibit F, the proposed development will provide 63 parking spaces. Since this is lower than the threshold of 75 spaces, the carpool and vanpool provisions do not apply.

(.07) Parking Area Redevelopment. The number of parking spaces may be reduced by up to 10% of the minimum required parking spaces for that use when a portion of the existing parking area is modified to



accommodate or provide transit-related amenities such as transit stops, pull-outs, shelters, and park and ride stations.

**Response:** The applicant is not proposing a parking reduction for transit-related amenities. This standard does not apply.

#### Section 4.171. General Regulations - 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 development plan needs to achieve a balance between the purposes of the site's Industrial Comprehensive Plan designation – notably, active industrial and commercial use for employment and economic development – and the site's natural topography and resource constraints. The applicant's proposed development plans include a Grading Plan (see Sheet C1.20 of in Exhibit F) that provides on-site grading and slope conditions that comply with these requirements. As shown on Sheets C1.01 and C1.10 of Exhibit F, minor grading is proposed within the eastern edge of the SROZ to accommodate a vegetated stormwater facility, following recommendations of the geotechnical report. The development plan prioritizes limiting impacts on the identified significant resource within the SROZ by concentrating development in the areas outside of it to the maximum extent feasible, consistent with full utilization of the portions of the property that do not contain significant resource areas. Following land use approval, as the project proceeds to development permitting, the applicant will be required to submit a detailed Erosion and Sediment Control (ESC) Plan with construction management practices to satisfy the requirements of subparagraphs B and C.1, -2 and -3. This standard can be met by imposition if a condition of approval requiring submittal of an Erosion and Sediment Control (ESC) Plan prior to issuance of a building construction permit.

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

- A. An engineering geologic study approved by the City, establishes that the site is stable for the proposed development, and any conditions and recommendations based on the study are incorporated into the plans and construction of the development. The study shall include items specified under subsection 4.171(.07)(A.)(2.)( a-j):
- B. Slope stabilization and re-vegetation plans shall be included as part of the applicant's landscape plans.
- *C.* Buildings shall be clustered to reduce alteration of terrain and provide for preservation of natural features.



- D. Creation of building sites through mass pad grading and successive padding or terracing of building sites shall be avoided where feasible.
- *E.* Roads shall be of minimum width, with grades consistent with the City's Public Works Standards.
- F. Maintenance, including re-vegetation, of all grading areas is the responsibility of the developer, and shall occur through October 1 of the second growing season following receipt of Certificates of Occupancy unless a longer period is approved by the Development Review Board.
- *G.* The applicant shall obtain an erosion and sediment control permit from the City's Building and Environmental Services Division's.

**Response:** As shown on Sheet C1.01 of Exhibit F, the area where grading is proposed is relatively flat (elevations range between 145'-150'). No area where development is proposed has a slope greater than 25%. These provisions are not applicable.

- (.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.

**Response:** As noted in the responses above and shown on Sheet L0.02 of Exhibit F, two (2) trees within the SROZ are proposed for removal. This application includes a request to remove those two trees and to make replacement mitigation plantings onsite. Tree protection measures will be implemented as shown on Sheet L0.02 of Exhibit F. No street trees are proposed for removal as part of this development. This standard is met.

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.

**Response:** As illustrated on Sheet C1.20 of Exhibit F, on-site protection measures will be established around the SROZ resource area and tree protection fencing will be installed to protect root zones for trees to be conserved outside that area.

2. Providing for drainage and water and air filtration to the roots of trees which will be covered with impermeable surfaces.

**Response:** No trees are proposed for retention at locations where their root zones would be covered by impermeable surfaces; this provision is not applicable.

3. Requiring, if necessary, the advisory expertise of a registered arborist/horticulturist both during and after site preparation.

**Response:** Arborist consultation can be required on-site as excavation and grading are done, to assess root damage and make determinations with respect to trees affected by mass grading, retaining wall construction, and utilities installations. Compliance can be assured through a condition of approval.



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 site does not contain uniquely valuable specimen trees or heritage status trees; this requirement is not applicable.

- (.05) High Voltage Powerline Easements and Rights of Way and Petroleum Pipeline Easements:
  - A. Due to the restrictions placed on these lands, no residential structures shall be allowed within high voltage powerline easements and rights of way and petroleum pipeline easements, and any development, particularly residential, adjacent to high voltage powerline easements and rights of way and petroleum pipeline easements shall be carefully reviewed.
  - B. Any proposed non-residential development within high voltage powerline easements and rights of way and petroleum pipeline easements shall be coordinated with and approved by the Bonneville Power Administration, Portland General Electric Company or other appropriate utility, depending on the easement or right of way ownership.

**Response:** Along the western boundary of the property runs a 125' wide Bonneville Power Administration (BPA) electrical transmission line easement in a north-south orientation. No development will take place within the BPA powerline easement except for limited site grading and utility connections as shown on Sheet C1.20 and C1.30 of Exhibit F. No residential development is proposed. Construction documents will be designed in coordination with BPA regulations. This standard is met.

- (.06) Hazards to Safety: Purpose:
  - A. To protect lives and property from natural or human-induced geologic or hydrologic hazards and disasters.
  - B. To protect lives and property from damage due to soil hazards.
  - C. To protect lives and property from forest and brush fires.
  - D. To avoid financial loss resulting from development in hazard areas.
- (.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, 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:** According to data from the Oregon Department of Geology and Mineral Industries (DOGAMI)<sup>2</sup>, the western portion of the subject site, generally corresponding to the designated SROZ resource corridor, is located within a moderate landslide hazard area; however, the proposed development area is located outside that boundary. See Figure III-1 below.

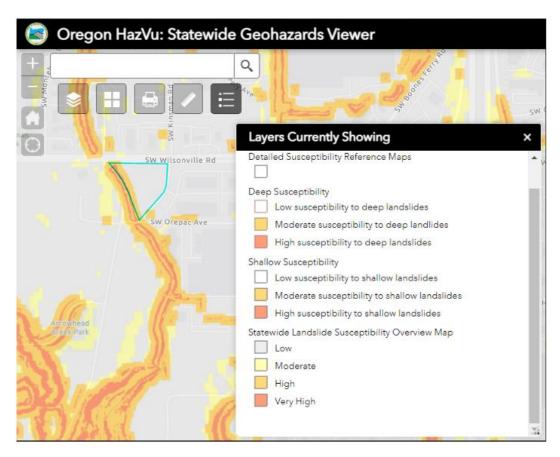


Figure III-1. Landslide Hazard Potential (DOGAMI)

<sup>&</sup>lt;sup>2</sup> https://gis.dogami.oregon.gov/maps/hazvu/



The proposed stormwater system, illustrated on Sheet C1.30 of Exhibit F, has been designed based on the site-specific geotechnical investigation findings and construction recommendations in the Geotechnical Report appended to Exhibit H, which did not identify high landslide potential. The on-site storm system will collect on-site stormwater runoff, direct it through surface water quality treatment facilities, and discharge treated runoff to Coffee Lake Creek. A Storm Report is included as Exhibit H.

The contractor will not begin clearing operations until appropriate jurisdictional permits have been issued by the City and the Oregon Department of Environmental Quality (DEQ), such as erosion/sediment control and grading permits, to ensure that adequate measures and monitoring will be in place to minimize erosion potential. This standard is met.

- (.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.

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:** In Appendix C of the Preliminary Storm Report (see Exhibit G), the applicant has provided documentation of poor soil infiltration characteristics at the subject property (*Geotechnical Design Memo on Infiltration Infeasibility*, June 9, 2020). All construction will be based on recommendations by the consulting geological engineer to ensure structural stability.

Proposed stormwater facilities are distributed on-site at strategic locations for capture of runoff, upon which underground piping collects the water and routes it to discharge at an existing outfall to Coffee Lake Creek. Based on the geotechnical engineering report's recommendation, sizing calculations for the on-site stormwater management facilities assume limited on-site infiltration. As a result, the preliminary storm report demonstrates the feasibility of meeting stormwater management requirements with minimal reliance of on-site infiltration, which contributes to on-site soil stability. This requirement is met.

#### (.09) Historic Protection: Purpose: [detailed provisions omitted for brevity]

**Response:** The subject property has not been identified as containing or being adjacent to any significant historic, cultural, or archaeological resources. These provisions are not applicable.

- (.10) Alteration and Development Criteria:
  - A. Demolition or alteration of any structure, or any change in any site or object which has been designated as a cultural resource, is prohibited unless it is determined:

1. In the case of a designated cultural resource, the proposed work would not detrimentally alter, destroy or adversely affect any exterior architectural or other identified feature; or

2. In the case of any property located within a historic district, the proposed construction, removal, rehabilitation, alteration, remodeling, excavation or exterior alteration conforms to any prescriptive standards as adopted by the City, and does not adversely affect the character of the district; or

3. In the case of construction of a new improvement, building or structure upon a cultural resource site, the exterior of such improvements will not adversely affect and



will be compatible with the external appearance of existing designated improvements, buildings and structures on said site; or

4. That no reasonable use can be made of the property without such approval.

**Response:** These provisions are not applicable because the subject property is not a designated cultural resource site and is not within a historic district.

(.11) Cultural Resource Designation Criteria: A cultural resource may be designated and placed on the Cultural Resources Inventory if it meets the following criteria:

- A. It exemplifies or reflects special elements of the City's cultural, social, economic, political, aesthetic, engineering or architectural history; or
- B. It is identified with persons or events significant in local, state, or national history; or
- *C.* It embodies distinctive characteristics of a style, type, period, or method of construction, or it is a valuable example of the use of indigenous materials or craftsmanship; or
- D. It is representative of the notable work of a builder, designer, or architect.

**Response:** These provisions are not applicable because the subject property is not a designated cultural resource site, and it is not proposed for such designation.

### Section 4.175. Public Safety and Crime Prevention

(.01) All developments shall be designed to deter crime and insure public safety.

**Response:** Although the SW Wilsonville Road and SW Kinsman Road frontages will be partially screened by landscaping, the proposed site plan is designed to provide visibility of active use parts of the site and the building. This enables citizens passing by on the public street to observe activity within the site and facilitates surveillance by law enforcement. Site lighting, including in parking/circulation areas and along the pedestrian path to the office entrance, will contribute to safety during hours of darkness. This standard is met.

# (.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.

**Response:** The applicant will prepare and submit plans for address number signage and direction for internal circulation in conjunction with construction permit submittals.

# (.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.

**Response:** Both site frontages along SW Wilsonville Road and SW Kinsman Road are observable from the right-of-way. facilitates routine surveillance by police without requiring them to enter and circulate within the site. Additionally, the parking lot and building will be illuminated to deter crime. This standard is met.

(.04) Exterior lighting shall be designed and oriented to discourage crime.

**Response:** Site lighting will illuminate parking and activity areas, to enable public surveillance and thereby discourage crime. A photometric plan is included as Sheet E1.01 of Exhibit F, followed by manufacturer's specifications for proposed fixtures.

# Section 4.176. Landscaping, Screening, and Buffering

Note: the reader is encouraged to see Section 4.179, applying to screening and buffering of storage areas for solid waste and recyclables.

(.02) Landscaping and Screening Standards.



B. Subsections "C" through "I," below, state the different landscaping and screening standards to be applied throughout the City. The locations where the landscaping and screening are required and the depth of the landscaping and screening is stated in various places in the Code.

**Response:** The landscape plans (L-Series sheets in Exhibit F) have been designed to conform to the applicable landscaping and screening standards, as described in responses to subsections C through I below. This standard is met.

C. All landscaping and screening required by this Code must comply with all of the provisions of this Section, unless specifically waived or granted a Variance as otherwise provided in the Code. The landscaping standards are minimum requirements; higher standards can be substituted as long as fence and vegetation-height limitations are met. Where the standards set a minimum based on square footage or linear footage, they shall be interpreted as applying to each complete or partial increment of area or length (e.g., a landscaped area of between 800 and 1600 square feet shall have two trees if the standard calls for one tree per 800 square feet.

**Response:** The applicant's landscaping plan, in the L-series drawing sheets of Exhibit F, demonstrates compliance with the standards in this Section.

- 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.

**Response:** This site abuts both SW Wilsonville Road and SW Kinsman Road. The applicant has used the General Landscape standard as the starting point for the SW Wilsonville Road and SW Kinsman Road site edges. The planting schemes for both frontages are designed to frame the public realm (street environment) and screen the parking and loading areas from view from the street (except at the driveway entrance). The plan also provides views into the SROZ Resource Area and the vegetated stormwater facility in the SROZ. In these ways, the specific planting scheme responds to the unique opportunities this site presents.

- D. Low Screen Landscaping Standard.
  - 1. Intent. The Low Screen Landscaping Standard is a landscape treatment that uses a combination of distance and low screening to separate uses or developments. It is intended to be applied in situations where low screening is adequate to soften the impact of one use or development on another, or where visibility between areas is more important than a total visual screen. The Low Screen



Landscaping Standard is usually applied along street lot lines or in the area separating parking lots from street rights-of-way.

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:** Plantings along the SW Wilsonville Road and SW Kinsman Road site frontages are designed in compliance with the Low Screen landscaping standard. As shown on Sheets L1.10 and L1.11 of Exhibit F, low shrubs will form a continuous screen 3' high and 95% opaque year-round. As shown on Sheets L1.10 and L1.11 of Exhibit F, shallow rooting trees and plantings are proposed within the 21' public utility easement along SW Wilsonville Road frontage in the area between the building and the right-of-way. The proposed trees along SW Wilsonville Road have spacing of one per 30 linear feet of landscape area. Additionally, trees are proposed along the SW Kinsman Road frontage. The trees along SW Kinsman Road have spacing of one per 30 linear feet of landscape area, excepting in a small segment where necessary to make a pedestrian connection to the public sidewalk. This standard is met.

(.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 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). [Amended by Ord. # 674 11/16/09]

**Response:** As shown on Sheet C1.10 of Exhibit F, overall site landscaping of 19,962 SF is provided, or 31.9% of buildable site area. Parking area landscaping is provided as 5,213 SF, which is 22.6% of the 23,073 SF of the site devoted to parking areas. Dense plantings with a variety of predominantly native species, shrubs, groundcover, and trees, along with protection of the SROZ all contribute to an interesting and varied landscape composition in the foreground of the proposed industrial building. These requirements are satisfied.

(.04) Buffering and Screening. Additional to the standards of this subsection, the requirements of the Section 4.137.5 (Screening and Buffering Overlay Zone) shall also be applied, where applicable.

- A. All intensive or higher density developments shall be screened and buffered from less intense or lower density developments.
- B. Activity areas on commercial and industrial sites shall be buffered and screened from adjacent residential areas. Multi-family developments shall be screened and buffered from single-family areas.
- *C.* All exterior, roof and ground mounted, mechanical and utility equipment shall be screened from ground level off-site view from adjacent streets or properties.



- D. All outdoor storage areas shall be screened from public view, unless visible storage has been approved for the site by the Development Review Board or Planning Director acting on a development permit.
- *E.* In all cases other than for industrial uses in industrial zones, landscaping shall be designed to screen loading areas and docks, and truck parking.
- *F.* In any zone any fence over six (6) feet high measured from soil surface at the outside of fenceline shall require Development Review Board approval.

**Response:** The subject site abuts residentially zoned land<sup>3</sup> (currently SW Industrial Way) along the western site property boundary. The nearest site improvement, parking area, is located approximately a minimum of 50' from the residential zone. The area in between the parking area and the residential property to the west is SROZ and will be planted as shown on Sheet L1.10 and L1.11 of Exhibit F. The parking area is located over 260' from the nearest residential property. The building's parapet-roof design provides screening of rooftop mechanical equipment from view from adjacent streets or properties, consistent with subparagraph C. The site plan does not include any outdoor storage areas subject to subparagraph D. No loading areas and/or loading docks are proposed, so subparagraph E. Perimeter fencing is not proposed, so subparagraph F is not applicable. No fence is proposed. This standard is met.

(.05) Sight-Obscuring Fence or Planting. The use for which a sight-obscuring fence or planting is required shall not begin operation until the fence or planting is erected or in place and approved by the City. A temporary occupancy permit may be issued upon a posting of a bond or other security equal to one hundred ten percent (110%) of the cost of such fence or planting and its installation. (See Sections 4.400 to 4.470 for additional requirements.)

**Response:** The subject property's location in the PDI zone, with industrial and commercial-designated neighboring properties, does not require sight-obscuring fencing or plantings for the anticipated office use. The area west of the site (Industrial Way) is designated as a residential zone, but the area is currently used as an access road, and therefore a sight-obscuring fence or plantings are not required. Additionally, the western boundary of the site is SROZ, and no non-exempt SROZ activities are proposed within that area. This provision is not applicable to this proposal.

### (.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

<sup>&</sup>lt;sup>3</sup> A portion of the Industrial Way roadway appears to have been acquired in fee by the City, so it does not appear as public right of way on the City's zoning map. The City's zoning map boundary appears to be abutting the subject site. The residential and industrial zones are separately by SW Industrial Way and the SROZ and Coffee Lake Creek.



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.

**Response:** Detailed instructions for landscape plants, materials and installation are provided in the Landscaping Plan (L-series sheets in Exhibit F). The specifications have been prepared in compliance with these and other City of Wilsonville requirements.

- 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:** Detailed specifications for landscape plants, materials and installation are provided in the Landscaping Plan (L-series sheets in Exhibit F). The specifications have been prepared in compliance with these requirements.

- C. Where a proposed development includes buildings larger than twenty-four (24) feet in height or greater than 50,000 square feet in footprint area, the Planning Director or the Development Review Board, as applicable, may require larger or more mature plant materials:
  - 1. At maturity, proposed trees shall be at least one-half the height of the building to which they are closest, and building walls longer than 50 feet shall require tree groups located no more than fifty (50) feet on center, to break up the length and height of the façade.
  - 2. Either fully branched deciduous or evergreen trees may be specified depending upon the desired results. Where solar access is to be preserved, only solar-



friendly deciduous trees are to be used. Where year-round sight obscuring is the highest priority, evergreen trees are to be used.

- 3. The following standards are to be applied:
  - a. Deciduous trees:
    - *i. Minimum height of ten (10) feet; and*
    - *ii.* Minimum trunk diameter (caliper) of 2 inches (measured at four and one-half [4 1/2] feet above grade).
  - b. Evergreen trees: Minimum height of twelve (12) feet.

**Response:** Detailed specifications for landscape plants, materials and installation are provided in the Landscaping Plan (L-series sheets in Exhibit F). The specifications have been prepared in compliance with these requirements.

- 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.
- 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 borealis (Red Oak), Acer Macrophylum (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 (NativePacific 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:** Both SW Wilsonville Road and SW Kinsman Road are fully improved, including street tree plantings. No street trees are proposed for removal, nor are any new street trees proposed. This standard is not applicable.

- 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 non-native 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:** Detailed specifications for landscape plants, materials and installation are provided in the Landscaping Plan (L-series sheets in Exhibit F). The specifications have been prepared in compliance with these requirements.

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

Existing trunk diameterNumber of Tree Credits18 to 24 inches in diameter3 tree credits25 to 31 inches in diameter4 tree credits32 inches or greater5 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.
- G. Exceeding Standards. Landscape materials that exceed the minimum standards of this Section are encouraged, provided that height and vision clearance requirements are met.
- H. Compliance with Standards. The burden of proof is on the applicant to show that proposed landscaping materials will comply with the purposes and standards of this Section.

**Response:** On Site trees to be conserved include three (3) coniferous trees (located within the SROZ) and five (5) deciduous trees. The on-site trees vary in trunk diameter size from 2"-7". A tree inventory is included as Exhibit K.

(.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.
- 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:** The landscaping plan (L-series sheets in Exhibit F) demonstrates the feasibility of installing landscape materials in compliance with these requirements. Compliance can be assured through imposition of a condition of approval.

(.08) Landscaping on Corner Lots. All landscaping on corner lots shall meet the vision clearance standards of Section 4.177. If high screening would ordinarily be required by this Code, low screening shall be substituted within vision clearance areas. Taller screening may be required outside of the vision clearance area to mitigate for the reduced height within it.

**Response:** The subject site is a corner lot. As shown on the L-series sheets of Exhibit F, the vision clearance standards of Section are met. As explained in the Applicant's response to Section 4.176.02, high screening is not required. This standard is 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:** As indicated in the planting plan, all landscape areas of the site fall into category C, Low water usage areas (see in Exhibit F, Sheet L0.01, Zoning Compliance Note for Section 4.176(.09) Water Usage).

(.10) Completion of Landscaping. The installation of plant materials may be deferred for a period of time specified by the Board or Planning Director 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:** This application does not request deferral of plant material installation; however, depending on the seasonality of construction, the applicant may work with City staff to utilize these provisions to plant at the appropriate time(s), as allowed under this provision.

(.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:** Based on the submitted materials, the proposal complies with applicable standards.

(.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 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 applicant has included in this request a Type B Tree Removal for DRB review and approval because proposed site design cannot be achieved without removal of two (2) existing trees within the SROZ. New tree plantings are proposed to mitigate the removal of the two (2) trees. With the approval of the Type B Tree Removal request, this standard is met.

## Section 4.177. Street Improvement Standards

This section contains the City's requirements and standards for pedestrian, bicycle, and transit facility improvements to public streets, or within public easements. The purpose of this section is to ensure that development, including redevelopment, provides transportation facilities that are safe, convenient, and adequate in rough proportion to their impacts.

(.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:** Per pre-application meeting information provided by City of Wilsonville staff, the applicant understands that both SW Wilsonville Road and SW Kinsman Road are fully improved. No dedications or frontage improvements are required or proposed.

### (.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:** As the site is surrounded by right-of-way, there are no adjacent sites. SW Wilsonville Road and SW Kinsman Road are fully improved to City standards; therefore, no dedications are required. This standard is not applicable.



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:** SW Wilsonville Road and SW Kinsman Road are fully improved to City standards. No frontage improvements or right-of-way dedication is warranted. This standard is met.

- 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:** SW Wilsonville Road and SW Kinsman Road are fully improved to City standards. No right-of-way dedication is required or warranted. The proposed building is set back a minimum of 65' from the centerline of SW Wilsonville Road (Arterial). This standard is 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:** No new dead-end streets or cul-de-sac are proposed as part of this project. 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 cross-visibility at the intersection and necessary excavation would



# result in an unreasonable hardship on the property owner or deteriorate the quality of the site.

**Response:** Landscape plantings at the proposed driveway are designed to provide adequate visibility in both directions for safe operations. Landscape maintenance practices will ensure visibility on an ongoing basis.

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

**Response:** As illustrated on the L-series sheets in Exhibit F, no structural elements are proposed over streets and drives. Trees planted in proximity to streets will be trimmed to provide adequate vertical clearance as required. This standard 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:** SW Wilsonville Road and SW Kinsman Road are fully improved to City standards. No improvements to the adjacent rights-of-way are warranted; therefore, no interim improvements are required. This standard is not applicable.

(.03) Sidewalks. Sidewalks shall be provided on the public street frontage of all development. Sidewalks shall generally be constructed within the dedicated 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 Sheet C1.10 of Exhibit F, a 6' sidewalk exists along the site's frontage with SW Wilsonville Road, and a 6' wide sidewalk exists along the site's frontage with SW Kinsman Road. No impacts or changes to the existing sidewalks are proposed. This standard is 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:** SW Wilsonville Road, along the site's frontage, is classified as a Minor Arterial per Figure 3-2 of the Wilsonville TSP. SW Wilsonville Road is a fully developed road, including: two (2) 10' travel lanes; one (1) 12' center lane; a 6' bike lane and 2' bike lane buffer both sides; curb and gutter; planter; and sidewalk. SW Kinsman Road, along the site's frontage, is classified as a Collector. SW Kinsman Road is a fully developed road, including: two (2) 12' travel lanes; one (1) 12' center lane; a 7' bike lane both sides; curb and gutter; planter; and sidewalk. No changes are proposed or warranted to the adjacent fully development roadways and bicycle facilities.

(.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:** No multiuse pathways are proposed, or warranted, as part of this development.

### (.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.

- A. Development shall at a minimum provide:
  - 1. Reasonably direct pedestrian connections, as defined by Section 4.154, between building entrances and the transit facility and between buildings on the site and streets adjoining transit stops.
  - 2. Improvements at major transit stops. Improvements may include intersection or mid-block traffic management improvements to allow for pedestrian crossings at major transit stops.
- B. Developments generating an average of 49 or more pm peak hour trips shall provide bus stop improvements per the Public Works Standards. Required improvements may include provision of benches, shelters, pedestrian lighting; or provision of an easement or dedication of land for transit facilities.
- C. In addition to the requirements of 4.177(.06)(A.)(2.), development generating more than 199 pm peak hour trips on major transit streets shall provide a bus pullout, curb extension, and intersection or mid-block traffic management improvements to allow for pedestrian crossings at major transit stops.
- D. In addition to the requirement s of 4.177(.06)(A.) and (B.), development generating more than 500 pm peak-hour trips on major transit streets shall provide on-site circulation to accommodate transit service



**Response:** SW Wilsonville Road is a major transit street. No bus stop is located along the site's frontage on SW Wilsonville Road. There is an eastbound bus stop on SW Wilsonville Road, located east of the Kinsman Road intersection, and a westbound bus stop on westbound SW Wilsonville Road, just west of the Kinsman Road intersection. As shown on Sheet C1.10 of Exhibit F, the proposed development provides a pedestrian connection to SW Kinsman Road which connects to the SW Wilsonville Road sidewalk. Statements regarding the number of pm peak hour trips will be provided in the applicant's incompleteness response in the future subject to confirmation by DKS report. This standard is met.

(.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.
- B. The design and construction of a Residential Private Access Drive shall ensure a useful lifespan and structural maintenance schedule comparable, as determined by the City Engineer or City's Authorized Representative, to a local street constructed in conformance to current public works standards.
  - 1. The design of residential private access drives shall be stamped by a professional engineer registered in the state of Oregon and shall be approved by the City Engineer or City's Authorized Representative to ensure the above requirement is met.
  - 2. Prior to issuing a certificate of occupancy for any residential dwelling unit whose primary vehicular access is from a Residential Private Access Drive the City Engineer or City's Authorized Representative shall certify construction of the Residential Private Access Drive substantially conforms the design approved by the City Engineer or City's Authorized Representative.
- C. Residential Private Access Drives shall be named for addressing purposes. All Residential Private Access Drives shall use the suffix "Lane", i.e. SW Oakview Lane.
- D. Residential Private Access Drives shall meet or exceed the standards for access drives and travel lanes established in Subsection (.08) of this Section. [Amended by Ord. 682, 9/1/10]

**Response:** The proposed development is commercial, not residential. 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.

**Response:** The proposed development will utilize an existing driveway located at the southeast corner of the site. The driveway is located to allow safe turning movements to and from the site, and to minimize conflicting movements within the site as well. Staff has advised that the existing driveway location should be used for this development. The parking lot has been designed to provide efficient circulation through the site, as to avoid any queuing onto the public right of way. This provision is met.

- 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.

**Response:** The proposed site plan demonstrates the feasibility to comply with these structural and emergency access requirements. Detailed specifications will be included in plans submitted for site construction.

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

**Response:** The one-driveway configuration, including proposed driveway widths, is appropriate to accommodate the anticipated mix of vehicles at the site, based on its intended office use.

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.

**Response:** SW Wilsonville Road, along the site's frontage, is classified as a Minor Arterial per the City's TSP. SW Kinsman Road, along the site's frontage, is classified as a Collector. Access will be taken from the lower classification street. This standard is met.

*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.

**Response:** The proposed development will utilize an existing driveway located at the southeast corner of the site. The driveway is located to allow safe turning movements to and from the site, and to minimize conflicting movements within the site as well. Staff has advised that the existing driveway location should be used for this development. No additional limits to this driveway access are warranted.

- 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.

**Response:** The subject site is a single parcel with no adjacent properties. The driveway and internal circulation are configured to allow exiting vehicles to queue as necessary within the site without congesting incoming vehicle movements. This provision is satisfied. The site includes no drive-up, drive-through, or vehicle storage or service areas. These provisions are met.

*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.

**Response:** The proposed driveway widths have been based on movement patterns and turning radii associated with the anticipated mix of vehicles, to minimize potential for conflicting movements within the public right-of-way. These provisions are met.



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.

**Response:** Statements will be provided in the applicant's incompleteness response in the future subject to confirmation by DKS report. The applicant does not expect any need for traffic-calming features to be installed in public streets in the vicinity based on pre-application conference discussions with City staff.

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.

**Response:** As noted above, the proposed driveway is located to allow safe turning movements to and from the site, and to minimize conflicting movements within the site as well. The pedestrian path is grade separated from the vehicle circulation area (with ADA-compliant ramps provided where necessary). This provision is met.

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.

**Response:** This provision is not applicable because this project will connect to an existing public storm drain system line in the SW of the site. See Sheet C1.20 in Exhibit F for details.

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:** Following land use approval, the applicant will provide construction plans that comply with this requirement.

- 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:** This provision is not applicable because the proposed project is not a residential or mixed-use development.

- (.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.

**Response:** This provision is not applicable because no new street intersection is proposed as part of this project.



(.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., **Response:** This provision is not applicable because subsections (.08) and (.09) are not applicable for the reasons stated above.

#### Section 4.179. Mixed Solid Waste and Recyclables Storage in New Multi-Unit Residential and Non-Residential Buildings

(.01) All site plans for multi-unit residential and non-residential buildings submitted to the Wilsonville Development Review Board for approval shall include adequate storage space for mixed solid waste and source separated recyclables. [Amended by Ordinance No. 538, 2/21/02.]

**Response:** As shown on Sheet C1.10 of Exhibit F, a solid waste storage enclosure is proposed between two (2) bays of parking spaces on the west edge of the development area. The proposed location provides sufficient linear approach area and turning radii for service vehicles. Correspondence from Republic Services in Exhibit H confirms the trash hauler's assessment that the proposed waste facilities are appropriate for the proposed use. This standard is met.

(.02) The floor area of an interior or exterior storage area shall be excluded from the calculation of building floor area for purposes of determining minimum storage requirements.

**Response:** The area of the waste storage facilities has not been included in the computation of floor area requiring waste storage. This standard is met.

(.03) The storage area requirement shall be based on the predominant use(s) of the building. If a building has more than one of the uses listed herein and that use occupies 20 percent or less of the floor area of the building, the floor area occupied by that use shall be counted toward the floor area of the predominant use(s). If a building has more than one of the uses listed herein and that use occupies more than 20 percent of the floor area of the building, then the storage area requirement for the whole building shall be the sum of the requirement for the area of each use.

**Response:** The building is proposed to have office uses, and the waste storage areas are thus computed based on that use category. The applicant's method of calculation complies with this provision.

(.04) Storage areas for multiple uses on a single site may be combined and shared.

**Response:** As shown on Sheet C1.10 of Exhibit F, the applicant is proposing a single waste storage area. This standard is met.

(.05) The specific requirements are based on an assumed storage height of four feet for solid waste/recyclables. Vertical storage higher than four feet but no higher than seven feet may be used to accommodate the same volume of storage in a reduced floor space. Where vertical or stacked storage is proposed, the site plan shall include drawings to illustrate the layout of the storage area and dimensions for the containers.

**Response:** The applicant is proposing to use waste bins not exceeding seven feet in height, consistent with these standards, to accommodate anticipated waste volume in a smaller space.

(.06) The specific requirements for storage area are as follows:



- A. Multi-unit residential buildings containing five-ten units shall provide a minimum storage area of 50 square feet. Buildings containing more than ten residential units shall provide an additional five square feet per unit for each unit above ten.
- B. Non-residential buildings shall provide a minimum storage area of ten square feet, plus:
  - 1. Office: Four square feet per 1,000 square feet gross floor area (GFA);
  - 2. Retail: Ten square feet per 1,000 square feet GFA;
  - 3. Wholesale / Warehouse / Manufacturing: Six square feet per 1,000 square feet GFA; and
  - 4. Other: Four square feet per 1,000 square feet GFA.

**Response:** Based on the proposed approximately 15,700 SF office building, this standard requires minimum waste enclosure area of 74 SF. The proposed development plan provides a waste enclosure exceeding this requirement, located adjacent to the landscape area along the west edge of the development area, as shown on Sheet C1.10 of Exhibit F. The proposed waste enclosure location and configuration have been reviewed and approved by the trash hauler, Republic Services, anticipating weekly service (pending Exhibit H). The proposed development complies.

(.07) The applicant shall work with the City's franchised garbage hauler to ensure that site plans provide adequate access for the hauler's equipment and that storage area is adequate for the anticipated volumes, level of service and any other special circumstances which may result in the storage area exceeding its capacity. The hauler shall notify the City by letter of their review of site plans and make recommendations for changes in those plans pursuant to the other provisions of this section.

**Response:** Pending Exhibit H contains a letter from the trash hauler agreeing that the waste storage facility is appropriate for the proposed warehouse/distribution and manufacturing use, and that adequate circulation is available on site. This standard is met.

(.08) Existing multi-unit residential and non-residential developments wishing to retrofit their structures to include storage areas for mixed solid waste and recycling may have their site plans reviewed and approved through the Class I Administrative Review process, according to the provisions of Section 4.035. Site plans for retrofitting existing developments must conform to all requirements of this Section, "Mixed Solid Waste and Recyclables Storage In New Multi-Unit Residential and Non-Residential Buildings," and 4.430, "Location, Design and Access Standards for Mixed Solid Waste and Recycling Areas," of the Wilsonville City Code.

**Response:** The applicant is not proposing to retrofit existing solid waste facilities. This standard does not apply.

(.09) When applicable, the applicant must comply with Wilsonville Code Section 8.010. [Added by Ordinance #837 – August 5, 2019]

**Response:** Wilsonville Code Section 8.010 states in its entirety that "The regulation of disposal and hauling, including both hauler and customer requirements, for solid waste, recycling, yard debris, organic materials, and other materials shall be adopted by City ordinance." The applicant intends to comply with the applicable standards set by the City and the hauler.

### Section 4.199 Outdoor Lighting

Section 4.199.20. Applicability.

- (.01) This Ordinance is applicable to:
  - A. Installation of new exterior lighting systems in public facility, commercial, industrial and multi-family housing projects with common areas.



B. Major additions or modifications (as defined in this Section) to existing exterior lighting systems in public facility, commercial, industrial and multi-family housing projects with common areas.

**Response:** The proposed development is for a commercial building; therefore, this section applies.

- (.02) Exemption. The following luminaires and lighting systems are EXEMPT from these requirements:
  - A. Interior lighting.
  - B. Internally illuminated signs.
  - C. Externally illuminated signs.
  - D. Temporary lighting for theatrical, television, and performance areas.
  - *E.* Lighting in swimming pools and other water features governed by Article 680 of the National Electrical Code.
  - *F.* Building Code required exit path lighting.
  - G. Lighting specifically for stairs and ramps.
  - H. Temporary and seasonal lighting provided that individual lamps are 10 watts or less.
  - I. Lighting required and/or regulated by the City (i.e. construction related activities), Federal Aviation Administration, U.S. Coast Guard or other Federal or State agency.
  - J. Single-family residential lighting.
  - K. Code Required Signs.
  - L. American flag.
  - M. Landscape lighting.
  - *N.* Lights approved by the City through an Administrative Review Temporary Use Permit process.
  - O. Public street lights.
  - P. ATM security lighting.
  - Q. Those "Exceptions" listed in the "Exterior Lighting Power Allowance" provisions of the Oregon Energy Efficiency Specialty Code.

**Response:** The applicant is seeking approval of those lighting systems which do not fall into the exemptions listed above.

Section 4.199.30. Lighting Overlay Zones.

(.01) The designated Lighting Zone as indicated on the Lighting Overlay Zone Map for a commercial, industrial, multi-family or public facility parcel or project shall determine the limitations for lighting systems and fixtures as specified in this Ordinance.

A. Property may contain more than one lighting zone depending on site conditions and natural resource characteristics.

**Response:** As illustrated in Figure 30 (in Section 4.199.60 below), this site and neighboring properties on all sides are entirely in Lighting Zone LZ 2. This standard is met.

- (.02) The Lighting Zones shall be:
  - A. LZ 1. Developed areas in City and State parks, recreation areas, SROZ wetland and wildlife habitat areas; developed areas in natural settings; sensitive night environments; and rural areas. This zone is intended to be the default condition for rural areas within the City.
  - B. LZ 2. Low-density suburban neighborhoods and suburban commercial districts, industrial parks and districts. This zone is intended to be the default condition for the majority of the City.
  - *C. LZ 3. Medium to high-density suburban neighborhoods and districts, major shopping and commercial districts as depicted on the Lighting Overlay Zone Map.*



D. LZ 4. Reserved for limited applications with special lighting requirements. This zone is appropriate for users who have unique site or operating circumstances that warrant additional light. This zone shall not be applied to residential or agricultural areas. [Section 4.199.30(.02) amended by Ord. 688, 11/15/10]

**Response:** Based on the descriptions above, this site is in Lighting Zone LZ 2 (as confirmed by the City's Lighting Overlay Zones map). A portion of the site is within an SROZ riparian corridor area but will meet the requirements of 4.199.40 "Exception 5" below as shown on the lighting analysis in Exhibit F.

- (.03) Modification of Lighting Zones.
  - A. The City Council may modify the designated Lighting Zones of one or more parcels if the City Council finds that the original Lighting Zone was in error, a change in circumstances has occurred warranting the change since the designation was established or the purposes of this section are better served.
  - B. The Development Review Board (DRB) may modify the designated Lighting Zones as part of the Stage II, Site Design Review Process if the DRB finds that the original Lighting Zone was in error, or a change in circumstances has occurred warranting the change since the designation was established or the purposes of this section are better served.
  - C. This ordinance establishes a Lighting Overlay Zone Map. The Planning Division shall maintain the current Lighting Overlay Zone Map.

**Response:** The applicant is not seeking any modifications from the City's Lighting Overlay Zones map. This standard does not apply.

Section 4.199.40. Lighting Systems Standards for Approval.

- (.01) Non-Residential Uses and Common Residential Areas.
  - A. All outdoor lighting shall comply with either the Prescriptive Option or the Performance Option below.

**Response:** The applicant is utilizing the Prescriptive Option for outdoor lighting.

- B. Prescriptive Option. If the lighting is to comply with this Prescriptive Option, the installed lighting shall meet all of the following requirements according to the designated Lighting Zone.
  - 1. The maximum luminaire lamp wattage and shielding shall comply with Table 7.
  - 2. Except for those exemptions listed in Section 4.199.20(.02), the exterior lighting for the site shall comply with the Oregon Energy Efficiency Specialty Code, Exterior Lighting.
  - 3. The maximum pole or mounting height shall be consistent with Table 8.
  - 4. Each luminaire shall be set back from all property lines at least 3 times the mounting height of the luminaire:
    - a. Exception 1: If the subject property abuts a property with the same base and lighting zone, no setback from the common lot lines is required.
    - b. Exception 2: If the subject property abuts a property which is zoned (base and lighting) other than the subject parcel, the luminaire shall be setback three times the mounting height of the luminaire, measured from the abutting parcel's setback line. (Any variance or waiver to the abutting property's setback shall not be considered in the distance calculation).
    - c. Exception 3: If the luminaire is used for the purpose of street, parking lot or public utility easement illumination and is located less than 3



mounting heights from the property line, the luminaire shall include a house side shield to protect adjoining property.

- d. Exception 4: If the subject property includes an exterior column, wall or abutment within 25 feet of the property line, a luminaire partly shielded or better and not exceeding 60 lamp watts may be mounted onto the exterior column, wall or abutment or under or within an overhang or canopy attached thereto.
- e. Exception 5: Lighting adjacent to SROZ areas shall be set back 3 times the mounting height of the luminaire, or shall employ a house side shield to protect the natural resource area.

**Response:** The lighting plan in Exhibit F shows proposed locations for a variety of exterior lighting fixtures that all comply with the Prescriptive Option, including the applicable exceptions listed in subparagraphs 4.a through -e. Sheet E1.10 and the following pages in Exhibit F contain a photometric analysis and manufacturer data sheets for typical proposed fixtures. The subject property is in Lighting Overlay Zone 2 and surrounding properties are in Industrial land use designations. This requirement is met.

- C. Performance Option. If the lighting is to comply with the Performance Option, the proposed lighting design shall be submitted by the applicant for approval by the City meeting all of the following:
  - 1. The weighted average percentage of direct uplight lumens shall be less than the allowed amount per Table 9.
  - 2. The maximum light level at any property line shall be less than the values in Table 9, as evidenced by a complete photometric analysis including horizontal illuminance of the site and vertical illuminance on the plane facing the site up to the mounting height of the luminaire mounted highest above grade. The Building Official or designee may accept a photometric test report, demonstration or sample, or other satisfactory confirmation that the luminaire meets the shielding requirements of Table 7. Luminaires shall not be mounted so as to permit aiming or use in any way other than the manner maintaining the shielding classification required herein:
    - a. Exception 1. If the property line abuts a public right-of-way, including a sidewalk or street, the analysis may be performed across the street at the adjacent property line to the right-of-way.
    - b. Exception 2. If, in the opinion of the Building Official or designee, compliance is impractical due to unique site circumstances such as lot size or shape, topography, or size or shape of building, which are circumstances not typical of the general conditions of the surrounding area. The Building Official may impose conditions of approval to avoid light trespass to the maximum extent possible and minimize any additional negative impacts resulting to abutting and adjacent parcels, as well as public rights-of-way, based on best lighting practices and available lighting technology.
    - The maximum pole or mounting height shall comply with Table 8.

3.

**Response:** The applicant is utilizing the prescriptive option rather than the performance option. This standard does not apply.

D. Curfew. All prescriptive or performance based exterior lighting systems shall be controlled by automatic device(s) or system(s) that:



- 1. Initiate operation at dusk and either extinguish lighting one hour after close or at the curfew times according to Table 10; or
- 2. Reduce lighting intensity one hour after close or at the curfew time to not more than 50% of the requirements set forth in the Oregon Energy Efficiency Specialty Code unless waived by the DRB due to special circumstances; and
- 3. Extinguish or reduce lighting consistent with 1. and 2. above on Holidays. The following are exceptions to curfew:
  - a. Exception 1: Building Code required lighting.
  - b. Exception 2: Lighting for pedestrian ramps, steps and stairs.
  - *c. Exception 3: Businesses that operate continuously or periodically after curfew.*

**Response:** It is feasible for the applicant to install an automatic device or system meeting these requirements; compliance can be assured through an appropriate condition of approval.

(.02) Special Permit for Specific Lighting Fixtures and Systems and When Exceeding Lighting Requirements.

- A. This section is intended to apply to situations where more than normal foot candles are required due to a unique circumstance or use or where it is absolutely essential to perform the proposed activities after dark. All special permits shall be reviewed by the DRB.
- B. Upon issuance of a special permit by the Development Review Board (DRB), lighting systems not complying with the technical requirements of this Ordinance may be installed, maintained, and replaced for lighting that exceeds the maximums permitted by this Ordinance. This section is intended to be applied to uses such as sports lighting systems including but not limited to, sport fields and stadiums, such as baseball and football field lighting, tennis court lighting, swimming pool area lighting and prisons; other very intense lighting defined as having a light source exceeding 200,000 lumens or an intensity in any direction of more than 2,000,000 candelas; building façade lighting of portions of buildings over two stories high; and public monuments.
- C. To obtain such a permit, applicants shall demonstrate that the proposed lighting installation:
  - 1. Is within Lighting Zone 3 or above.
  - 2. Has been designed to minimize obtrusive light and artificial sky glow, supported by a signed statement from a registered civil or electrical engineer describing the mitigation measures. Such statement shall be accompanied by calculations indicating the light trespass levels (horizontal and vertical at ground level) at the property line.
  - 3. Will not create excessive glare, sky glow, or light trespass beyond that which can be reasonably expected by application of best lighting practices, and available technology.
  - 4. Provides appropriate lighting curfew hours based on the use and the surrounding areas.
- D. The DRB may impose conditions of approval to mitigate any negative impacts resulting to the abutting parcel, based on best lighting practices and available lighting technology.
- E. The City may charge a review fee and may, at the Building Official's option, employ the services of a qualified professional civil or electrical engineer to review such submittals and the cost thereof shall be an additional fee charged to the applicant.



**Response:** The site does not appear to be eligible for a special lighting permit since it is located in Lighting Overlay Zone 2. The applicant is not seeking approval of a special permit for lighting. This standard does not apply.

# Section 4.199.50. Submittal Requirements.

(.01) Applicants shall submit the following information as part of DRB review or administrative review of new commercial, industrial, multi-family or public facility projects:

- A. A statement regarding which of the lighting methods will be utilized, prescriptive or performance, and a map depicting the lighting zone(s) for the property.
- B. A site lighting plan that clearly indicates intended lighting by type and location. For adjustable luminaires, the aiming angles or coordinates shall be shown.
- C. For each luminaire type, Drawings, cut sheets or other documents containing specifications for the intended lighting including but not limited to, luminaire description, mounting, mounting height, lamp type and manufacturer, lamp watts, ballast, optical system/distribution, and accessories such as shields.
- D. Calculations demonstrating compliance with Oregon Energy Efficiency Specialty Code, Exterior Lighting, as modified by Section 4.199.40(.01)(B.)(2.) [Amended by Ord. 688, 11/15/10]
- E. Lighting plans shall be coordinated with landscaping plans so that pole lights and trees are not placed in conflict with one another. The location of lights shall be shown on the landscape plan. Generally, pole lights should not be placed within one pole length of landscape and parking lot trees.
- *F.* Applicants shall identify the hours of lighting curfew.

**Response:** The applicant proposes to comply using the Prescriptive Method. The property, identified by a blue star in the excerpt from the City's Lighting Overlay Zones Map below, and surrounding sites are all in Lighting Overlay Zone 2 (LZ 2).

The lighting plan (Sheet E1.10 and data sheets on the following pages in Exhibit F) shows proposed locations for lighting fixtures and provides luminaire specifications (manufacturers' data sheets for typical fixtures). Lighting locations have been coordinated with the landscape planting plan to avoid conflicts. In Lighting Overlay Zone 2, the lighting curfew time is 10:00 PM (2,200 hours).

The [OR Energy Code] for outdoor illumination establishes maximum energy use figures for building exterior areas, expressed in Watts per Square Foot (W/SF), with reference to Table 9.4.2 Individual Lighting Power Allowances for Building Exteriors [ANSI/ASHRAE/IES Standard 90.1-2019 (I-P)]. For buildings in Zones 1 through 4, those maximum energy consumption standards allow a range between 0.03 W/SF and 0.08 W/SF for Uncovered Parking Areas, and between 0.03 and 0.04 W/SF for Landscaping Areas.

The applicant's exterior lighting plan includes the following exterior area lighting fixtures:

Power Consumption of Proposed Lighting Fixtures					
Shielded Fixture Type	Label	Count	Input Watts/Unit	Total Watts	Watts/Area (SF) (52,073 SF parking & landscape) - See Note 1
Gardco PureForm LED area small square comfort P15	Type SA	8	90	720	0.014
Trick Blade Effect surface mounted luminaire	Type SB	2	7.2	14.4	0.000
Lumenquad small LED luminaire	Type SC	4	14	56	0.001
Zip Comfort ceiling recessed luminaires	Type SD	6	15.5	93	0.002
Look Wall accent light luminaire	Type SF	40	13.5	540	0.010
Total Proposed Fixtures and Consumption		60	-	1423.4	0.027
Allowable Maximum Range (Zones 1 – 4)	_	-	-	3,159 Watts See Note 2	0.061 / SF See Note 2
Proposed Power Consumption as % of Allowable Maximum Per Code	-	-	-	45.1%	45.1%

# Notes:

1. Total Outdoor Illumination Area based on Site Plan (C1.10):

		Max	Max
Subarea	SF	Watts/SF	Watts
Paved Areas	26,898		
Parking	23,073	0.08	1,846
Other (e.g., Access/			
Circulation/Dock)	3,825	0.08	306
Parking Landscape Area	5,213	0.04	209
Landscape Area	19,962	0.04	798
	52,073	0.061	3,159

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2. For buildings in Zones 1 through 4, maximum energy consumption standards allow a range between 0.03 and 0.08 W/SF for Uncovered Parking Areas, and between 0.03 and 0.04 W/SF for Landscaping Areas.

Based on this analysis, power consumption per unit area for the proposed development is only 45.1% of the allowed power consumption rate per unit of area. This requirement is satisfied.

(.02) In addition to the above submittal requirements, Applicants using the Prescriptive Method shall submit the following information as part of the permit set plan review:

A. A site lighting plan (items 1 A - F, above) which indicates for each luminaire the 3 mounting height line to demonstrate compliance with the setback requirements. For luminaires mounted within 3 mounting heights of the property line the compliance exception or special shielding requirements shall be clearly indicated.

**Response:** Exhibit F includes a Site Lighting Plan at Sheet E1.10 and specifications on following sheets. Notably, all the neighboring properties are designated Industrial and are also in the same Lighting Overlay Zone, LZ 2, as the subject property. Luminaire setbacks and other design factors are subject to the Exceptions in Section 4.199.40(.01)B.4.

(.03) In addition to the above submittal requirements, Applicants using the Performance Method shall submit the following information as part of the permit set plan review:

- A. Site plan showing horizontal isocandle lines, or the output of a point-by-point computer calculation of the horizontal illumination of the site, showing property lines and light levels immediately off of the subject property.
- B. For each side of the property, the output of a point-by-point vertical footcandle calculation showing illumination in the vertical plane at the property line from grade to at least 10 feet higher than the height of the tallest pole.
- *C.* Lighting plans shall be prepared by a qualified licensed engineer.

**Response:** The applicant is utilizing the prescriptive option rather than the performance option. This standard does not apply.

(.04) In addition to the above applicable submittal requirements, Applicants for Special Permits shall submit the following to the DRB for review:

- A. Tabulation of International Engineering Society of North America (IESNA) lighting recommendations for each task including area illuminated, recommended illumination level, actual maintained illumination level, and luminaires used specifically to achieve the indicated criteria.
- B. Lighting plans shall be prepared by a qualified licensed engineer.

**Response:** The applicant is not seeking approval of a special permit for lighting. This standard does not apply.

(.05) For all calculations, the following light loss factors shall be used unless an alternative is specifically approved by the City:

Metal halide	0.6
High pressure sodium	0.8
Compact fluorescent	0.7
Full size fluorescent	0.75
Incandescent	0.9
Halogen	0.95
Other	As approved
Full size fluorescent Incandescent Halogen	0.75 0.9 0.95



**Response:** The applicant understands these factors to apply to implementation of the Performance Method, which is not used in this application.

Section 4.199.60. Major Additions or Modifications to Pre-Existing Sites.

(01.) Major Additions. If a major addition occurs on a property, all of the luminaires on the site shall comply with the requirements of this Section. For purposes of this sub-section, the following are considered to be major additions:

- A. Additions of 50 percent or more in terms of additional dwelling units, gross floor area, seating capacity, or parking spaces, either with a single addition or with cumulative additions after July 2, 2008.
- B. Modification or replacement of 50 percent or more of the outdoor lighting luminaries' within a 5-year timeframe existing as of July 2, 2008.

**Response:** The applicant has submitted requests for a new development, not a major addition. This standard does not apply.

Table 7: Maximum Wattage And Required Shielding				
Lighting Zone	Fully Shielded	Shielded	Partly Shielded	Unshielded
LZ 1	70	20	13	Low voltage landscape lighting 50 watts or less
LZ 2	100	35	39	Low voltage landscape lighting 50 watts or less
LZ 3	250	100	70	Landscape and facade lighting 100 watts or less; ornamental lighting on private drives of 39 watts and less
LZ 4	450	150	150	Landscape and facade lighting 250 watts or less; ornamental lights on private drives and lanterns 70 watts or less; marquee lighting not employing medium based lamps

[Table 7 amended by Ord. 682, 9/9/10; Ord. 688, 11/15/10]

Table 8: Maximum Lighting Mounting Height In Feet				
Lighting Zone	Lighting for private drives, driveways, parking, bus stops and other transit facilities	Lighting for walkways, bikeways, plazas and other pedestrian areas	All other lighting	
LZ O	20	8	4	
LZ 1	25	12	4	
LZ 2	40	18	8	
LZ 3	40	18	16	
LZ 4	4 Height limit to be determined by Special Use Permit Only			

Lighting mounted onto buildings or other structures shall not exceed a mounting height greater than 4 feet higher than the tallest part of the building or structure at the place where the lighting is installed, nor higher than 33.33 percent of the horizontal distance of the light from the nearest property line, whichever is less.



	Table 9: Performance Method			
	Maximum	Maximum Light Level at Property Line		
Lighting Zone	percentage of direct uplight lumens	Horizontal plane at grade (foot candles - fc)	Vertical plane facing the site in question, from grade to mounting height of highest mounted luminaire (foot candles – fc)	
LZ O	0	0.01 fc	0.02 fc	
LZ 1	1%	0.05 fc	0.1 fc	
LZ 2	5%	0.2 fc	0.4 fc	
LZ 3	10%	0.4 fc	0.8 fc	
LZ 4	20%	0.8 fc	1.6 fc	

Table 10: Curfew		
Lighting Zone	Curfew Time	
LZ O	8:00 DM (2000 hours)	
LZ 1	8:00 PM (2000 hours)	
LZ 2	10:00 PM (2200 hours)	
LZ 3	Midnight (2400 hours)	
LZ 4	- Midnight (2400 hours)	

[Tables, above, renumbered by Ord. 688, 11/15/10

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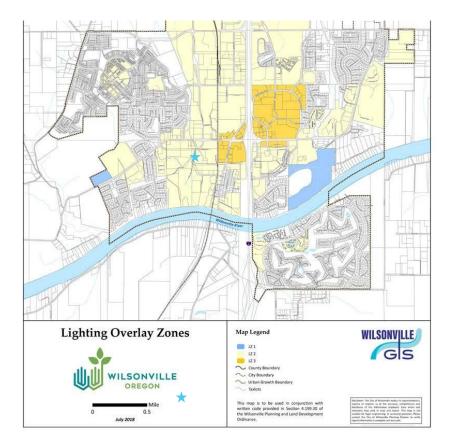


Figure 30: Lighting Overlay Zone Map [Amended by Ord. 821 adopted July 2, 2018]

# UNDERGROUND UTILITIES

# Section 4.300. General

(.01) The City Council deems it reasonable and necessary in order to accomplish the orderly and desirable development of land within the corporate limits of the City, to require the underground installation of utilities in all new developments.

(.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.

# Section 4.310. Exceptions

Section 4.300 of this Code shall not apply to surface-mounted transformers, surface-mounted connection boxes, wireless communication facilities, and meter cabinets and other appurtenances which are reasonably necessary to be placed above ground, or to temporary utility service facilities during construction, or to high capacity electric and communication feeder lines, or to utility transmission lines operating at 50,000 volts or more.



**Response:** There are existing high voltage power lines running in a north-south orientation above the western edge of subject site. As excepted by this provision, the high voltage power lines will remain as is. New utilities are all proposed to be underground. This standard is met.

# 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.

(.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:** Proposed utility system extensions and alignments have been prepared in consultation with City staff and service providers. The submitted plans demonstrate the feasibility of achieving compliance. Detailed plans will be submitted for permitting prior to construction. Condition(s) of approval can assure compliance in the permitting and construction process.

# Section 4.400. Purpose

(.01) Excessive uniformity, inappropriateness or poor design of the exterior appearance of structures and signs and the lack of proper attention to site development and landscaping in the business, commercial, industrial and certain residential areas of the City hinders the harmonious development of the City, impairs the desirability of residence, investment or occupation in the City, limits the opportunity to attain the optimum use in value and improvements, adversely affects the stability and value of property, produces degeneration of property in such areas and with attendant deterioration of conditions affecting the peace, health and welfare, and destroys a proper relationship between the taxable value of property and the cost of municipal services therefor.

(.02) The City Council declares that the purposes and objectives of site development requirements and the site design review procedure are to:

- A. Assure that Site Development Plans are designed in a manner that insures proper functioning of the site and maintains a high quality visual environment.
- B. Encourage originality, flexibility and innovation in site planning and development, including the architecture, landscaping and graphic design of said development;
- C. Discourage monotonous, drab, unsightly, dreary and inharmonious developments;
- D. Conserve the City's natural beauty and visual character and charm by assuring that structures, signs and other improvements are properly related to their sites, and to surrounding sites and structures, with due regard to the aesthetic qualities of the natural terrain and landscaping, and that proper attention is given to exterior appearances of structures, signs and other improvements;
- E. Protect and enhance the City's appeal and thus support and stimulate business and industry and promote the desirability of investment and occupancy in business, commercial and industrial purposes;



- *F.* Stabilize and improve property values and prevent blighted areas and, thus, increase tax revenues;
- G. Insure that adequate public facilities are available to serve development as it occurs and that proper attention is given to site planning and development so as to not adversely impact the orderly, efficient and economic provision of public facilities and services.
- H. Achieve the beneficial influence of pleasant environments for living and working on behavioral patterns and, thus, decrease the cost of governmental services and reduce opportunities for crime through careful consideration of physical design and site layout under defensible space guidelines that clearly define all areas as either public, semiprivate, or private, provide clear identity of structures and opportunities for easy surveillance of the site that maximize resident control of behavior -- particularly crime;
- I. Foster civic pride and community spirit so as to improve the quality and quantity of citizen participation in local government and in community growth, change and improvements;
- J. Sustain the comfort, health, tranquility and contentment of residents and attract new residents by reason of the City's favorable environment and, thus, to promote and protect the peace, health and welfare of the City.

**Response:** The applicant's submitted plans in Exhibit F respond to applicable development standards. The plans demonstrate that the proposed development will function properly and will contribute to producing the high-quality visual environment desired along SW Wilsonville Road. The proposed development plan reflects the appropriate consideration the applicant's design team has given to all the above purposes and objectives of the Site Design Review process. For most design issues, the project straightforwardly satisfies the standards the City has adopted to implement the above purposes and objectives; however, the application includes one (1) waiver request for which the applicant has provided appropriate findings of compliance with the intent of the regulations.

# Section 4.420. Jurisdiction and Powers of the Board

(.01) Application of Section. Except for single-family or two-family dwellings in any residential zoning district, and in the Village zone, row houses or apartments, no Building Permit shall be issued for a new building or major exterior remodeling of an existing building, and no Sign Permit, except as permitted in Sections 4.156.02 and 4.156.05, shall be issued for the erection or construction of a sign relating to such new building or major remodeling, until the plans, drawings, sketches and other documents required for a Sign Permit application have been reviewed and approved by the Board.

**Response:** The applicant is requesting DRB approval of the Stage II Final Plan Modification, Site Development Review, Waiver, Type B Tree Removal, and Type III Sign Master Plan Modification. This standard is met.

(.02) Development in Accord with Plans. Construction, site development and landscaping shall be carried out in substantial accord with the plans, drawings, sketches and other documents approved by the Board, unless altered with Board approval. Nothing in this subsection shall be construed to prevent ordinary repair, maintenance and replacement of any part of the building or landscaping which does not involve a substantial change from the purpose of Section 4.400. If the Board objects to such proposed changes, they shall be subject to the procedures and requirements of the site design review process applicable to new proposals.

**Response:** The applicant intends to construct a project that aligns with the general form and design depicted in the accompanying plans, subject to possible minor alterations that may arise during preparation of construction drawings for permit review. This standard is met.



(.03) Variances. The Board may authorize variances from the site development requirements, based upon the procedures, standards and criteria listed in Section 4.196. Variances shall be considered in conjunction with the site design review process.

**Response:** No Variance is requested.

# 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:** The proposed development site remains in a semi-natural state. The SROZ area and western portion of the property remains in a natural state whereas the central and eastern portion of the property has most recently been used as a staging area for a waterline project. The applicant has made significant adaptations of the proposed development plan in order to incorporate a significant open space area for the planting of vegetation on the western portion of the property (in the SROZ). The upland portion of the site is relatively flat, and will remain so as a result of the proposed site grading (see Sheet C1.20 of Exhibit F) This standard 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 noted above, the location of the building and constructed improvements is located on a portion of the site which has been previously used as a staging area. The proposed perimeter and interior landscaping will minimize the visual impacts of the building and parking area. The site's principal environmental feature is the SROZ riparian corridor that will be protected and retained in the western part of the site. This standard 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 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 applicant has proposed a one-driveway configuration (utilizing an existing driveway) because it achieves efficient access and circulation while minimizing conflicting movements among site users. Pedestrian walkways are separated from vehicular driveways for safety. These standards are met.



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:** The proposed plans (see Exhibit F) include site grading for positive on-site drainage to surface facilities for stormwater facility, with discharge to Coffee Lake Creek. This standard 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:** Utility service connections will be made underground as shown on Sheet C1.30 of Exhibit F. This standard is met.

F. Advertising Features. In addition to the requirements of the City's sign regulations, the following criteria should be included: the size, location, design, color, texture, lighting and materials of all exterior signs and outdoor advertising structures or features shall not detract from the design of proposed buildings and structures and the surrounding properties.

**Response:** This application incorporates the locations, general configurations, and sizing of proposed monument signage to identify the building tenant, as part of the overall composition and project design. This requirement is met in a way that will set the stage for the applicant to obtain over-the-counter permits to install tenant-specific compliant signs in the future.

G. Special Features. Exposed storage areas, exposed machinery installations, surface areas, truck loading areas, utility buildings and structures and similar accessory areas and structures shall be subject to such setbacks, screen plantings or other screening methods as shall be required to prevent their being incongruous with the existing or contemplated environment and its surrounding properties. Standards for screening and buffering are contained in Section 4.176.

**Response:** No exposed storage areas, exposed machinery installations, surface areas, truck loading areas, utility buildings and structures, and similar accessory areas and structures are proposed as part of this development. As shown on the L-series sheets of Exhibit F, the site will have perimeter landscaping that will soften the appearance of the vehicle parking area. The submitted materials meet this requirement.

(.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:** The submitted plans include all known features of the proposed development project, to support analysis consistent with this provision.

(.03) The Board shall also be guided by the purpose of Section 4.400, and such objectives shall serve as additional criteria and standards.

**Response:** The applicant has responded to the Purpose statements in Section 4.400 above.

(.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:** The applicant is seeking Site Design Review approval as part of this application package, so no approval condition requiring conformance to site development standards is necessary. This standard does not apply.

(.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 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:** The applicant recognizes the DRB's authority to impose conditions of approval necessary to ensure conformance to adopted Code standards; however, the proposed use and development are consistent with the subject property's proposed PDI zoning, prior approval(s) and is compatible with the adjoining industrial zoning and uses. For these reasons, no imposition of additional conditions over and above Code standards is necessary or warranted to meet the intent of the Comprehensive Plan or to protect the best interests of the surrounding properties and neighborhoods, the City as a whole, and the intent of this Code. This criterion is met without additional conditions.

(.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:** The applicant requests DRB approval of the general color scheme illustrated in Exhibit E, Materials Perspectives (Colors and Materials panel); however, to allow flexibility to tailor final color selections to best meet the intent of the proposal while responding to the site's real-world natural daylight conditions, and in recognition of the DRB's discretion provided by this standard, the applicant requests that the DRB not impose conditions mandating use of those specific colors. This standard is met.

## Section 4.430. Location, Design and Access Standards for Mixed Solid Waste and Recycling Areas

(.01) The following locations, design and access standards for mixed solid waste and recycling storage areas shall be applicable to the requirements of Section 4.179 of the Wilsonville City Code. **Response:** The proposed trash enclosure meets the requirements of Section 4.179 of the Wilsonville City Code. The applicant's responses to individual criteria are provided in this narrative under Section 4.179.

- (.02) Location Standards:
  - A. To encourage its use, the storage area for source separated recyclables shall be colocated with the storage area for residual mixed solid waste.
  - B. Indoor and outdoor storage areas shall comply with Uniform Building and Fire Code requirements.
  - C. Storage area space requirements can be satisfied with a single location or multiple locations and can combine with both interior and exterior locations.



- D. Exterior storage areas can be located within interior side yard or rear yard areas. Minimum setback shall be three (3) feet. Exterior storage areas shall not be located within a required front yard setback, including double frontage lots.
- *E. Exterior storage areas shall be located in central and visible locations on a site to enhance security for users.*
- F. Exterior storage areas can be located in a parking area if the proposed use provides at least the minimum number of parking spaces required for the use after deducting the area used for storage. Storage areas shall be appropriately screened according to the provisions of Section 4.430 (.03), below.
- G. The storage area shall be accessible for collection vehicles and located so that the storage area will not obstruct pedestrian or vehicle traffic movement on the site or on public streets adjacent to the site.

**Response:** The proposal includes a single storage area for recyclables and mixed solid waste. The storage area complies with Uniform Building and Fire Code requirements; see details in Exhibit F, Sheets C1.10 (location) and A5.10 (details). The storage area is not located in a setback or in a parking area. The storage area is in a visible location. The trash hauler, Republic Services, has provided a letter (pending Exhibit H). These standards are met.

- (.03) Design Standards.
  - A. The dimensions of the storage area shall accommodate containers consistent with current methods of local collection.
  - B. Storage containers shall meet Uniform Fire Code standards and be made of or covered with waterproof materials or situated in a covered area.
  - C. Exterior storage areas shall be enclosed by a sight obscuring fence, wall or hedge at least six (6) feet in height. Gate openings for haulers shall be a minimum of ten (10) feet wide and shall be capable of being secured in a closed or open position. In no case shall exterior storage areas be located in conflict with the vision clearance requirements of Section 4.177.
  - D. Storage area(s) and containers shall be clearly labeled to indicate the type of materials accepted.

**Response:** The design of the storage area was provided to Republic Services who is the local hauler for review. They have provided their approval of the storage area. Storage containers will meet Uniform Fire Code standards and be clearly labeled to indicate the type of materials. Individual storage containers will be covered. The storage area will be enclosed by split face concrete block walls. See storage area details on Sheet A5.10 of Exhibit F. These standards are met.

- (.04) Access Standards.
  - A. Access to storage areas can be limited for security reasons. However, the storage area shall be accessible to users at convenient times of the day and to collect service personnel on the day and approximate time they are scheduled to provide collection service.
  - B. Storage areas shall be designed to be easily accessible to collection trucks and equipment, considering paving, grade and vehicle access. A minimum of ten (10) feet horizontal clearance and eight feet of vertical clearance is required if the storage area is covered.
  - C. Storage areas shall be accessible to collection vehicles without requiring backing out of a driveway onto a public street. If only a single access point is available to the storage area, adequate turning radius shall be provided to allow collection vehicles to safely exit the site in a forward motion.



**Response:** The storage area will be accessible to users, and to collection personnel. The location and design of the storage area was provided for review to the trash hauler, Republic Services. Republic Services has provided a letter (pending Exhibit H). These standards 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, off-street 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.
- 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 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 in necessary.
- 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.
- 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:** The required documents listed above have been included in this application package as Exhibits E and F, with the exception of the fee which was paid separately. This standard is met.

(.02) As soon as possible after the preparation of a staff report, a public hearing shall be scheduled before the Development Review Board. In accordance with the procedures set forth in Section 4.010(2) and 4.012, the Development Review Board shall review and approve, approve with conditions, or deny the proposed architectural, site development, landscaping or sign plans of the applicant. If the Board finds that additional information or time are necessary to render a decision, the matter may be continued to a date certain. The applicant shall be immediately notified in writing of any such continuation or delay together with the scheduled date of review.

**Response:** This provision provides procedural guidance for implementation and requires no evidence within the applicant's narrative.



## Section 4.441. Effective Date of Decisions

A decision of the Board shall become effective fourteen (14) calendar days after the date of the decision, unless the decision is appealed to, or called up by, the Council. If the decision of the Board is appealed to, or called up by, the City Council, the decision of the Council shall become effective immediately. **Response:** This provision provides procedural guidance for implementation and requires no evidence

## Section 4.442. Time Limit on Approval

from the applicant.

Site design review approval shall be void after two (2) years unless a building permit has been issued and substantial development pursuant thereto has taken place; or an extension is granted by motion of the Board.

**Response:** The applicant intends to seek a building permit and begin construction within the timeframes outlined by Code. This standard is met.

## Section 4.443. Preliminary Consideration

An applicant may request preliminary consideration by the Board of general plans prior to seeking a building permit. When seeking preliminary consideration, the applicant shall submit a site plan showing the proposed structures, improvements and parking, together with a general description of the plans. The Board shall approve or reject all or part of the applicant's general plan within the normal time requirements of a formal application. Preliminary approval shall be deemed to be approval of the final plan to the extent that the final design contains the characteristics of the preliminary design.

**Response:** The applicant has submitted for a Stage II Planned Development Modification Review pursuant to this Section.

## Section 4.450. Installation of Landscaping

(.01) All landscaping required by this section and approved by the Board shall be installed prior to issuance of occupancy permits, unless security equal to one hundred and ten percent (110%) of the cost of the landscaping as determined by the Planning Director is filed with the City assuring such installation within six (6) months of occupancy. "Security" is cash, certified check, time certificates of deposit, assignment of a savings account or such other assurance of completion as shall meet with the approval of the City Attorney. In such cases the developer shall also provide written authorization, to the satisfaction of the City Attorney, for the City or its designees to enter the property and complete the landscaping as approved. If the installation of the landscaping is not completed within the six-month period, or within an extension of time authorized by the Board, the security may be used by the City to complete the installation. Upon completion of the installation, any portion of the remaining security deposited with the City shall be returned to the applicant.

(.02) Action by the City approving a proposed landscape plan shall be binding upon the applicant. Substitution of plant materials, irrigation systems, or other aspects of an approved landscape plan shall not be made without official action of the Planning Director or Development Review Board, as specified in this Code.

(.03) All landscaping shall be continually maintained, including necessary watering, weeding, pruning, and replacing, in a substantially similar manner as originally approved by the Board, unless altered with Board approval.

(.04) If a property owner wishes to add landscaping for an existing development, in an effort to beautify the property, the Landscape Standards set forth in Section 4.176 shall not apply and no Plan approval or permit shall be required. If the owner wishes to modify or remove landscaping that has been accepted or approved through the City's development review process, that removal or modification must first be approved through the procedures of Section 4.010.



**Response:** The applicant acknowledges the City's authority under these provisions to require installation and maintenance of landscape features in accordance with construction plans after approval, and applicant accepts responsibility for care, maintenance, and procedures for approval of non-additive modifications to landscape features.

# Type C Tree Plan DRB Review

## Section 4.600.20. Applicability of Subchapter

(.01) The provisions of this subchapter apply to the United States and the State of Oregon, and to their agencies and subdivisions, including the City of Wilsonville, and to the employees and agents thereof. (.02) By this subchapter, the City of Wilsonville regulates forest practices on all lands located within its urban growth boundary, as provided by ORS 527.722.

(.03) The provisions of this subchapter apply to all land within the City limits, including property designated as a Significant Resource Overlay Zone or other areas or trees designated as protected by the Comprehensive Plan, City zoning map, or any other law or ordinance; except that any tree activities in the Willamette River Greenway that are regulated by the provisions of WC 4.500 - 4.514 and requiring a conditional use permit shall be reviewed by the DRB under the application and review procedures set forth for Tree Removal Permits.

**Response:** This site is located in the City of Wilsonville. This subchapter is applicable.

## 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:** This application includes a request for a Type B Tree Removal Permit.

## Section 4.600.40. Exceptions

[Detailed provisions omitted for brevity] **Response:** The applicant is not requesting an exemption for tree removal.

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#### Section 4.600.50. Application For Tree Removal Permit

(.01) Application for Permit. A person seeking to remove one or more trees shall apply to the Director for a Tree Removal Permit for a Type A, B, C, or D permit, depending on the applicable standards as provided in this subchapter.

(A) An application for a tree removal permit that does not meet the requirements of Type A may be submitted as a Type B application.

(.02) Time of Application. Application for a Tree Removal Permit shall be made before removing or transplanting trees, except in emergency situations as provided in WC 4.600.40 (1)(B) above. Where the site is proposed for development necessitating siteplan or plat review, application for a Tree Removal Permit shall be made as part of the site development application as specified in this subchapter.



(.03) Fees. A person applying for a Tree Removal Permit shall pay a non-refundable application fee; as established by resolution of the City Council.

A. By submission of an application, the applicant shall be deemed to have authorized City representatives to have access to applicant's property as may be needed to verify the information provided, to observe site conditions, and if a permit is granted, to verify that terms and conditions of the permit are followed.

**Response:** A total of 18 trees were inventoried, eight (8) trees on the subject property including three (3) within the SROZ, and 10 street trees around the perimeter of the site. (See Sheet L0.02 of Exhibit F). Due to site grading and activities subject to an exception in the SROZ (as explained in the Applicant's response to Section 4.139.11), two (2) coniferous trees will be removed and mitigated for as shown on Sheet L1.11 of Exhibit F. The two (2) trees to be removed measure 6" and 7" d.b.h. As the trees to be removed are within the SROZ, the Applicant is requesting a Type B tree removal permit.

# Section 4.610.00. Application Review Procedure

(.01) The permit applicant shall provide complete information as required by this subchapter in order for the City to review the application.

**Response:** The applicant has submitted a complete application for the City's review.

(.02) Departmental Review. All applications for Tree Removal Permits must be deemed complete by the City Planning Department before being accepted for review. When all required information has been supplied, the Planning Department will verify whether the application is complete. Upon request of either the applicant or the City, the City may conduct a field inspection or review meeting. City departments involved in the review shall submit their report and recommendations to the Planning Director who shall forward them to the appropriate reviewing authority.

**Response:** The applicant acknowledges the procedure for the determination of completeness and Departmental Review.

# (.03) Reviewing Authority.

A. Type A or B. Where site plan review or plat approval by the Development Review Board is not required by City ordinance, the grant or denial of the Tree Removal Permit application shall be the responsibility of the Planning Director. The Planning Director has the authority to refer a Type B permit application to the DRB under the Class II administrative review procedures of this Chapter. The decision to grant or deny a permit shall be governed by the applicable review standards enumerated in WC 4.610.10.

**Response:** As explained in the Applicant's response to Section 4.610.20, a Type B tree removal permit is required. This site plan review is subject to review by the Development Review Board.

(.06) Grant of a Tree Removal Permit. Whenever an application for a Type B, C or D Tree Removal Permit is granted, the reviewing authority shall:

- A. Conditions. Attach to the granting of the permit any reasonable conditions considered necessary by the reviewing authority including, but not limited to, the recording of any plan or agreement approved under this subchapter, to ensure that the intent of this Chapter will be fulfilled and to minimize damage to, encroachment on or interference with natural resources and processes within wooded areas;
- B. Completion of Operations. Fix a reasonable time to complete tree removal operations; and



- C. Security. Require the Type C permit grantee to file with the City a cash or corporate surety bond or irrevocable bank letter of credit in an amount determined necessary by the City to ensure compliance with Tree Removal Permit conditions and this Chapter.
  - 1. This requirement may be waived by the Planning Director if the tree removal must be completed before a plat is recorded, and the applicant has complied with WC 4.264(1) of this Code.

**Response:** As explained in the applicant's response to Section 4.610.20, a Type B tree removal permit is required. The applicant acknowledges that the reviewing authority may apply conditions or other requirements when granting a Tree Removal Permit.

Section 4.610.10. Standards For Tree Removal, Relocation Or Replacement

(.01) Except where an application is exempt, or where otherwise noted, the following standards shall govern the review of an application for a Type A, B, C or D Tree Removal Permit:

A. Standard for the Significant Resource Overlay Zone. The standard for tree removal in the Significant Resource Overlay Zone shall be that removal or transplanting of any tree is not inconsistent with the purposes of this Chapter.

**Response:** The subject site is partially located in a Significant Resource Overlay Zone (SROZ), so this standard applies. The two (2) trees proposed for removal are within the SROZ.

B. Preservation and Conservation. No development application shall be denied solely because trees grow on the site. Nevertheless, tree preservation and conservation as a design principle shall be equal in concern and importance to other design principles.

**Response:** The site layout, including planting of replacement trees, has been designed to mitigate for impacts associated with site development for commercial use by replanting trees throughout the site to the extent it is feasible to do so. See the Planting Plan (Sheets L1.10 and L1.11 of Exhibit F) for details.

C. Developmental Alternatives. Preservation and conservation of wooded areas and trees shall be given careful consideration when there are feasible and reasonable location alternatives and design options on-site for proposed buildings, structures or other site improvements.

**Response:** Preservation and conservation of natural areas and trees was given careful consideration in site planning and design; however, based on multiple site constraints (as discussed in the Introduction section above), the area where the two (2) trees are proposed for removal will be replaced with a vegetated stormwater facility. The building is located in the eastern part of the site, as far from the Coffee Lake Creek SROZ corridor as is practical. The design of stormwater management facility allows additional trees to be planted within the SROZ corridor along Coffee Lake Creek, further insulating and shading the vegetated corridor along the creek. This standard is met.

D. Land Clearing. Where the proposed activity requires land clearing, the clearing shall be limited to designated street rights-of-way and areas necessary for the construction of buildings, structures or other site improvements.

**Response:** Clearing and grading on the site will be limited to the extents of site improvement. Construction on the site will also be in alignment with the recommendations of the landscape architect to protect trees in the SROZ (See Sheet L0.02 of Exhibit F), and at other locations around the site's perimeter to the extent feasible, during construction. This standard is met.



E. Residential Development. Where the proposed activity involves residential development, residential units shall, to the extent reasonably feasible, be designed and constructed to blend into the natural setting of the landscape.

**Response:** The proposed development is not residential. This standard does not apply.

*F.* Compliance With Statutes and Ordinances. The proposed activity shall comply with all applicable statutes and ordinances.

**Response:** The applicant has submitted this application and narrative to show compliance with all applicable statutes and ordinances.

G. Relocation or Replacement. The proposed activity shall include necessary provisions for tree relocation or replacement, in accordance with WC 4.620.00, and the protection of those trees that are not to be removed, in accordance with WC 4.620.10.

**Response:** No tree relocation is proposed. Two (2) trees are subject to the Code's provision for mitigation/replacement planting. Trees to remain within the site and adjacent to the site are to be protected by measures as outlined on Sheet L0.02 of Exhibit F.

- H. Limitation. Tree removal or transplanting shall be limited to instances where the applicant has provided completed information as required by this Chapter and the reviewing authority determines that removal or transplanting is necessary based on the criteria of this subsection.
  - 1. Necessary For Construction. Where the applicant has shown to the satisfaction of the reviewing authority that removal or transplanting is necessary for the construction of a building, structure or other site improvement, and that there is no feasible and reasonable location alternative or design option on-site for a proposed building, structure or other site improvement; or a tree is located too close to existing or proposed buildings or structures, or creates unsafe vision clearance.
  - 2. Disease, Damage, or Nuisance, or Hazard. Where the tree is diseased, damaged, or in danger of falling, or presents a hazard as defined in WC 6.208, or is a nuisance as defined in WC 6.200 et seq., or creates unsafe vision clearance as defined in this Code.
    - (a) As a condition of approval of Stage II development, filbert trees must be removed if they are no longer commercially grown or maintained.
  - 3. Interference. Where the tree interferes with the healthy growth of other trees, existing utility service or drainage, or utility work in a previously dedicated right-of-way, and it is not feasible to preserve the tree on site.
  - 4. Other. Where the applicant shows that tree removal or transplanting is reasonable under the circumstances.

**Response:** The removal of trees at this site is necessary for the construction of the building and the dispersed stormwater facilities, as required by City Engineering. The site is constrained due to easements and the SROZ corridor which render approximately 42% of the site unbuildable. The site design balances the preservation of the Significant Resource, while accommodating a new office building and site improvements. This standard is met.

I. Additional Standards for Type C Permits.

**Response:** A Type B Tree Removal Permit is requested. This standard is not applicable.

J. Exemption. Type D permit applications shall be exempt from review under standards D, E, H and I of this subsection.



**Response:** A Type B, not Type D, Tree Removal Permit is requested. This exemption is not applicable.

Section 4.610.20. Type A Permit

(.01) Approval to remove one to three trees within a 12 month period on any property shall be granted if the application meets all of the following requirements:

A. The trees subject to removal are not located in the Significant Resource Overlay Zone; and

B. The trees subject to removal are not located in the Willamette River Greenway;

C. The trees subject to removal are not Heritage Trees.

D. The trees subject to removal are not street trees;

*E.* The trees subject to removal must not be retained as a condition of site development approval. **Response:** The two (2) trees proposed for removal are located within the SROZ; therefore, per 4.610.20.02., the appropriate Tree Removal Permit is the Type B Permit.

(.02) Where the City determines that an application to remove a tree or trees does not meet the criteria of 1(A)-(E) of this section, then the application may be submitted as a Type B application.

**Response:** The two (2) trees proposed for removal are located within the SROZ; therefore, per 4.610.20.02., this Type A Tree Removal Permit is submitted as a Type B Tree Removal Permit Application.

(.03) An application for a Type A Permit shall contain the following information:

A. A brief statement explaining why tree removal is necessary.

B. A brief description of the trees proposed for removal or relocation, including common name, approximate height, diameter (or circumference) at four and one-half feet d.b.h. above grade, and apparent health.

*C.* A drawing that depicts where trees are located and provides sufficient detail to indicate to a City reviewer where removal or relocation will occur.

D. The name of the person who will perform the removal or transplanting, if known, and the approximate date of removal.

*E.* Additional supporting information which the Planning Department requests, in order to determine whether an application meets the requirements of this section.

**Response:** Compliance with the Submittal requirements of a Type B Tree Removal permit are addressed below in the Applicant's responses to 4.610.30.02

(.04) The City shall accept a Type A permit application under the following procedure:

A. Review Period. Completed Type A permit applications shall be reviewed within ten working days. The grant or denial of the Tree Removal Permit application shall be the responsibility of the Planning Director.

*B.* The Type A permit application shall be reviewed under the standards of Class I administrative review and applicable requirements of this subchapter.

**Response:** The two (2) trees proposed for removal are located within the SROZ; therefore, per 4.610.20.02., this Type A Tree Removal Permit is submitted as a Type B Tree Removal Permit Application.

Section 4.610.30. - Type B Permit

(.01) An applicant may apply for a Type B Permit based on the following criteria:



A. The applicant proposes to remove four or more trees on property not subject to site development review; or

*B.* The applicant proposes major or minor changes in a condition or conditions of a development permit previously approved under the provisions of this Chapter; or

*C.* The applicant is a homeowners' association that proposes to remove trees on property previously approved by the City for development.

1. A Tree Maintenance and Protection Plan submitted for approval under (1)(C) of this subsection shall meet the following criteria:

a. The Development Review Board shall review the Covenants, Conditions and Restrictions (CC&R's) to verify that the homeowners' association is designated and authorized by the CC&R's to review tree maintenance, removal, and planting requests.

b. A request for tree removal shall indicate the reason for the request, as well as the location, size, species and health of tree.

c. Decisions on requests and actions taken are documented and retained and shall be made available to the City's Development Review Board upon request.

d. A replanting program is established and reviewed on an annual basis. Where such a program is approved, mitigation under this Chapter shall not be required.

2. Any permit approved under this subsection shall require that all maintenance, planting, and removal be performed to the standards established in this subchapter and in Wilsonville Code.

3. Failure of a homeowners' association to meet the requirements of this subsection shall be grounds for revocation of a Type B permit.

**Response:** If the two (2) trees proposed for removal met the requirements of 4.610.20.01, a Type A Tree Removal permit would be required. As two (2) trees proposed for removal are located within the SROZ, per 4.610.20.02., this Type A Tree Removal Permit is submitted as a Type B Tree Removal Permit Application.

(.02) Application for the Type B permit shall consist of the information required for a Type A Permit, as provided in WC 4.610.20, and a Tree Maintenance and Protection Plan, which shall contain the following information:

A. An accurate topographical survey, subdivision map or plat map, that bears the signature of a qualified, registered surveyor or engineer, and which shows:

1. the shape and dimensions of the property, and the location of any existing and proposed structure or improvement,

2. the location of the trees on the site, and indicating species, approximate height, d.b.h. diameter, canopy spread and common name,

3. the location of existing and proposed easements, as well as setbacks required by existing zoning requirements.

**Response:** An existing conditions plan meeting the requirements of 4.610.02.A is included as Sheet C0.01 of Exhibit F. This standard is met.

B. In lieu of the map or survey, an applicant proposing to remove trees under (1)(B) or (1)(C) of this subsection may provide aerial photographs with overlays, GIS documentation, or maps approved by the Planning Director, and clearly indicating the information required by (2)(A) of this subsection.

**Response:** The Applicant has provided an existing conditions plan (Sheet C0.01 of Exhibit F) meeting the requirements of 4.610.02.A. This standard is not applicable.



*C.* Arborist Report. The report shall describe the health and condition of all trees subject to removal or transplanting, and shall include information on species, common name, diameter at four and one-half feet d.b.h., approximately height and age.

**Response:** The enclosed tree inventory (Exhibit K), describes the size, health, and species for the two (2) trees to be removed. Both trees proposed for removal are Ponderosa Pine, measuring 5" and 6" d.b.h. respectively. The Applicant's existing conditions show the trees proposed for removal at 6" and 7" d.b.h., respectively, which is attributed to the time of the tree survey compared to the tree inventory (1+ year). Additionally, many of the trees shown on the tree inventory were removed as part of the waterline project, so the existing conditions plan accurately reflects the remaining trees on site.

D. Tree Protection. Unless specifically exempted by the Planning Director, a statement describing how trees intended to remain will be protected during tree removal, and how remaining trees will be maintained.

**Response:** Tree protection details area shown on Sheet L0.02 of Exhibit F. Tree protection will be further detailed at time of permitting.

*E.* Tree Identification. Unless specifically exempted by the Planning Director, a statement that any trees proposed for removal will be identified by a method obvious to a site inspector, such as tagging, painting, or flagging, in addition to clear identification on construction documents. **Response:** Tree identification will be further detailed at time of permitting.

F. Replacement Trees. A description of the proposed tree replacement program with a detailed explanation including the number, size, and species, and cost. In lieu of replacing trees, the applicant may propose to pay into the City Tree Fund an amount equivalent to the value of the replacement trees after installation, as provided in this subchapter.

**Response:** Replacement trees are proposed as shown on the L-Series sheets of Exhibit F. This standard is met.

G. Covenants, Conditions and Restrictions (CC&R's). Where the applicant is proposing to remove trees on common areas, the applicant shall provide a copy of the applicable CC&R's, including any landscaping provisions.

**Response:** The Applicant (property owner) has ownership of the entire property with no common areas. This standard is not applicable.

*H.* Waiver of documentation. The Planning Director may waive an application document where the required information has already been made available to the City, or where the Director determines the information is not necessary to review the application.

**Response:** The Applicant is not requesting a waiver of information for the tree removal permit.

#### (.03) Review:

A. The Type B permit application, including major or minor changes in a condition or conditions of a development permit previously approved under the provisions of this chapter, shall be reviewed under the standards of Class II administrative review and the requirements of this subchapter. Where site plan review or plat approval by the Development Review Board is not required by City ordinance, the grant or denial of the Type B permit shall be the responsibility of the Planning Director. The Planning Director has the authority to refer a Type B permit application to DRB under the Class II administrative review procedures of this Chapter.



B. The DRB shall review and render a decision on any application referred by the Planning Director within 60 days. The Planning Director shall review a completed permit application within 30 days.

*C.* The decision to grant or deny a Type B permit shall be governed by the standards established in WC 4.610.10.

**Response**: This application seeks site plan review approval for the proposed development.

### Section 4.620.00. Tree Relocation, Mitigation, Or Replacement

(.01) Requirement Established. A Type B or C Tree Removal Permit grantee shall replace or relocate each removed tree having six (6) inches or greater d.b.h. within one year of removal.

(.02) Basis For Determining Replacement. The permit grantee shall replace removed trees on a basis of one (1) tree replanted for each tree removed. All replacement trees must measure two inches (2") or more in diameter. Alternatively, the Planning Director or Development Review Board may require the permit grantee to replace removed trees on a per caliper inch basis, based on a finding that the large size of the trees being removed justifies an increase in the replacement trees required. Except, however, that the Planning Director or Development Review Board may allow the use of replacement Oregon white oaks and other uniquely valuable trees with a smaller diameter.

**Response:** Trees proposed for removal are subject to replacement planting requirements. As shown on Sheet L0.02 of Exhibit F, two (2) coniferous trees will be removed because their location conflicts with the proposed linear stormwater management facility; mitigation replanting will consist of planting two replacement trees close to the same location, consistent with grading changes and the stormwater facility, as depicted on Sheet L1.11. The proposed planting plan includes nine (9) trees: five (5) Acer circinatum/vine maple trees and four (4) Rhamnus purshiana/cascara trees; therefore, on-site plantings exceed the mitigation planting requirement and no contribution to the City Tree Fund pursuant to Section 4.620.00(.06) is required. This standard is met.

(.03) Replacement Tree Requirements. A mitigation or replacement tree plan shall be reviewed by the City prior to planting and according to the standards of this subsection.

- A. Replacement trees shall have shade potential or other characteristics comparable to the removed trees, shall be appropriately chosen for the site from an approved tree species list supplied by the City, and shall be state Department of Agriculture Nursery Grade No. 1 or better.
- B. Replacement trees must be staked, fertilized and mulched, and shall be guaranteed by the permit grantee or the grantee's successors-in-interest for two (2) years after the planting date.
- *C.* A "guaranteed" tree that dies or becomes diseased during that time shall be replaced.
- D. Diversity of tree species shall be encouraged where trees will be replaced, and diversity of species shall also be maintained where essential to preserving a wooded area or habitat.

**Response:** The L-Series sheets include tree planting specifications that satisfy these standards. Trees are to be staked, fertilized, mulched, and guaranteed. (See Sheet L0.01 in Exhibit F.)

(.04) All trees to be planted shall consist of nursery stock that meets requirements of the American Association of Nurserymen (AAN) American Standards for Nursery Stock (ANSI Z60.1) for top grade. **Response:** All on-site tree planting will meet the ANSI Z60.1 standard. Compliance can be assured through a condition of approval.



(.05) Replacement Tree Location.

- A. City Review Required. The City shall review tree relocation or replacement plans in order to provide optimum enhancement, preservation and protection of wooded areas. To the extent feasible and desirable, trees shall be relocated or replaced on-site and within the same general area as trees removed.
- B. Relocation or Replacement Off-Site. When it is not feasible or desirable to relocate or replace trees on-site, relocation or replacement may be made at another location approved by the City.

**Response:** Proposed tree plantings are located on-site. The mitigation trees will be planted adjacent to the proposed linear stormwater management facility, contributing to the natural character of the buffer adjacent to the SROZ along the west boundary of the site.

(.06) City Tree Fund. Where it is not feasible to relocate or replace trees on site or at another approved location in the City, the Tree Removal Permit grantee shall pay into the City Tree Fund, which fund is hereby created, an amount of money approximately the value as defined by this subchapter, of the replacement trees that would otherwise be required by this subchapter. The City shall use the City Tree Fund for the purpose of producing, maintaining and preserving wooded areas and heritage trees, and for planting trees within the City.

- A. The City Tree Fund shall be used to offer trees at low cost on a first-come, first-serve basis to any Type A Permit grantee who requests a tree and registers with the City Tree Fund.
- *B.* In addition, and as funds allow, the City Tree Fund shall provide educational materials to assist with tree planting, mitigation, and relocation.

**Response:** Proposed on-site planting of nine (9) trees exceeds the mitigation requirement associated with removal of two (2) trees. As noted above, the proposed number of trees to be planted exceeds the number of trees to be removed, so compliance is achieved without making a contribution to the City Tree Fund. This standard is met.

(.07) Exception. Tree replacement may not be required for applicants in circumstances where the Director determines that there is good cause to not so require. Good cause shall be based on a consideration of preservation of natural resources, including preservation of mature trees and diversity of ages of trees. Other criteria shall include consideration of terrain, difficulty of replacement and impact on adjacent property.

**Response:** The proposal satisfies tree replacement planting requirements, and the applicant does not request an exception from tree replacement standards of this Section.

## Section 4.620.10. Tree Protection During Construction

(.01) Where tree protection is required by a condition of development under Chapter 4 or by a Tree Maintenance and Protection Plan approved under this subchapter, the following standards apply:

- A. All trees required to be protected must be clearly labeled as such.
- B. Placing Construction Materials Near Tree. No person may conduct any construction activity likely to be injurious to a tree designated to remain, including, but not limited to, placing solvents, building material, construction equipment, or depositing soil, or placing irrigated landscaping, within the drip line, unless a plan for such construction activity has



been approved by the Planning Director or Development Review Board based upon the recommendations of an arborist.

- C. Attachments to Trees During Construction. Notwithstanding the requirement of WC 4.620.10(1)(A), no person shall attach any device or wire to any protected tree unless needed for tree protection.
- D. Protective Barrier. Before development, land clearing, filling or any land alteration for which a Tree Removal Permit is required, the developer shall erect and maintain suitable barriers as identified by an arborist to protect remaining trees. Protective barriers shall remain in place until the City authorizes their removal or issues a final certificate of occupancy, whichever occurs first. Barriers shall be sufficiently substantial to withstand nearby construction activities.

Plastic tape or similar forms of markers do not constitute "barriers." The most appropriate and protective barrier shall be utilized. Barriers are required for all trees designated to remain, except in the following cases:

- 1. Right-of-Ways and Easements. Street right-of-way and utility easements may be cordoned by placing stakes a minimum of fifty (50) feet apart and tying ribbon, plastic tape, rope, etc., from stake to stake along the outside perimeters of areas to be cleared.
- 2. Any property area separate from the construction or land clearing area onto which no equipment will venture may also be cordoned off as described in paragraph (D) of this subsection, or by other reasonable means as approved by the reviewing authority.

**Response:** Tree protection measures are specified on Sheet L0.03 of Exhibit F. Additional details of tree protection measures will be demonstrated at time of permitting.

# Section 4.620.20. Maintenance And Protection Standards

(.01) The following standards apply to all activities affecting trees, including, but not limited to, tree protection as required by a condition of approval on a site development application brought under this Chapter or as required by an approved Tree Maintenance and Protection Plan.

- A. Pruning activities shall be guided by the most recent version of the ANSI 300 Standards for Tree, Shrub, and Other Woody Plant Maintenance. Information on these standards shall be available upon request from the Planning Department.
- B. Topping is prohibited.
  - 1. Exception from this section may be granted under a Tree Removal Permit if necessary for utility work or public safety.

**Response:** The applicant will perform maintenance and protection practices according to ANSI 300 standards. This standard will be met.

# Section 4.630.00. Appeal

(.01) The City shall not issue a Tree Removal Permit until approval has been granted by either the Planning Director or the DRB. Any applicant denied a Type A or B permit may appeal the decision as provided for in review of Class I Development Applications, or Class II Development Applications, whichever is applicable. Decisions by the Planning Director may be appealed to the DRB as provided in WC 4.022. Decisions by the DRB may be appealed to the City Council as provided in WC 4.022.

**Response:** The applicant acknowledges this process and their right to appeal a denied permit.

(.02) The City shall not issue a Tree Removal Permit approved by the Development Review Board until fifteen (15) calendar days have passed following the approval. The grant or denial of a Tree Removal Permit may be appealed to the City Council in the same manner as provided for in WC 4.022. An appeal



must be filed in writing, within the fifteen (15) calendar day period following the decision being appealed. The timely filing of an appeal shall have the effect of suspending the issuance of a permit pending the outcome of the appeal. The City Council, upon review, may affirm, reverse or modify the decision rendered by the Development Review Board based upon the same standards of review specified for the DRB in the Wilsonville Code.

**Response:** The applicant acknowledges there is a 15-day appeal period between granting or denying a Tree Removal permit and issuance for an approved permit.

## Section 4.630.10. Display Of Permit; Inspection

The Tree Removal Permit grantee shall conspicuously display the permit on-site. The permit grantee shall display the permit continuously while trees are being removed or replaced or while activities authorized under the permit are performed. The permit grantee shall allow City representatives to enter and inspect the premises at any reasonable time, and failure to allow inspection shall constitute a violation of this subchapter.

Response: The permit will be conspicuously displayed on the job site. This standard will be met.

## Section 4.630.20. Variance For Hardship

*Any person may apply for a variance of this subchapter as provided for in Section 4.196 of this Chapter.* **Response:** A variance is not requested.

## Section 4.630.30. Severability

If any part of this ordinance is found by a court of competent jurisdiction to be invalid, that part shall be severable and the remainder of this ordinance shall not be affected. **Response:** This provision requires no evidence from the applicant.

## Section 4.640.00. Violation; Enforcement

(.01) The cutting, damaging, or removal of any individual tree without a permit as required by this ordinance constitutes a violation punishable as a separate infraction under WC 1.013. In addition, each violation of a condition or a violation of any requirement of this Chapter shall constitute a separate infraction.

**Response:** The tree removal plan shall be followed. This standard will be met.

(.02) Retroactive Permit. A person who removes a tree without obtaining a Type A or Type B permit may apply retroactively for a permit. In addition to all application requirements of this Chapter, the person must be able to demonstrate compliance with all requirements of this subchapter, in addition to paying a triple permit fee and a penalty per tree in an amount established by resolution of City Council. Mitigation requirements of this subchapter apply to all retroactive permits.

**Response:** This application is not a request for a retroactive permit. This provision requires no evidence from the applicant.

(.03) Nuisance Abatement. Removal of a tree in violation of this Chapter is a nuisance and may be abated as provided in Sections 6.230 to 6.244, 6.250, and 6.260 of the Wilsonville Code.

**Response:** It is not the applicant's intention to remove any tree in violation of this Chapter. This provision requires no evidence from the applicant.

(.04) Withholding Certificate of Occupancy. The City Building Official has the authority to issue a stopwork order, withhold approval of a final plat, or withhold issuance of a certificate of occupancy, permits



or inspections until the provisions of this Chapter, including any conditions attached to a Tree Removal Permit, have been fully met.

**Response:** This provision requires no evidence from the applicant.

(.05) Fines. Fines for a violation shall be imposed according to WC 1.012. **Response:** This provision requires no evidence from the applicant.

(.06) Mitigation. The City shall require the property owner to replace illegally removed or damaged trees. The City may also require a combination of payment and tree replacement.

- A. The City shall notify the property owner in writing that a violation has occurred and mitigation is required. Within thirty (30) days of the date of mailing of the notice, the property owner shall provide a mitigation plan to the City. The plan shall provide for replacement of a tree of similar species and size taking into account the suitability of the site and nursery stock availability.
- B. Replacement will be on an inch-for-inch basis computed by adding the total diameter measured at d.b.h. in inches of the illegally removed or damaged trees. The City may use any reasonable means to estimate the tree loss if destruction of the illegally removed or damaged trees prevents exact measurement. All replaced trees must be a minimum two-inch (2") caliper. If the mitigation requirements cannot be completed on the property, the City may require completion at another approved location. Alternatively, the City may require payment into the City Tree Fund of the value of the removed tree as established by the Planning Department.

**Response:** This application is for a Type II Tree Removal permit associated with new development. It is not in response to a notice of violation or other enforcement action. The above provisions are not applicable.

Section 4.640.10. Alternative Enforcement

(.01) In the event that a person commits more than one violation of WC 4.600.30 to WC 4.630.00, the following alternative sentence may be imposed:

- A. If a person has gained money or property through the commission of an offense under this section, then upon conviction thereof, the court, in lieu of imposing a fine, may sentence the person to pay an amount, fixed by the court, not to exceed double the amount of the gain from the commission of the offense.
- B. "Gain" is defined as the amount of money or value of property derived from the commission of the violation, less the amount of money or value of property seized by or surrendered to the City. "Value" shall be the greater of the market value or replacement cost as determined by a licensed professional in the tree, nursery, or landscape field.
- *C.* Any fines collected by the City under this section shall accrue to the City Tree Fund.

**Response:** It is not the applicant's intention to remove any tree in violation of this Chapter. This provision requires no evidence from the applicant and is acknowledged by the applicant.

# Section 4.640.20. Responsibility For Enforcement.

Compliance with this Chapter shall be enforced by the City Attorney, the City Attorney's designee, and Clackamas County or Washington County law enforcement officers.

**Response:** This provision provides procedural guidance for enforcement actions and requires no evidence from the applicant.

# 3. Class III Master Sign Plan Modification

## Section 4.156. Sign Regulations

## Section 4.156.01. - Sign Regulations Purpose and Objectives.

(.01) Purpose. The general purpose of the sign regulations are to provide one of the principal means of implementing the Wilsonville Comprehensive Plan by fostering an aesthetically pleasing, functional, and economically vital community, as well as promoting public health, safety, and well-being. The sign regulations strive to accomplish the above general purpose by meeting the needs of sign owners while maintaining consistency with the development and design standards elsewhere in Chapter 4. This Code regulates the design, variety, number, size, location, and type of signs, as well as the processes required to permit various types of signs. Sign regulations have one or more of the following specific objectives:

A. Well-designed and aesthetically pleasing signs sufficiently visible and comprehensible from streets and rights-of-way that abut a site as to aid in wayfinding, identification and provide other needed information.

B. Sign design and placement that is compatible with and complementary to the overall design and architecture of a site, along with adjoining properties, surrounding areas, and the zoning district.

*C.* A consistent and streamlined sign review process that maintains the quality of sign development and ensures due process.

D. Consistent and equitable application and enforcement of sign regulations.

*E.* All signs are designed, constructed, installed, and maintained so that public safety, particularly traffic safety, are not compromised.

## *F.* Sign regulations are content neutral.

**Response:** A location and dimensions for a ground-mounted sign were approved in 2010 under DB09-0051 (in the DB09 – 0048-0053 approval package). The applicant proposes to install a free-standing sign consistent with that approved location, but also to add a second free-standing sign adjacent to the Kinsman Road frontage just north of the single driveway serving the site. The proposed sign locations are shown on Sheet C1.10 and details are provided on Sheet A5.14 of Exhibit F.

## Section 4.156.02. Sign Review Process and General Requirements.

(.01) Permit Required. Unless exempt under Section 4.156.05, no sign, permanent or temporary, shall be displayed or installed in the City without first obtaining a sign permit.

**Response:** This application includes a request to amend the previous Master Sign Plan approval (DB09-0051) to allow an additional ground-mounted sign along the Kinsman Road property frontage.

The applicant's intent is to have all future particular signs comply, through Class I or II review, with the City's applicable regulations regarding sign sizes, locations, materials, illumination, and other characteristics.

For this Class III review, site plans (C-Series sheets in Exhibit F) and detail drawings (Sheet A5.17 in Exhibit F) show the proposed locations for tenant signage and sign configuration and dimensions. The icons represent conceptual signage locations, with future permit issuance to be based on demonstration that the proposed sign complies with applicable area limitations.



(.02) Sign Permits and Master Sign Plans. Many properties in the City have signs pre-approved through a Master Sign Plan. For the majority of applications where a Master Sign Plan has been approved the applicant need not consult the sign requirements for the zone, but rather the Master Sign Plan, copies of which are available from the Planning Division. Signs conforming to a Master Sign Plan require only a Class I Sign Permit.

**Response:** This application is to amend the previous Master Sign Plan approval (DB09-0051).

(.03) Classes of Sign Permits, Master Sign Plans, and Review Process. The City has three classes of sign permits for permanent signs: Class I, Class II, and Class III. In addition, non-residential developments with three or more tenants require a Master Sign Plan. Class I sign permits are reviewed through the Class I Administrative Review Process as outlined in Subsection 4.030(.01)(A.). Class II sign permits are reviewed through the Class III Administrative Review Process as outlined in Subsection 4.030(.01)(B.). Class III Sign Permits and Master Sign Plans are reviewed by the Development Review Board (DRB) as outlined in Section 4.031.

**Response:** This application includes a request to modify a previously approved and vested Class III Master Sign Plan approval (DB09-0051).

(.07) Master Sign Plans. A Master Sign Plan is required for non-residential developments with three or more tenants. In creating a Master Sign Plan thought should be given to needs of initial tenants as well as the potential needs of future tenants.

- A. Master Sign Plan Submission Requirements. Applications for Master Sign Plans shall include ten paper and electronic copies of all the submission requirements for Class II and III Sign Permits and the following in addition to all required fees:
  - 2. A written explanation of the flexibility of the Master Sign Plan for different potential tenant space configurations over time;
  - 3. A written explanation of the extent to which different sign designs, including those incorporating logos, stylized letters, multiple lines of text, non-straight baselines, or different materials and illumination will be allowed and if allowed how the flexibility of the master sign plan will allow these different sign designs over time;
  - 4. A written explanation of how the sign plan provides for a consistent and compatible sign design throughout the subject development.
- B. Master Sign Plan Review Criteria. In addition to the review criteria for Class II and Class III Sign Permits, Master Sign Plans shall meet the following criteria:
  - 1. The Master Sign Plan provides for consistent and compatible design of signs throughout the development; and
  - 2. The Master Sign Plan considers future needs, including potential different configurations of tenant spaces and different sign designs, if allowed.
- C. Modifications of a Master Sign Plan. Modifications of a Master Sign Plan, other than Minor and Major Adjustments, shall be reviewed the same as a new Master Sign Plan.

**Response:** The applicant is requesting review of this Master Sign Plan modification request in a consolidated procedure with the other applications, which require Type III public hearing procedure.

A. Class III Sign Permit Submission Requirements: Ten (10) paper and electronic copies of the submission requirements for Class II Sign Permits plus information on any requested waivers or variances in addition to all required fees.

**Response:** The applicant's submittal package includes digital files and the number of paper copies requested by City staff.



B. Class III Sign Permit Review Criteria: The review criteria for Class II Sign Permits plus waiver or variance criteria when applicable.

- Section 4.156.02.(.05)E. Class II Sign Permit Review Criteria: Class II Sign Permits shall satisfy the sign regulations for the applicable zoning district and the Site Design Review Criteria in Sections 4.400 through 4.421, as well as the following criteria:
  - 1. The proposed signage is compatible with developments or uses permitted in the zone in terms of design, materials used, color schemes, proportionality, and location, so that it does not interfere with or detract from the visual appearance of surrounding development;
  - 2. The proposed signage will not create a nuisance or result in a significant reduction in the value or usefulness of surrounding development; and
  - 3. Special attention is paid to the interface between signs and other site elements including building architecture and landscaping, including trees.

**Response:** The proposed signage plan change includes the locations and maximum sizes/proportions for two (2) ground-mounted free-standing signs, one each along the Wilsonville Road and Kinsman Road property frontages. The sign locations and sizes are designed to be integrated with and to complement the form of the building, including its strong horizontal expression. The sign sizes and locations form part of an integrated whole approach to composition of site elements, including the building, site circulation and parking areas, and landscaping features, particularly along the SW Wilsonville Road and Kinsman Road frontages, which are the public realms from which the site will be visible to the public. As a result, the proposed signage plan satisfies the Class II Sign Permit Review Criteria cited above. No waiver or variance is requested with respect to signage. This requirement is met.

(.07) Master Sign Plans. A Master Sign Plan is required for non-residential developments with three (3) or more tenants. In creating a Master Sign Plan thought should be given to needs of initial tenants as well as the potential needs of future tenants. (...)

**Response:** The site is subject to a previously Master Sign Plan (DB09-0051). This application is a request to modify that approval with respect to this subject property and proposed development.

(.08) Waivers and Variances. Waivers and variances are similar in that they allow deviation from requirements such as area, and height from ground. They differ in that waivers are granted by the DRB as part of a comprehensive review of the design and function of an entire site to bring about an improved design and variances are granted by either the Planning Director or DRB to relieve a specific hardship caused by the regulations.

- A. Waivers. The DRB may grant waivers for sign area, sign height from ground (no waiver shall be granted to allow signs to exceed thirty-five (35) feet in height), number of signs, or use of electronic changeable copy signs in order to better implement the purpose and objectives of the sign regulations as determined by making findings that all of the following criteria are met:
  - 1. The waiver will result in improved sign design, in regards to both aesthetics and functionality.
  - 2. The waiver will result in a sign or signs more compatible with and complementary to the overall design and architecture of a site, along with adjoining properties, surrounding areas, and the zoning district than signs allowed without the waiver.
  - 3. The waiver will result in a sign or signs that improve, or at least do not negatively impact, public safety, especially traffic safety.
  - 4. Sign content is not being considered when determining whether or not to grant a waiver.



- B. Variances.
  - 1. Administrative Variance: In reviewing a Sign Permit the Planning Director may grant or deny a variance to relieve a hardship through the Class II Administrative Review process. Such a variance shall only be approved where the variance does not exceed twenty percent (20%) of area, height, or setback requirements. The Planning Director shall approve such a variance only upon finding that the application complies with all of the required variance criteria listed in Section 4.196.
  - 2. Other Variances: In addition to the authority of the Planning Director to issue administrative variances as noted above, the Development Review Board may authorize variances from sign requirements of the Code, subject to the standards and criteria listed in Section 4.196.

**Response:** The applicant is not requesting a waiver or variance from the sign standards.

(.09) Temporary Sign Permits. Temporary sign permits shall be reviewed as follows:

- A. 30 days and less- Class I Administrative Review
- B. 31 days up to 120 days- Class II Administrative Review
- C. Submission Requirements: Applications for a temporary sign permit shall include the following in addition to the required application fee:
  - 1. Completed application form prescribed by the City and signed by the property owner or their authorized representative,
  - 2. Two (2) copies of sign drawings or descriptions showing all materials, sign area and dimensions used to calculate areas, number of signs, location and placement of signs, and other details sufficient to judge the full scale of the sign or signs,
  - 3. Information showing the proposed sign or signs conform with all applicable code requirements.
- D. Review Criteria: Temporary Sign Regulations in Section 4.156.09
- *E.* When a temporary sign permit request is submitted as part of the broader temporary use permit request of the same duration, the sign request shall not require an additional fee.

**Response:** The applicant is not requesting a temporary sign permit.

(.10) Waiver of Documentation. The Planning Director may, in his or her discretion, waive an application document for Class I, Class II, and temporary sign permits where the required information has already been made available to the City, or where the Planning Director determines the information contained in an otherwise required document is not necessary to review the application.

**Response:** The application is for a Class III permit; a waiver is not requested or allowed.

## Section 4.156.03. Sign Measurement

(.01) Sign Area:

- A. Cabinet Signs and Similar: The area for signs enclosed by cabinet, frame, or other background (including lighted surface) not otherwise part of the architecture of a building or structure shall be the area of a shape drawn around the outer dimension of the cabinet, frame, or background.
  - 1. If the cabinet, frame, or background is an irregular shape the signs perimeter shall be measured the same as an individual element sign under B. below.
  - 2. The sign area does not include:



- a. Foundations, supports, and other essential structures that are not designed to serve as a backdrop or border to the sign;
- b. Architectural elements of a freestanding or ground mounted sign designed to match or complement the architectural design of buildings on the site not and otherwise meeting the definition of a sign;
- c. A pole or other structural support, unless such pole or structural support is internally illuminated or otherwise so designed to constitute a display device.
- B. Individual Element Signs: The area for signs constructed of individual elements (letters, figures, etc.) attached to a building wall or similar surface or structure shall be the summed area of up to three squares, rectangles, circles, or triangles drawn around all sign elements.
  - 1. The descender on the lower case letters "q, y, p g, or j." shall not be included in sign area when the letter otherwise matches the font of other letters in the sign, the descender is no more than 1/2 the cap height of the font, and the descender is no wider than the main body of the letter.
- C. Round or Three-Dimensional Signs: The area of a round or three-dimensional sign shall be the maximum surface area visible from any one location on the ground measured the same as A. above except if the maximum surface area is an irregular shape the signs perimeter shall be measured the same as an individual element sign under B. above.
- D. Awning or Marquee Signs: The area of signs incorporated into awnings or marquees shall be the area of the entire panel containing the sign measured the same as A. above unless it is clear that part of the panel contains no sign-related display or decoration, other than the background color of the awning.
- *E.* Painted Wall Signs: The area of painted wall signs shall be determined as follows:
  - 1. If individual elements are painted without a background it shall be calculated in the manner indicated in B. above.
  - 2. If a background is painted it shall be calculated in the manner indicated in A. above.
- *F.* Temporary Signs: The area of temporary signs including banners, lawn signs, and rigid signs shall be calculated in the manner indicated in A. above.
- G. Unless otherwise specified, the sign area of a two-sided sign, with two matching sides, shall be considered to be the area of one side. For example, the sign area of a two-sided sign having thirty-two (32) square feet per sign face shall be considered to be thirty-two (32) square feet, unless this code specifies otherwise.

**Response:** Specific sign type and size will be chosen in the future and approved through a Type I sign application that is not part of this application.

# (.02) Sign Height above Ground.

- A. The height above ground of a freestanding or ground-mounted sign is measured from the average grade directly below the sign to the highest point of the sign or sign structure except as follows:
  - 1. A freestanding or ground mounted sign on a man-made base, including a graded earth mound, shall be measured from the grade of the nearest pavement or top of any pavement curb to the highest point of the sign or sign structure. In all cases signs on a berm shall be allowed to be eight (8) feet in height from the top of the berm.



2. A freestanding or ground mounted sign placed below the elevation of the rightof-way it fronts shall be measured from the lowest point in the right-of-way along the frontage to the highest point of the sign.

**Response:** Two (2) ground mounted signs are proposed. The top of the signs will not exceed 8' above finished grade. Sign details are shown in Exhibit F, Sheet A5.17.

(.03) Sign Height and Length.

- A. Height of a sign is the vertical distance between the lowest and highest points of the sign.
- B. Length of a sign is the horizontal distance between the furthest left and right points of the sign.

**Response:** How the City determines sign height and length was used to calculate proposed sign height, width, and areas. Sign details are shown in Exhibit F, Sheet A5.17.

(.04) Final Determination of Sign Measurement. The Planning Director shall be responsible for determining the area, height above ground and height and length of a sign, subject to appeal as specified in Section 4.022. Applicants for sign plans and permits shall provide the dimensions needed to calculate the area, height above ground, height, and length.

**Response:** Sign size, height, and width dimensions are shown on the plans provided in Exhibit F, Sheet A5.17, and described in this narrative.

# Section 4.156.04. Non-Conforming Signs.

(.01) Non-Conforming Signs. Non-conforming signs, which may be non-conforming structures or nonconforming uses, are subject to the standards for non-conforming uses and non-conforming structures delineated in Sections 4.189 through 4.190. Except, however, that a non-conforming sign that is damaged beyond fifty percent (50%) of its value, as determined by the City Building Official, may only be reconstructed if the reconstructed sign meets all applicable zoning, structural, and electrical standards applicable at the time of reconstruction. Nothing in this Section is intended to impair any previously approved sign permit that has been issued by the City of Wilsonville, subject to state or federal law, or to require the removal of any sign that was legally erected or installed prior to the effective date of these regulations. In the event that a previously erected or installed sign no longer meets applicable City zoning standards it may remain in place, subject to the standards for non-conforming uses or nonconforming structures noted above. However, a sign that is required to be moved solely because of a public taking may be replaced on the site, and maintain its non-conforming status, subject to a Class II Sign Permit, provided the replacement sign is found to not increase in non-conformity to current code standards other than required setbacks.

**Response:** This application is for new development. This standard does not apply.

# Section 4.156.05. Signs Exempt From Sign Permit Requirements.

(.01) The following signs are exempt from the permit requirements of this code and do not require sign permits. Unless otherwise specified, the area of the exempted signs shall not be included in the calculations of sign area permitted on a given site:

- A. Traffic or other governmental or directional signs, as may be authorized by the City or other units of government having jurisdiction within the City.
- B. Signs installed by public utility companies indicating danger, or which serve as an aid to public safety, or which show the location of utilities or public facilities, including underground utilities.



C. Flags displayed from permanently-located freestanding or wall-mounted flagpoles that are designed to allow raising and lowering of flags. One site may have up to two (2) exempt flags; no exempt flag may be more than thirty (30) feet in height.

**Response:** The proposed signs do not fall into an exempt sign category.

(.02) Other Signs. No sign permit is necessary before placing, constructing or erecting the following signs. However, in all other particulars such signs shall conform to the requirements of applicable Building and Electrical Codes, as well as this Code.

- A. Signs inside a building except for prohibited signs listed in Section 4.156.06.
- B. Name Plates and Announcements.
  - 1. A sign identifying the name, street address, occupation and/or profession of the occupant of the premises in the aid of public health and safety. One name plate, not exceeding a total of three (3) square feet shall be allowed for each occupant. The name plate shall be affixed to the building.
  - 2. Announcements posted on a given property (e.g., no smoking, no parking, rules of conduct, etc.) and not intended to be read from off-site, are permitted to be located as needed. Such announcements shall not be considered to be part of the sign allotment for the property.
- C. Directional Signs. Designed for non-changing messages, directional signs facilitate the safe movement of the traveling public. Such signs are subject to the following standards and conditions:
  - 1. The sign area does not exceed three (3) square feet per sign face,
  - 2. The sign location is not within public rights-of-way and meets City vision clearance requirements;
  - 3. No sign lighting;
  - 4. No logo or a logo that does not exceed one (1) square foot in size; and
  - 5. No more than one (1) directional sign is located on the same tax lot.
- D. Changes of Copy Only, where the graphics contained on an existing sign are changed, but the sign itself is not structurally altered, and no building or electrical permit is required.
- *E.* Signs not visible from any off-site location.
- *F.* Holiday lights and decorations, in place between November 15 and January 15.
- G. Signs on scoreboards or ballfields located on public property.
- H. One small decorative banner per dwelling unit placed on site, in residential zones.
- *I.* Lawn Signs meeting the standards of Table S-1 and the following conditions:
  - 1. Such signs shall not be intentionally illuminated and shall not display movement.
  - 2. Such signs shall not obscure sight lines of the motoring public, obscure traffic or other government signs, or create a nuisance to the use or occupancy of any property.
  - 3. Lawn signs associated with temporary events may be posted no longer than sixty (60) days before the beginning of an event and must be removed at the event's completion.
  - 4. Lawn signs not associated with temporary events may be posted for one period of up to sixty (60) days in a calendar year.
  - 5. Such signs may be up to six (6) feet in height.
  - 6. Such signs may be one (1) or two (2) sided.
- J. Rigid Signs meeting the standards of Table S-1 and the following conditions:
  - 1. Such signs shall not be intentionally illuminated and shall not display movement.



- 2. Such signs shall not obscure sight lines of the motoring public, obscure traffic or other government signs, or create a nuisance to the use or occupancy of any property.
- 3. Such signs may be up to six (6) feet in height, except signs on lots with an active construction project (active building permit), which may be up to ten (10) feet in height. (Note that signs exceeding six (6) feet in height typically require building permits.)
- 4. Such signs may be one (1), two (2), or three (3) sided.
- 5. On Residential and Agriculture zoned lots:
  - a. A rigid sign not associated with an ongoing temporary event may be displayed for no more than sixty (60) days each calendar year.
  - b. A rigid sign associated with an ongoing temporary event may be displayed for the duration of that event. Note: Section 4.156.06 (.01) Q. of this Code prohibits signs associated with temporary events to remain posted after the completion of the event.
- 6. On Commercial, Industrial, or Public Facility zoned lots:
  - a. A rigid sign not associated with an ongoing temporary event may be displayed for no more than ninety (90) days each calendar year.
  - b. A rigid sign associated with an ongoing temporary event may be displayed for the duration of that temporary event. Note: Section 4.156.06(.01)(Q.) of this Code prohibits signs associated with temporary events to remain posted after the completion of the event.
  - c. A temporary event must have an end, marked by the occurrence of a specifically anticipated date or happening. A temporary event may not be a part of a broader, continuing event or of related, serial events. Temporary events shall not be defined by content, but may include isolated merchandise sales or discounts, or availability of real estate for sale or lease.
- *K.* Signs allowed in Subsections 6.150 (1) and (2) Wilsonville Code for special events.

**Response:** The proposed signs do not fall into a class of signs for which no permits are required. The applicant is aware that the sign types listed above do not require a permit.

# Section 4.156.06. Prohibited Signs

(.01) Prohibited Signs. The following signs are prohibited and shall not be placed within the City:

- A. Search lights, strobe lights, and signs containing strobe lights or other flashing lights, unless specifically approved in a sign permit.
- B. Obstructing signs, a sign or sign structure such that any portion of its surface or supports will interfere in any way with the free use of any fire escape, exit, hydrant, standpipe, or the exterior of any window; any sign projecting more than twelve (12) inches from a wall, except projecting signs that are specifically permitted through the provisions of this Code.
- C. Changing image signs, including those within windows.
- D. Changeable copy signs that use lighting changed digitally, unless specifically approved through a waiver process connected with a Class III Sign Permit or Master Sign Plan. In granting a waiver for a digital changeable copy signs the DRB shall ensure the following criteria will be met:
  - 1. The sign shall be equipped with automatic dimming technology which automatically adjusts the sign's brightness in direct correlation with ambient



light conditions and the sign owner shall ensure appropriate functioning of the dimming technology for the life of the sign.

- 2. The luminance of the sign shall not exceed five thousand (5000) candelas per square meter between sunrise and sunset, and five hundred (500) candelas per square meter between sunset and sunrise.
- E. Roof signs signs placed on the top of a building or attached to the building and projecting above the top of that building, unless specifically approved through the temporary sign permit procedures or the architectural design of a building makes the slope of the roof below the peak a practicable location of signs on a building and the general location of signs on the roof is approved by the DRB during Stage II Approval, as applicable, and Site Design Review.
- *F.* Signs obstructing vision clearance areas.
- G. Pennants, streamers, festoon lights, balloons, and other similar devices intended to be moved by the wind, unless specifically authorized in an approved sign permit.
- *H.* Signs attached to trees, public sign posts, or public utility poles, other than those placed by appropriate government agencies or public utilities.
- I. Signs using bare-bulb illumination or signs lighted so that the immediate source of illumination is visible, unless specifically authorized by the Development Review Board or City Council such as Digital Changeable Copy Signs. This is not intended to prohibit the use of neon or LED's as a source of illumination.
- J. Signs that use flame as a source of light or that emit smoke or odors.
- K. Any sign, including a window sign, which is an imitation of or resembles an official traffic sign or signal; and which may include display of words or graphics that are likely to cause confusion for the public, such as "STOP," "GO," "SLOW," "CAUTION," "DANGER," "WARNING," etc.
- L. Any sign, including a window sign, which by reason of its size, location, movements, content, coloring or manner of illumination may be confused with, or construed as, a traffic control device, or which hides from view any traffic sign, signal, or device.
- M. Portable signs, exceeding six (6) square feet of sign area per side, other than those on vehicles or trailers. The display of signs on a vehicle or trailer is prohibited where the vehicle or trailer is not fully operational for use on public roads or where the primary function of the vehicle or trailer is advertising. Examples where the primary function of the vehicle or trailer is advertising include mobile billboards such as those on which advertising space is rented, sold, or leased.
- *N.* Signs located on public property in violation of Section 4.156.10.
- O. Signs placed on private property without the property owner's permission.
- P. Signs erected or installed in violation of standards prescribed by the City of Wilsonville, State of Oregon or the U.S. government.
- *Q.* Signs associated with temporary events, after the temporary event is completed.
- R. Any private signs, including window signs, with a luminance greater than five thousand (5000) candelas per square meter between sunrise and sunset and five hundred (500) candelas per square meter between sunset and sunrise.
- S. Video Signs

**Response:** The proposed signs are not prohibited signs.

*Section 4.156.06. Prohibited Signs. Section 4.156.07. Sign Regulations In Residential Zones.* **Response:** The site is not in a residential zone. These standards do not apply.

Section 4.156.08. Sign Regulations in the PDC, TC, PDI, and PF Zones.



- (.01) Freestanding and Ground Mounted Signs:
  - A. One freestanding or ground mounted sign is allowed for the first two-hundred (200) linear feet of site frontage. One additional freestanding or ground mounted sign may be added for through and corner lots having at least two-hundred (200) feet of frontage on one street or right-of-way and one-hundred (100) feet on the other street or right-ofway.

**Response:** Two (2) ground mounted frontage signs are allowed and two (2) are proposed. This standard is met.

- B. The allowed height above ground of a freestanding or ground mounted sign is twenty (20) feet except as noted in 1-2 below.1. The maximum allowed height above ground for signs along the frontage of Interstate 5, and parallel contiguous portions of streets, as identified in Figure S-4, associated with multiple tenants or businesses may be increased by three (3) feet for each tenant space of ten thousand (10,000) square feet or more of gross floor area up to a maximum of thirty-five (35) feet.
  - 2. The allowed height above ground for signs in the TC Zone, Old Town Overlay Zone, and PDI Zone is eight (8) feet, except those signs along the frontage of Interstate 5 and parallel contiguous portions of streets identified in Figure S-4.

**Response:** The site is located in the PDI Zone and does not have I-5 frontage. Therefore, the signs can be up to 8' high. The proposed signs meet this standard. Sign details are shown in Exhibit F, Sheet A5.17, and sign location in Exhibit F, Sheet C1.10.

- *C.* The maximum allowed area for each freestanding or ground-mounted sign is determined based on gross floor area and number of tenant spaces:
  - 1. For frontages along streets other than those indicated in 2 below sign area allowed is calculated as follows:

Gross Floor Area in a Single Building	Maximum Allowed Sign Area
Less than 11,000 sq. ft.	32 sq. ft.
11,000-25,999 sq. ft.	32 sq. ft. + 2 sq. ft. per 1000 sq. ft. of floor area greater than 10,000 rounded down to the nearest 1,000 sq. ft.
26,000 sq. ft. or more	64 sq. ft.

a. The sign area allowed for signs pertaining to a single tenant:

- i. For PF (Public Facility) zoned properties adjacent to residential zoned land the maximum allowed area is thirty-two (32) square feet.
- b. The maximum allowed sign area for signs pertaining to multiple tenants or businesses is thirty-two (32) square feet plus the following for each tenant space:

Gross Floor Area of Tenant Space	Additional Allowed Sign Area for Tenant Space
Less than 1,000 sq. ft.	3 sq. ft.



1,000-10,999 sq. ft.	3 sq. ft. + 3 sq. ft. per 1,000 sq. ft. of floor area rounded down to the nearest 1,000 sq. ft.
11,000 sq. ft. or more	32 sq. ft.

- i. The total sign area shall not exceed two hundred (200) square feet, except in the TC Zone, Old Town Overlay Zone, and PDI Zone the total sign area shall not exceed eighty (80) square feet.
- ii. Though the maximum allowed sign area is calculated based on number of tenant spaces and their size, the content of the sign and area used for different content is at the discretion of the sign owner, except for required addressing.

**Response:** The proposed building is anticipated to have one (1) tenant, with Gross Floor Area of approximately 15,700 SF. Per the table in subparagraph a, freestanding/ground-mounted sign area of up to 42 SF is allowed for each of two (2) signs, one on each street frontage. The proposed signs comply with this standard. Sign details are shown on Sheet A5.17 of Exhibit F.

### D. Pole or sign support placement shall be installed in a full vertical position.

**Response:** The sign will be placed on a concrete vertical base, as shown on Sheet A5.17, in Exhibit F. This standard is met.

*E. Freestanding and ground mounted signs shall not extend into or above public rights-ofway, parking areas, or vehicle maneuvering areas.* 

**Response:** The signs are not located within a public right of way, parking area, or vehicle maneuvering area. The sign locations are shown in Exhibit F, Sheet C1.10. This standard is met.

F. The location of free standing or ground mounted signs located adjacent to or near the Public Right-of-Way shall be in compliance with the City's Public Works Standards for sight distance clearance. Prior to construction, the location of the sign shall be approved by the City of Wilsonville Engineering Division.

**Response:** The signs have been placed to meet sight distance clearance requirements. Sign locations are shown in Exhibit F, Sheet C1.10. This standard is met.

*G.* Freestanding and ground mounted signs shall be designed to match or complement the architectural design of buildings on the site.

**Response:** The proposed monument sign base forms are designed to complement the architectural design of the building and extend the use of its forms, materials, and colors close to the edge of the street. This standard is met.

*H.* For freestanding and ground mounted signs greater than eight (8) feet in height, the width of the sign shall not exceed the height.

**Response:** The signs are not greater than 8' in height. This standard is met.

*I.* Along street frontages in the TC Zone and Old Town Overlay Zone monument style signs are required.

**Response:** The site is not located in the TC Zone or Old Town Overlay Zone. This standard does not apply.



J. Freestanding and ground mounted signs shall be no further than fifteen (15) feet from the property line and no closer than two (2) feet from a sidewalk or other hard surface in the public right-of-way.

**Response:** The proposed ground mounted signs will be located close to property boundaries and at least 2' from sidewalks in Wilsonville Road and Kinsman Road. Sign locations are shown in Exhibit F, Sheet C1.10. This standard is met.

*K.* Except for those signs fronting Interstate 5, freestanding and ground mounted signs shall include the address number of associated buildings unless otherwise approved in writing by the City and the Fire District.

**Response:** At least one (1) of the ground mounted signs will include the site address number. This standard will be met.

L. When a sign is designed based on the number of planned tenant spaces it shall remain a legal, conforming sign regardless of the change in the number of tenants or configuration of tenant spaces.

**Response:** The signage is designed based on the building having a single tenant.

(.02) Signs on Buildings.

3.

- A. Sign Eligible Facades: Building signs are allowed on a facade of a tenant space or single tenant building when one or more of the following criteria are met:
  - 1. The facade has one or more entrances open to the general public;
  - 2. The facade faces a lot line with frontage on a street or private drive with a cross section similar to a public street, and no other buildings on the same lot obstruct the view of the building facade from the street or private drive; or
    - The facade is adjacent to the primary parking area for the building or tenant.

**Response:** No wall-mounted signage is proposed. The proposed building is designed to have a single tenant, with a single principal entrance open to the general public centrally located on the south building façade. The building's north façade, facing Wilsonville Road, measures 174' and its east façade, facing Kinsman Road, measures 94.58' (see Sheet C1.10 in Exhibit F), but neither façade has a public entrance. All on-site parking is located south and west of the building; a pedestrian path extends east from the public entrance to connect to the sidewalk in SW Kinsman Road.

B. Sign Area Allowed: [detailed provisions omitted for brevity]

**Response:** As noted above under subparagraph A.1-3, no wall signage is proposed.

(.03) Additional signs. Notwithstanding the signs allowed based on the site in (.01) and (.02) above, the following signs may be permitted, subject to standards and conditions in this Code:

- A. Directional Signs: In addition to exempt directional signs allowed under Subsection 4.156.05 (.02) C. freestanding or ground mounted directional signs six (6) square feet or less in area and four (4) feet or less in height:
  - 1. The signs shall be designed to match or complement the architectural design of buildings on the site;
  - 2. The signs shall only be placed at the intersection of internal circulation drives; and
  - 3. No more than one (1) sign shall be placed per intersection corner with no more than two (2) signs per intersection.
- B. Planned Development Signs. Up to thirty (32) square feet of the allowed sign area for freestanding signs in a planned development may be used for a separate on-site



monument sign or off-site monument sign on an adjacent parcel identifying the Planned Development project.

- C. Blade Signs. To aid in pedestrian wayfinding, one (1) blade sign, not to exceed six (6) square feet, per facade eligible for building signs. Blade signs over pedestrian accessible areas shall provide a minimum of eight (8) feet of clearance from the ground.
- D. Fuel or Service Station Price Signs. In addition to the freestanding or ground mounted signs allowed, changeable copy signs shall be allowed for the purpose of advertising fuel prices, subject to the following standards and conditions:
  - 1. The signs shall have a maximum of eleven (11) square feet in area per face per type of fuel sold and shall be permanently affixed to the building or a freestanding sign.
  - 2. The signs shall not be considered in calculating the sign area or number of signs allowed.
  - 3. Signs on fuel pumps shall be permitted, providing that they do not project beyond the outer edge of the pump in any direction.

**Response:** No additional signs are proposed at this time. The applicant acknowledges that any future signage proposals will be subject to approval under separate applications and review procedures.

### Section 4.156.09. Temporary Signs In All Zones.

The following temporary signs may be permitted in addition to the permanent signs allowed in different zones and exempt temporary signs unless specifically prohibited in a master sign plan or other sign approval:

(.01) General Allowance. Except as noted in subsection (.02) below up to two (2) temporary signs not exceeding a combined total of twenty four (24) square feet may be permitted per lot or non-residential tenant. Such signs may be banners, rigid signs, lawn signs, portable signs, or other signs of similar construction.

(.02) Opening Banner for a New Business or Housing Development. A banner corresponding with the opening of a new business or housing development may be permitted, subject to the following standards and conditions:

- A. One such banner shall be allowed either from the date of issuance of Building Permits until four (4) weeks after issuance of Certificates of Occupancy, or if no Building Permit is issued, for four (4) weeks after occupancy of a new business.
- B. Such banner may be two-sided but shall not exceed thirty-two (32) square feet per face.
- C. Such signs shall not be permitted at the same time as general allowance signs in (.01) above.

(.03) Annual Event Signs. Up to ten (10) lawn signs may be permitted to be located in the public right-ofway for up to fourteen (14) days if all of the following are met:

- A. Signs will not be located in the areas listed in Subsection 4.156.10 (.01) A. 4.
- B. The applicant or event has not been issued a permit for and placed signs in the public right-of-way in the previous six (6) months;
- C. Not more than one (1) other permit has been issued for lawn signs in the right-of-way during the time period the applicant is requesting;
- D. The event to which the signs pertain is expected to attract two hundred fifty (250) or more people;
- *E.* The request is not in addition to exempt lawn signs for large special events allowed for in Section 6.150; and



*F.* The applicant has indicated on a map the exact locations the signs will be placed and has submitted an application along with the required fee.

(.04) Inflatable Signs. Inflatable signs may be permitted for a maximum of fifteen (15) days of display use in any calendar year subject to the following standards and conditions:

- A. Does not exceed ten (10) feet in overall height; and
- *B.* If attached to a building in any manner, it meets applicable building code requirements including consideration of wind loads.

**Response:** No additional signs are proposed at this time. The applicant acknowledges that any future signage proposals will be subject to approval under separate applications and review procedures.

### Section 4.156.10. Signs on City and ODOT Right-Of-Way.

**Response:** No signs are proposed on City or ODOT Right-Of-Way. This standard does not apply.

### Section 4.156.11. Sign Enforcement.

**Response:** This section provides direction for enforcement of sign regulations and requires no evidence submittal by the applicant.



### IV. CONCLUSION

Based on the information presented and discussed in this narrative and the attached supporting plans and documentation, this application meets applicable standards necessary for land use approval. The proposed development complies with all applicable standards of the Wilsonville Planning and Land Development Ordinance. The applicant respectfully requests approval by the City.



# Citycounty Insurance Aerial Map

# 9770 SW Wilsonville Road Wilsonville, Oregon

# LEGEND



Project Site Tax Lots

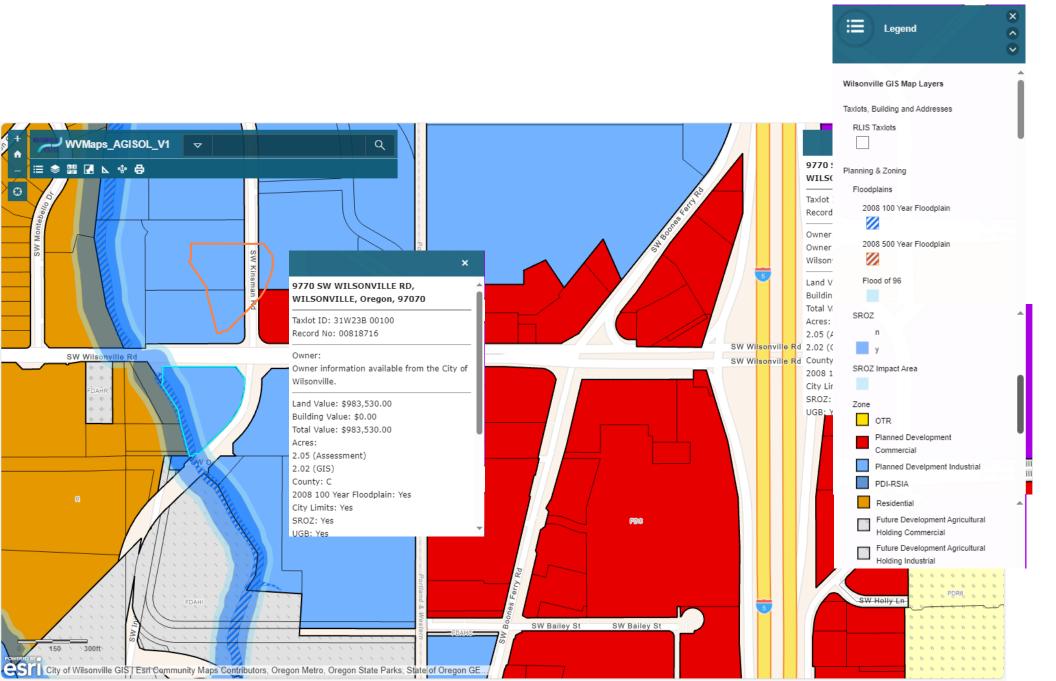


P 503.224.9560 • F 503.228.1285 • W MCKNZE.COM RiverEast Center, 1515 SE Water Avenue, #100, Portland, OR 97214

Portland, Oregon • Vancouver, Washington • Seattle, Washington

# Zoning Map (excerpt)

(Source: City of Wilsonville GIS)



# **Preliminary Report**

Fidelity National Title - Oregon

File No.: 45142303033

# **Introducing LiveLOOK**

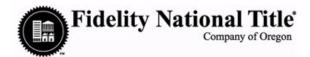
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THIS REPORT IS ISSUED BY THE ABOVE-NAMED COMPANY ("THE COMPANY") FOR THE EXCLUSIVE USE OF THE FOLLOWING CUSTOMER:

Fidelity National Title - Builder Services Phone No.: (503)796-6654

 Date Prepared:
 April 25, 2023

 Effective Date:
 April 21, 2023 / 08:00 AM

 Charge:
 \$350.00

 Order No.:
 45142303033

 Reference:
 Egger in Wilsonville

The information contained in this report is furnished to the Customer by Fidelity National Title Company of Oregon (the "Company") as an information service based on the records and indices maintained by the Company for the county identified below. This report is not title insurance, is not a preliminary title report for title insurance, and is not a commitment for title insurance. No examination has been made of the Company's records, other than as specifically set forth in this report ("the Report"). Liability for any loss arising from errors and/or omissions is limited to the lesser of the fee paid or the actual loss to the Customer, and the Company will have no greater liability by reason of this report. This report is subject to the Definitions, Conditions and Stipulations contained in it.

### REPORT

A. The Land referred to in this report is located in the County of Clackamas, State of Oregon, and is described as follows:

As fully set forth on Exhibit "A" attached hereto and by this reference made a part hereof.

B. As of the Effective Date, the tax account and map references pertinent to the Land are as follows:

As fully set forth on Exhibit "B" attached hereto and by this reference made a part hereof.

C. As of the Effective Date and according to the Public Records, we find title to the land apparently vested in:

As fully set forth on Exhibit "C" attached hereto and by this reference made a part hereof.

D. As of the Effective Date and according to the Public Records, the Land is subject to the following liens and encumbrances, which are not necessarily shown in the order of priority:

As fully set forth on Exhibit "D" attached hereto and by this reference made a part hereof.

### EXHIBIT "A" (Land Description)

For <u>APN/Parcel ID(s):</u> 00818716 For Tax Map ID(s): 01W23B 00100

Parcel 1, <u>PARTITION PLAT NO. 2012-057</u>, recorded December 5, 2012, Document No. 2012-080104, in the City of Wilsonville, Clackamas County, Oregon.

EXCEPTING THEREFROM that portion deeded to the City of Wilsonville in deed recorded February 9, 2021 as No. 2021-013778.

Public Record Report for New Subdivision or Partition (Ver. 20161024)

### EXHIBIT "B" (Tax Account and Map)

APN/Parcel ID(s) 00818716 as well as Tax/Map ID(s) 31W23B 00100

Public Record Report for New Subdivision or Partition (Ver. 20161024)

### EXHIBIT "C" (Vesting)

CIS Trust, an intergovernmental entity operating under ORS Chapter 190 as a self-insurance trust created under the authority of ORS 30.282(2)

#### EXHIBIT "D" (Liens and Encumbrances)

#### SPECIFIC ITEMS AND EXCEPTIONS:

1. The subject property is under charitable organization ownership and is exempt from ad valorem taxation. Any change in ownership prior to delivery of the assessment roll may result in tax liability.

 Tax Account No.:
 00818716

 Map No.:
 31W23B 00100

 Levy Code:
 003-023

- 2. City Liens, if any, in favor of the City of Wilsonville.
- 3. The Land lies within the Wilsonville West side Urban Renewal Area and is subject to the terms and provisions thereof.
- 4. Rights and easements for navigation and fishery which may exist over that portion of said Land lying beneath the waters of unnamed stream and Seeley Ditch.
- 5. Rights of the public, riparian owners and governmental bodies as to the use of the waters of Seeley Ditch and the natural flow thereof on and across that portion of the subject land lying below the high water line of said waterway.
- 6. Easement(s) for the purpose(s) shown below and rights incidental thereto, as granted in a document:

Granted to:	United States of America
Purpose:	Transmission line
Recording Date:	February 8, 1957
Recording No:	Book 521, Page 669
Affects:	Westerly portion of subject property-also delineated on plat

7. Easement(s) for the purpose(s) shown below and rights incidental thereto, as granted in a document:

Granted to:	The public
Purpose:	Public utility
Recording Date:	February 4, 2003
Recording No:	2003-014486
Affects:	Northwesterly portion of subject property

8. Easement(s) for the purpose(s) shown below and rights incidental thereto, as granted in a document:

Granted to:	City of Wilsonville
Purpose:	Public utility easement
Recording Date:	September 19, 2012
Recording No:	2012-060556
Affects:	North 21 feet -also delineated on plat

#### EXHIBIT "D" (Liens and Encumbrances) (continued)

9. Easement(s) for the purpose(s) shown below and rights incidental thereto, as granted in a document:

Granted to:	City of Wilsonville
Purpose:	Pipeline and Bicycle/Pedestrian Public Access Easements
Recording Date:	September 19, 2012
Recording No:	2012-060557
Affects:	Westerly portion as described therein -also delineated on plat

10. Restrictions, but omitting restrictions, if any, based upon race, color, religion, sex, sexual orientation, familial status, marital status, disability, handicap, national origin, ancestry, or source of income, as set forth in applicable state or federal laws, except to the extent that said restriction is permitted by applicable law, as shown on that certain plat

Name of Plat:	Partition Plat No. 2012-057
Recording Date:	December 5, 2012
Recording No:	2012-080104

11. Easement(s) for the purpose(s) shown below and rights incidental thereto as delineated or as offered for dedication, on the map of said <u>tract/plat</u>;

Purpose:	Public utility and sidewalk easement
Affects:	8.00 feet along Kinsman Road frontage

12. Easement(s) for the purpose(s) shown below and rights incidental thereto as delineated or as offered for dedication, on the map of said <u>tract/plat</u>;

Purpose: Access easement for the benefit of City of Wilsonville Affects: A strip 15 feet in width, as shown on plat

13. Easement(s) for the purpose(s) shown below and rights incidental thereto as delineated or as offered for dedication, on the map of said <u>tract/plat</u>;

Purpose:Storm drainageAffects:Southerly portion of subject property

14. Easement(s) for the purpose(s) shown below and rights incidental thereto as delineated or as offered for dedication, on Partition Plat No. 2012-057;

Sanitary Sewer Affects: 15 feet wide as delineated on plat

Stormwater Affects: Most Southerly portion as delineated on plat

Pedestrian Ingress and egress Affects: 20.00 feet wide

### EXHIBIT "D" (Liens and Encumbrances) (continued)

15. Easement(s) for the purpose(s) shown below and rights incidental thereto, as granted in a document:

Granted to:	City of Wilsonville
Purpose:	Street tree easement
Recording Date:	December 5, 2012
Recording No:	2012-080105
Affects:	A strip 20 feet in width along Kinsman Road as delineated on plat

16. An unrecorded lease with certain terms, covenants, conditions and provisions set forth therein as disclosed by the document

Entitled:	Memorandum of Lease	
Lessor:	PNWP, LLC #5	
Lessee:	O'Reilly Automotive Stores, Inc.	
Recording Date:	January 31, 2013	
Recording No:	2013-007292	
Affects: Additional property also		

- Easement(s) for the purpose(s) shown below and rights incidental thereto, as granted in a document: Granted to: Willamette Water Supply System Commission, an Oregon intergovernmental entity organized under ORS Chapter 190 Purpose: Temporary Construction Easement Recording Date: October 30, 2019 <u>Recording No: 2019-068704</u> Affects: as described therein
- 18. Easement(s) for the purpose(s) shown below and rights incidental thereto, as granted in a document:

Granted to:	City of Wilsonville
Purpose:	Temporary Construction Easement
Recording Date:	February 9, 2021
Recording No:	2021-013779

19. Any rights, interests, or claims which may exist or arise by reason of the following matters disclosed by survey,

Job No.:	470
Dated:	December 3, 2021
Last Revised:	December 20, 2021
Prepared by:	Northwest Surveying, Inc.
Matters shown:	

A. A ditch inlet is located outside of the storm drainage easement in the Southerly portion of the property up to 2.1 feet.

20. Please be advised that our search did not disclose any open Deeds of Trust of record. If you should have knowledge of any outstanding obligation, please contact the Title Department immediately for further review.

### EXHIBIT "D" (Liens and Encumbrances) (continued)

- 21. Existing leases and tenancies, if any, and any interests that may appear upon examination of such leases.
- 22. Personal property taxes, if any.

BOUNDARY DOCUMENTS <u>Partition Plat No. 1990-92</u> Deed 2001-009218 Deed 2010-40436 Deed 2022-043313

### DEFINITIONS, CONDITIONS AND STIPULATIONS

- 1. **Definitions.** The following terms have the stated meaning when used in this report:
  - (a) "Customer": The person or persons named or shown as the addressee of this report.
  - (b) "Effective Date": The effective date stated in this report.
  - (c) "Land": The land specifically described in this report and improvements affixed thereto which by law constitute real property.
  - (d) "Public Records": Those records which by the laws of the state of Oregon impart constructive notice of matters relating to the Land.

#### 2. Liability of Company.

- (a) This is not a commitment to issue title insurance and does not constitute a policy of title insurance.
- (b) The liability of the Company for errors or omissions in this public record report is limited to the amount of the charge paid by the Customer, provided, however, that the Company has no liability in the event of no actual loss to the Customer.
- (c) No costs (including without limitation attorney fees and other expenses) of defense, or prosecution of any action, is afforded to the Customer.
- (d) In any event, the Company assumes no liability for loss or damage by reason of the following:
  - (1) Taxes or assessments which are not shown as existing liens by the records of any taxing authority that levies taxes or assessments on real property or by the Public Records.
  - (2) Any facts, rights, interests or claims which are not shown by the Public Records but which could be ascertained by an inspection of the land or by making inquiry of persons in possession thereof.
  - (3) Easements, liens or encumbrances, or claims thereof, which are not shown by the Public Records.
  - (4) Discrepancies, encroachments, shortage in area, conflicts in boundary lines or any other facts which a survey would disclose.
  - (5) (i) Unpatented mining claims; (ii) reservations or exceptions in patents or in Acts authorizing the issuance thereof; (iii) water rights or claims or title to water.
  - (6) Any right, title, interest, estate or easement in land beyond the lines of the area specifically described or referred to in this report, or in abutting streets, roads, avenues, alleys, lanes, ways or waterways.
  - (7) Any law, ordinance or governmental regulation (including but not limited to building and zoning laws, ordinances or regulations) restricting, regulating, prohibiting or relating to (i) the occupancy, use or enjoyment of the land; (ii) the character, dimensions or location of any improvement now or hereafter erected on the land; (iii) a separation in ownership or a change in the dimensions or area of the land or any parcel of which the land is or was a part; or (iv) environmental protection, or the effect of any violation of these laws, ordinances or governmental regulations, except to the extent that a notice of the enforcement thereof or a notice of a defect, lien or encumbrance resulting from a violation or alleged violation affecting the land has been recorded in the Public Records at the effective date hereof.
  - (8) Any governmental police power not excluded by 2(d)(7) above, except to the extent that notice of the exercise thereof or a notice of a defect, lien or encumbrance resulting from a violation or alleged violation affecting the land has been recorded in the Public Records at the effective date hereof.
  - (9) Defects, liens, encumbrances, adverse claims or other matters created, suffered, assumed, agreed to or actually known by the Customer.
- 3. **Report Entire Contract.** Any right or action or right of action that the Customer may have or may bring against the Company arising out of the subject matter of this report must be based on the provisions of this report. No provision or condition of this report can be waived or changed except by a writing signed by an authorized officer of the Company. By accepting this form report, the Customer acknowledges and agrees that the Customer has elected to utilize this form of public record report and accepts the limitation of liability of the Company as set forth herein.
- 4. **Charge.** The charge for this report does not include supplemental reports, updates or other additional services of the Company.

### LIMITATIONS OF LIABILITY

"CUSTOMER" REFERS TO THE RECIPIENT OF THIS REPORT.

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

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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.

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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.

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END OF THE LIMITATIONS OF LIABILITY



June 2<sup>nd</sup>, 2022

PlanB Consultancy International, LLC Mike DiPasquale Between Industrial Way and SW Kinsman Road, 97070 971-284-1907 <u>mdipasquale@planbconsult.net</u>

RE: Tree inventory for the lot located between Industrial Way and SW Kinsman Road, 97070.

The information gathered in the site visit and discussed in the enclosed document will provide the necessary tree inventory information.

If you have any questions or concerns regarding this proposal, please contact me at (503) 710-0815. Thank you for choosing Arbor Pro!

Sincerely,

### Leigh Bourgeois

ISA Certified Arborist PN 8449A Tree Risk Assessment Qualified Member ISA – International Society of Arboriculture Mailing Address: 121 Foothills Rd, Lake Oswego, OR 97034





#### **Tree Inventory List:**

On May 26<sup>th</sup>, 2022, I visited the property located between Industrial Way and SW Kinsman Road, off SW Wilsonville Road, 97070. This is a vacant lot at the time being. The following is a conclusion of my findings. Most of the trees onsite are in good to fair condition, only needing annual pruning. Tree number 16 is in poor health, with a declining canopy. The rest of the trees are in good to fair condition.

Tree Number	Common Name	Species	DBH (Inches)	Condition
1	Red maple	Acer rubrum	1.5	Good
2	Red maple		2	Fair
3	Red maple		6	Good
4	Red maple		5.5	Good
5	Willow	Salix scouleriana	6	Good
6	Red oak	Quercus rubra	2	Good
7	Red maple		7	Good
8	Red maple		3.5	Good
9	Red maple		3	Good
10	Red maple		4	Good
11	Red maple		2.5	Good
12	Red maple		4.75	Good
13	Magnolia	Magnolia grandiflora	3.5	Good
14	Magnolia		4	Good
15	Douglas fir	Pseudotsuga menziesii	1.5	Good
16	Red maple		3	Poor
17	Douglas fir		1	Good
18	Douglas fir		2	Good
19	Red maple		3	Poor
20	Douglas fir		3	Good
21	Magnolia		5	Good
22	Magnolia		5.5	Good
23	Norway Maple	Acer platanoides	9	Good
24	Norway maple		6.5	Good
25	Norway maple		6	Good
26	Norway maple		6.5	Fair
27	Norway maple		6	Fair
28	Norway maple		7	Good
		•	•	•

email: info@arborpronw.com

TCIA

BBB

503 473 TREE (8733)

ASCA



29	Norway maple		5	Good
30	Norway maple		6	Good
31	Ponderosa pine	Pinus ponderosa	6.5	Good
32	Ponderosa pine		5	Good
33	Ponderosa pine		5	Good
34	White oak	Quercus alba	3	Good
35	Ponderosa pine		5	Good
36	Ponderosa pine		6	Good
37	Red alder	Alnus rubra	1	Good
38	Red alder		1	Good
39	Western red cedar	Thuja plicata	1	Good
40	Western red cedar		1	Good
41	Red alder		1	Good
42	Red maple		3	Fair



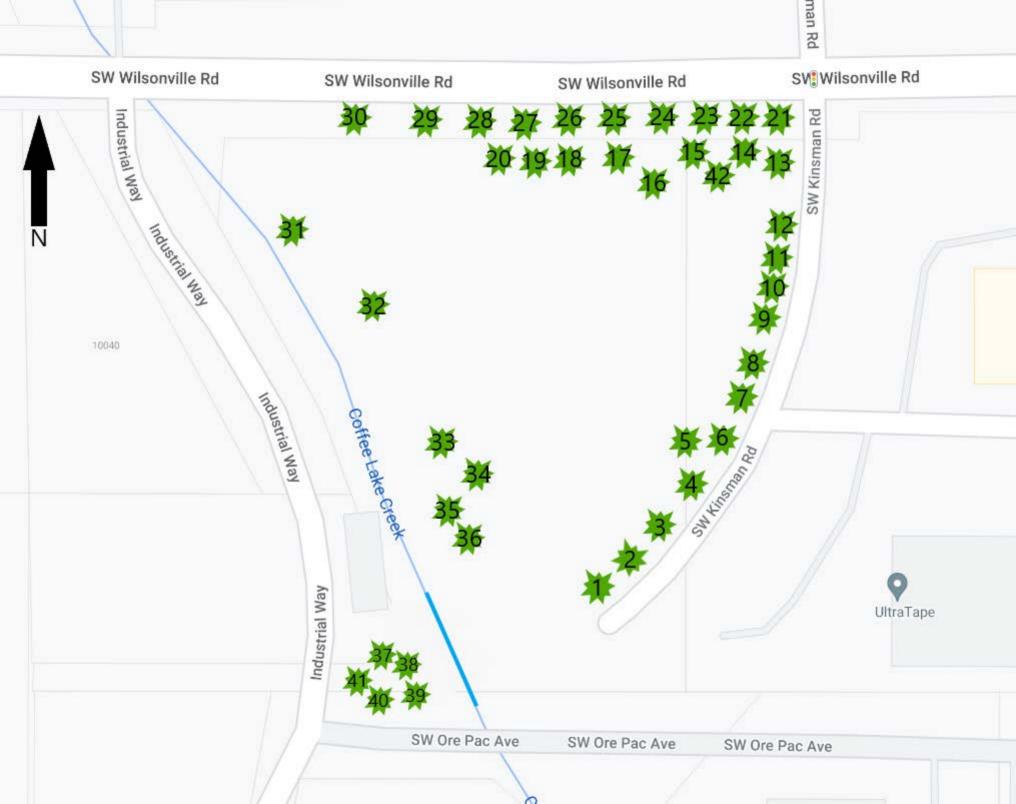


### **Assumptions and Limiting Conditions**

- 1. Any legal description provided to the consultant is assumed to be correct. Titles and ownerships to property are assumed to be good and marketable. No responsibility is assumed for legal matters.
- 2. Care has been taken to obtain all information from reliable sources. All data has been verified insofar as feasible; however, the consultant can neither guarantee nor be responsible for the accuracy of information provided by others.
- 3. The consultant shall not be required to give testimony or attend court by reason of this report unless subsequent contractual arrangements are made, including additional fees.
- 4. This report, and any values expressed herein, represents the opinion of the consultant, and the consultant fee is in no way contingent upon the reporting of a specified value, a stipulated result, the occurrence of a subsequent event, nor upon any finding to be reported.
- 5. Sketches, drawings, and photographs in this report are intended as visual aids and are probably not to scale. The reproduction of information generated by other consultants is for coordination and ease of reference. Inclusion of such information does not constitute a representation by the consulting arborist, as to the sufficiency or accuracy of the information.
- 6. Unless expressed otherwise, information in this report covers only items that were examined and reflects the condition of those items at the time of inspection. The inspection is limited to visual examination of accessible items without laboratory analysis, dissection, excavation, probing, or coring, unless otherwise stated.
- 7. There is no warranty or guarantee, expressed or implied, that problems or deficiencies of the plants or property in question may not arise in the future.
- 8. This report is the completed work product. Any additional work, including production of a site plan, addenda and revisions, construction of tree protection measure, tree work, or inspection of tree protection measures, for example, must be contracted separately.

Loss or alteration of any part of this report invalidates the entire report.







# WETLAND DELINEATION REPORT

November 13, 2023



**CIS Headquarters** Wilsonville, Oregon

Prepared for

CIS

Steven Norman

PO Box 1469

Lake Oswego, OR 97035

(503) 763-3890

Prepared by Ecological Land Services

1157 3rd Avenue, Suite 220A • Longview, WA 98632 (360) 578-1371 • Project Number 3688.02

# SIGNATURE PAGE

The information in this report was compiled and prepared under the supervision and direction of the undersigned.

m

Annie Jean Rendleman Biologist

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# **APPENDICES**

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# APPENDIX C – GROUND LEVEL COLOR PHOTOGRAPHS

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# **APPENDIX E – LITERATURE CITATIONS**

# **INTRODUCTION**

Ecological Land Services, Inc. (ELS) was contracted by CIS to complete a critical areas report on property in Wilsonville, Oregon. The site consists of Tax Lot 31W23B00100. The site is approximately 2.04 acres and is located at 9770 SW Wilsonville Rd., in Wilsonville, Oregon. The site is in Section 23, Township 3 South, and Range 1 West of the Willamette Meridian (Figure 1). This critical areas report was completed for the purpose of developing a headquarters facility for CIS on the site. Field work was conducted on January 25, 2022. This report summarizes ELS's findings in accordance with *Wilsonville Municipal Code (WMC) Section 4.139.00 Significant Overlay Resource Zone* (2023).

### A) LANDSCAPE SETTING AND LAND USE

The project site is situated north of the Willamette River and west of Interstate-5. Coffee Lake Creek flows southward along the western site boundary. The site is located within Hydrologic Unit Code (HUC) 170900070402, Coffee Lake Creek-Willamette River.

The site and tax lots to the north and east are zoned PDI (Planned Development Industrial). Tax lots are zoned R (Residential) to the west, FDAHI (Future Development Agricultural Holding Industrial) to the south, and PDC (Planned Development Commercial) to the east. The Willamette River lies approximately 0.5 miles south of the site. Southwest Wilsonville Road borders the site to the north, SW Industrial Way borders the site to the west, and SW Kinsman Road borders the site to the east (Figure 5). The site can be accessed via SW Kinsman Road in the southeastern portion of the site. One wetland, Wetland A, was delineated in the northern portion of the site. Coffee Lake Creek borders the site to the west and flows from north to south. An existing outfall structure and channel lies in the southwestern portion of the site. The site was historically used as a filbert orchard. No known structures have ever been onsite, other than the existing impervious surface (site access) in the southern portion of the site.

# Vegetation

Vegetation found within test plots are documented on the attached wetland determination data forms (Appendix B). The indicator status, which follows the scientific names of species within the test plots, indicates the likelihood of the species to be found in wetlands. A description of the indicator status categories is listed in Appendix D.

# Uplands

Onsite upland test plots were dominated by **trees**: Ponderosa pine (*Pinus ponderosa*, FACU); **herbs**: hairy cat's-ear (*Hypochaeris radicata*, FACU), Kentucky bluegrass (*Poa pratensis*, FAC), tall fescue (*Festuca arundinacea*, FAC), reed canary grass (*Phalaris arundinacea*, FACW), creeping buttercup (*Ranunculus repens*, FAC), dove foot geranium (*Geranium molle*, UPL), bedstraw (*Galium aparine*, FACU), English plantain (*Plantago lanceolata*, FACU), scotch broom (*Cytisus scoparius*, UPL), and common vetch (*Vicia sativa*, UPL); and **woody vines**: Himalayan blackberry (*Rubus armeniacus*, FAC).

# Wetland

Onsite wetland test plots were dominated by **herbs**: tall fescue (*Festuca arundinacea*, FAC), reed canary grass (*Phalaris arundinacea*, FACW), bedstraw (*Galium aparine*, FACU), and soft rush (*Juncus effusus*, FACW).

# Soils

The U.S.D.A. Natural Resource Conservation Service Soil Survey website (NRCS 2023A) designates the soils onsite as Latourell loam, 3 to 8 percent slopes (53B), and Willamette silt loam, gravelly substratum, 0 to 3 percent slopes (87A; Figure 4). Both soil profiles are characterized as well-drained soils with an average depth to water table of more than 80 inches below ground surface (BGS). Both soil profiles are generally found on terraces. A typical profile of Latourell loam, 3 to 8 percent slopes, consists of loam from 0 to 48 inches BGS and gravelly sandy loam from 48 to 60 inches BGS. A typical profile of Willamette silt loam, gravelly substratum, 0 to 3 percent slopes, consists of silt loam from 0 to 36 inches BGS, silty clay loam from 36 to 40 inches BGS, and very gravelly loam from 40 to 60 inches BGS. Neither soil profile is considered to be hydric (NRCS 2023B).

Evaluated soils consisted of loam, silty loam, and loamy peat. The primary hydric soil indicator Depleted Matrix was found in Test Plots 2 and 6. The attached wetland determination data forms can be found in Appendix B.

# **B) SITE ALTERATIONS**

The site is zoned as PDI (Planned Development Industrial). The majority of the site consists of open field, with Coffee Lake Creek bordering the site to the west. An existing outfall and stormwater structure are located in the southern portion of the site. Per the City of Wilsonville, the existing outfall and stormwater structure will be used for this development. One small wetland, Wetland A, was delineated in the northern portion of the site. Wetland A is depressional, emergent, and totals 768 square feet. The site was historically used as a filbert farm, and no standing structures onsite.

# C) PRECIPITATION DATA AND ANALYSIS

Precipitation data was gathered from the WETS Station in Oregon City and is summarized in the table below from data in Appendix D. Rainfall in October of 2021 was notably high, at 73 percent above the monthly average. Please note that the data shown in the table below for January 2022 includes the entire month, although the site visit was conducted on January 25<sup>th</sup>.

# Table 1. Precipitation Data.

	Precipitation								
Date of Site Visit	2 Weeks Prior (inches)	3 Months Prior			Average	Average			
		Month	Monthly Average <sup>1</sup> (inches)	Monthly Total (inches)	Deviation from Average	30% Below (inches)	30% Above (inches)		
1/25/22	0.18	10/2021	4.20	7.26	+73%	2.68	5.06		
		11/2021	6.29	5.92	-6%	4.36	7.48		
		12/2021	7.14	6.64	-7%	5.11	8.44		
		01/2022	6.25	6.06	-3%	4.29	7.45		

<sup>1</sup> Based on 1992-2022 data.

# D) METHODS

Field work was conducted on January 25, 2022, following the Routine Determination Method according to the U.S. Army Corps of Engineers, *Wetland Delineation Manual* (Environmental Laboratory 1987) and the *Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Western Mountains, Valleys, and Coast Region (Version 2.0)* (U.S. Army Corps of Engineers 2010). Vegetation, soils, and hydrology data were collected from 8 test plots to verify the presence or absence of wetlands. Test plot locations were selected based on soil survey data, historic aerial photographs, and changes in topography and vegetation. ELS field data can be found on the attached wetland determination data forms (Appendix B). ELS delineated the OHWM of a portion of the eastern side of Coffee Lake Creek onsite using guidance from the Washington State Department of Ecology (Ecology) publication *Determining the Ordinary High Water Mark for Shoreline Management Act Compliance in Washington State* (Ecology Publication No. 16-06-029). ELS flagged and mapped the test plot, wetland boundary, and ordinary high water mark (OHWM) locations with a hand-held GPS unit that achieves sub-meter accuracy under ideal conditions. Flags were subsequently professionally surveyed by Mackenzie Inc.

# E) DESCRIPTION OF ALL WETLANDS AND OTHER NON-WETLAND WATERS

# Wetland A

One wetland, Wetland A, was delineated in the northern portion of the site. Wetland A is an emergent, depressional wetland totaling 768 square feet.

# Coffee Lake Creek

Coffee Lake Creek borders the site to the west and flows from north to south. It originates in the Tualatin-Sherwood area and flows south through Wilsonville to the Willamette River. The portion of Coffee Lake creek onsite as observed during the site visit was 1 to 3 feet deep with a cobble creek bed and ranged from 4 to 12 feet wide.

According to *Wilsonville Municipal Code (WMC) Section 4.139.00 Significant Overlay Resource Zone* (2023), Coffee Lake Creek is a primary protected water feature. Primary protected water features include all perennial streams and streams draining greater than 100 acres, Title 3 wetlands, and natural lakes and springs. Because Coffee Lake Creek has adjacent slopes of less than 25 percent, a vegetated corridor of 50 feet is required (*WMC Section 4.139.00, Table NR-1: Metro Water Quality Resource Area Slope Calculations*). According to *WMC 4.139.5*, an additional 25-foot impact area is designated adjacent to the outer boundary of the SROZ (Figures 5 and 6).

# F) DEVIATION FROM NWI AND LWI

Figure 3A shows the National Wetlands Inventory (NWI) mapping for the site and surrounding area (USFWS 2023). There is an offsite channel to the west of the site that loosely follows Coffee Lake Creek mapped by NWI as a Freshwater Forested/Shrub Wetland - palustrine, forested, broad-leaved deciduous, and seasonally flooded (PFO1C). Figure 3B shows the City of Wilsonville wetland mapping which also shows an offsite channel to the west of the site that loosely follows Coffee Lake Creek and is marked as a Significant Resource Overlay Zone (SROZ) Stream and Significant Wetland. ELS's assessment partially differs from these maps as the OHWM of the east side of Coffee Lake Creek was delineated onsite.

# H) ADDITIONAL INFORMATION

Precipitation data, vegetation information, and wetland determination methodology are located in Appendix D.

# I) RESULTS AND CONCLUSIONS

ELS biologists delineated one wetland, Wetland A onsite. The proposed plan avoids impacts to Wetland A, as grading and development will occur outside the wetland boundary.

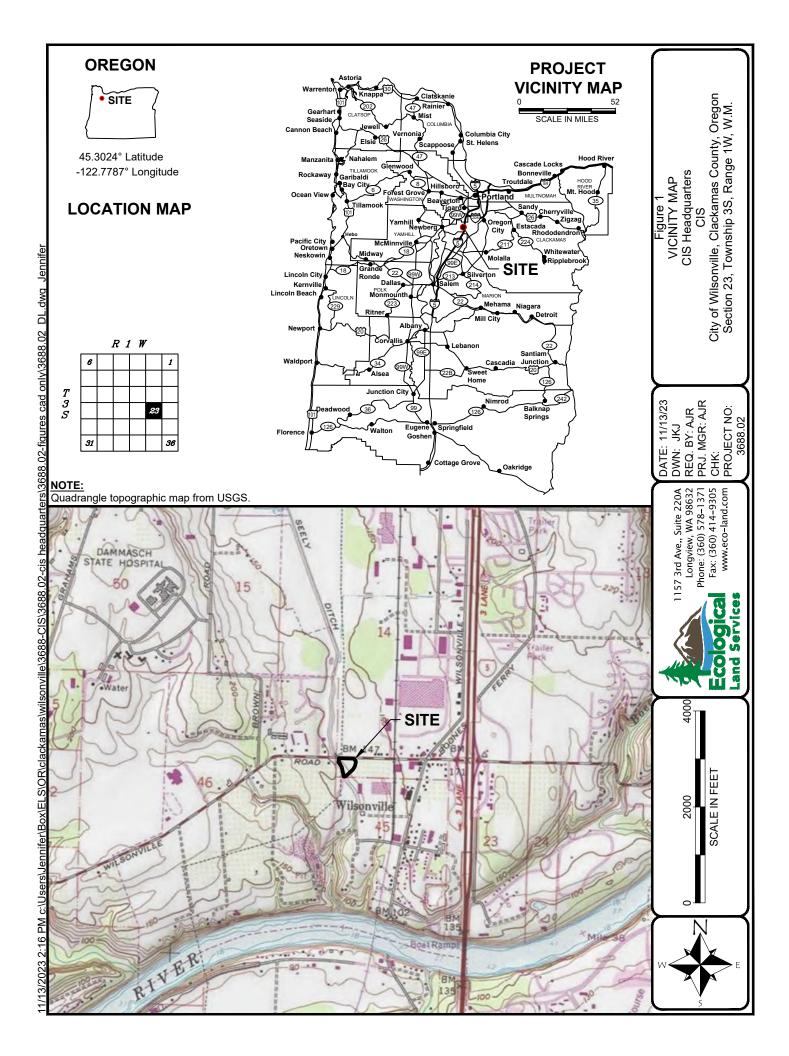
Coffee Lake Creek is located on the western site boundary and has a 50-foot SROZ with an additional 25-foot impact area (*WMC 4.139.00*; Figure 5). The southernmost portion of the onsite impact area consists of existing impervious surface. The remainder of the onsite impact area consists of open field dominated by invasive plant species, particularly Himalayan blackberry and reed canary grass. Trees and shrubs will not be removed from the impact area. Because of the lack of interspersion of plant communities, lack of habitat features, and limited hydrologic functions, the onsite impact area is considered to have low ecological value.

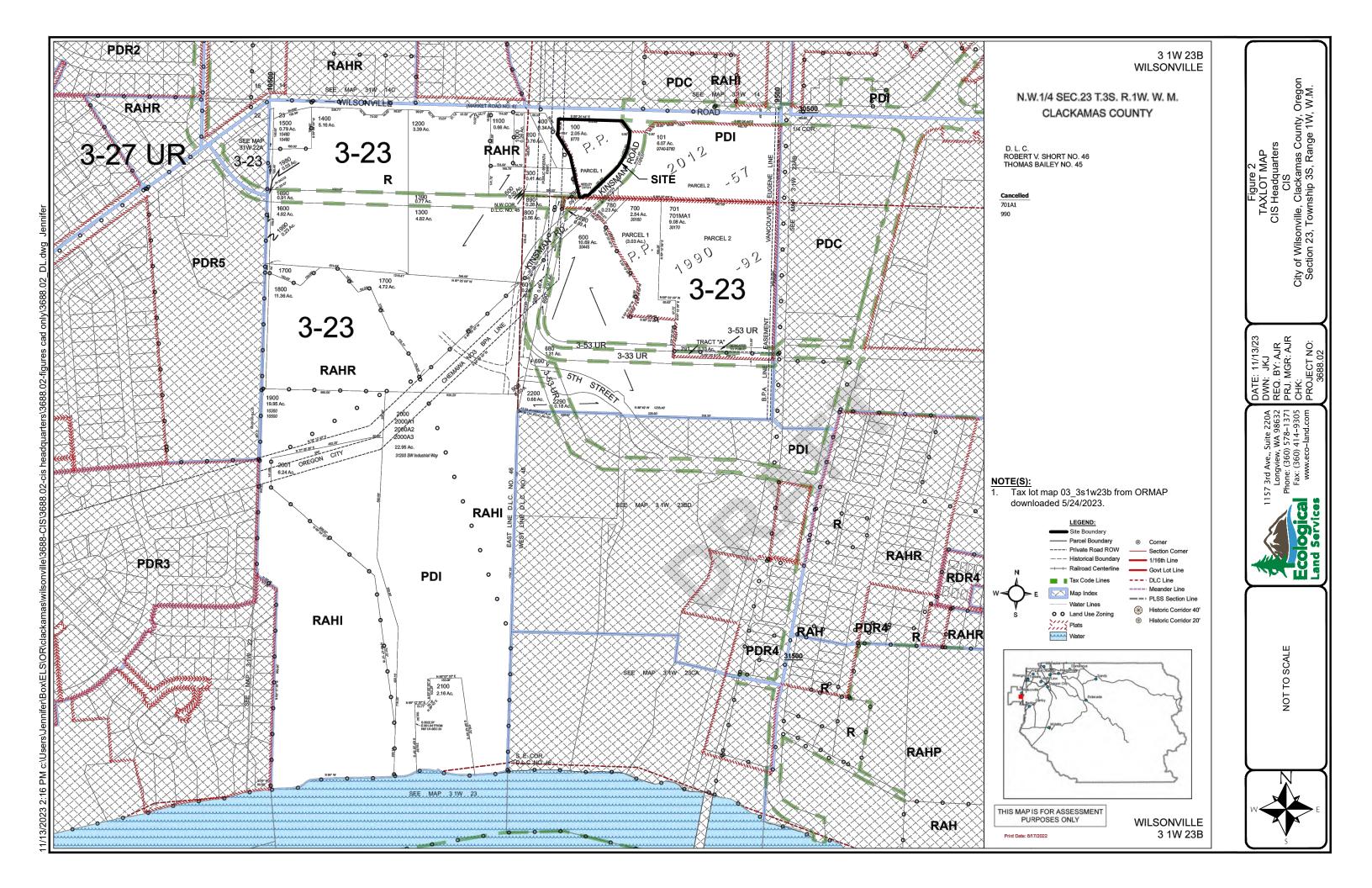
The grading required to create the stormwater swale will result in disturbance within the 50-foot SROZ. Disturbance is expected to be minimal and appropriate best management practices will be implemented, such as installing silt fencing and other measures to control sedimentation and additional ground disturbance. All exposed areas will be immediately reseeded with native plant species. Installed plants within the swale will increase sediment trapping and particulate retention functions. Overall, the stormwater swale will improve onsite infiltration and flood storage functions compared to the existing conditions and will, therefore, serve as mitigation for the disturbance within the SROZ.

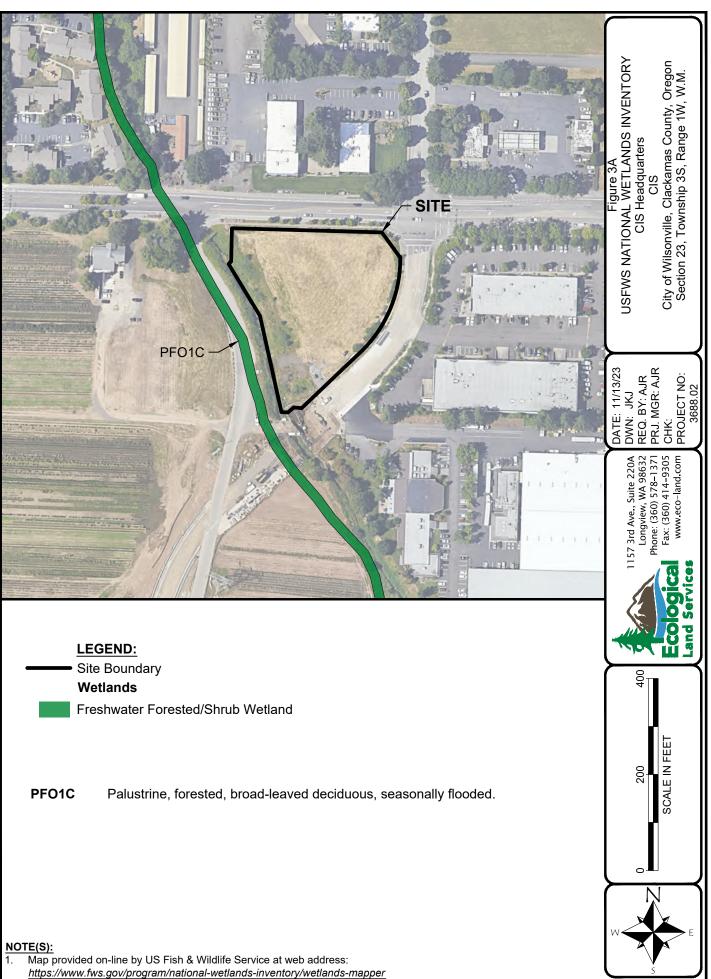
# J) DISCLAIMER

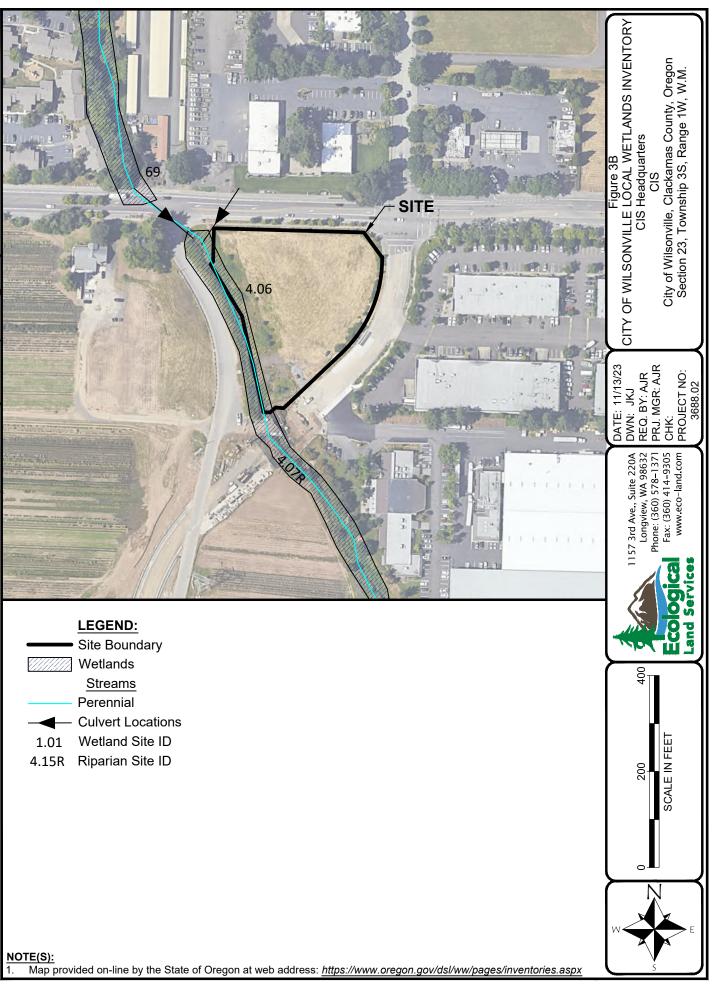
This report documents the investigation, best professional judgment, and conclusions of Ecological Land Services, Inc. It is correct and complete to the best of our knowledge. It should be considered a Preliminary Jurisdictional Determination of wetlands and other waters, and used at your own risk until it has been reviewed and approved in writing by the Oregon Department of State Lands in accordance with OAR 141-090-0005 through 141-090-0055.

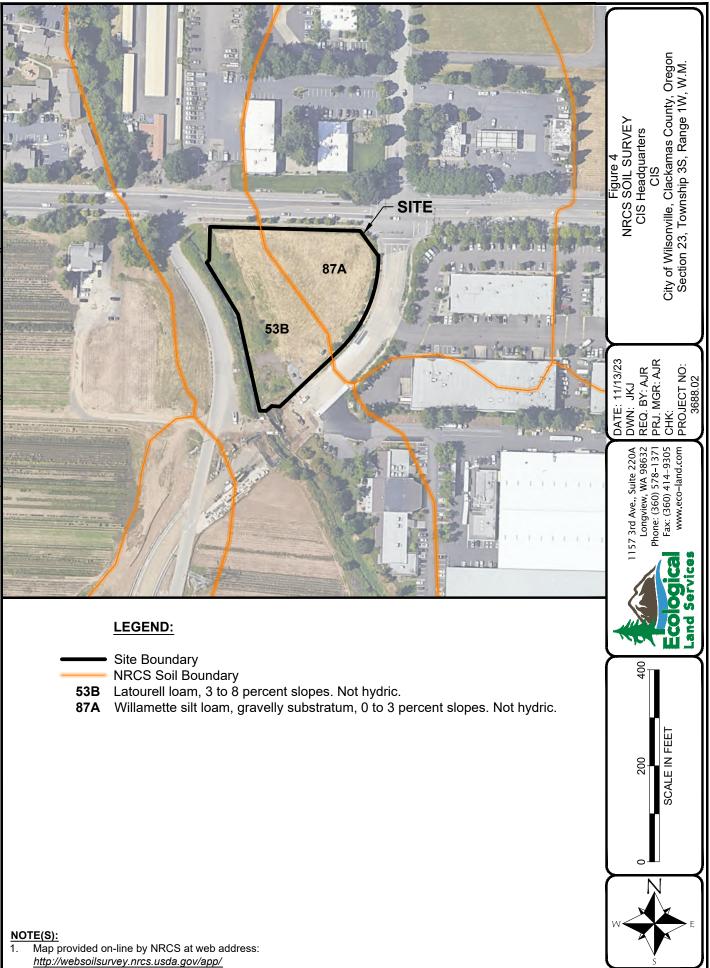
APPENDIX A – MAPS



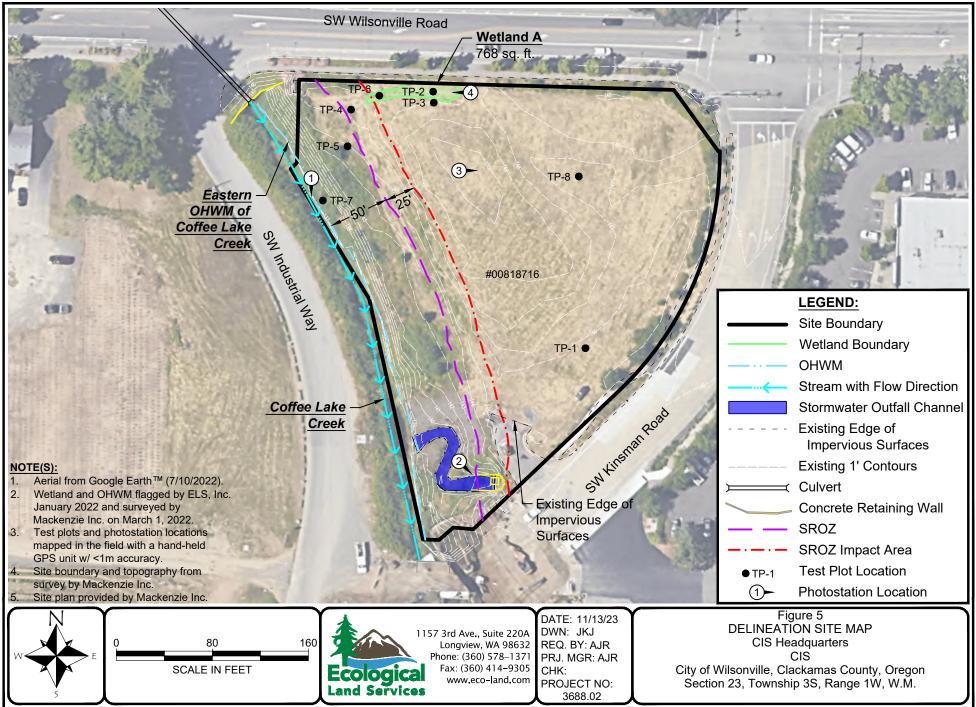




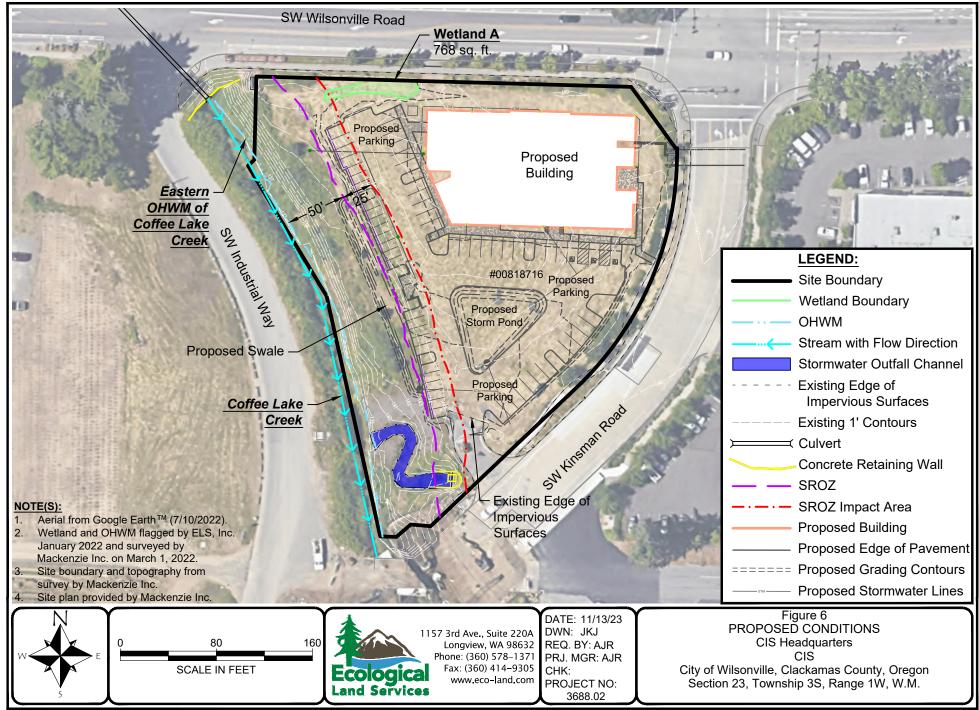




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# APPENDIX B – WETLAND DETERMINATION DATA FORMS

Project/Site: CIS Hea	City/Co	ounty: Wilso	onville			Sampling Date:	1/25/2022			
Applicant/Owner:	CIS						State:	WA	Sampling Point:	TP1
Investigator(s): Huffn	nan, Coli			Section	, Township,	Range:	S23, T3	3S, R1W		
Landform (hillside, te	errace, etc.):	Terrace		Local relief	(concave, co	onvex, no	one): C	Convex	Slop	oe (%): <u>3-8</u>
Subregion (LRR):	LRR A	Lat:	45.3022082		Long:	-122.77	8534		Datum:	NAD83
Soil Map Unit Name:	Latourell loa	am, 3 to 8 per	cent slopes				N	WI classifi	cation: None	
Are climatic / hydrold	ogic conditior	ns on the site t	ypical for this time	e of year?	Yes X	No		(If no, exp	lain in Remarks.)	
Are Vegetation	, Soil	, or Hydrology	significant	ly disturbed?	Are "Norma	al Circum	stances	" present?	Yes <u>X</u> No	)
Are Vegetation	, Soil	, or Hydrology	naturally p	oroblematic?	(If needed,	explain a	any ansv	vers in Ren	narks.)	
SUMMARY OF I	FINDINGS	– Attach s	ite map show	/ing sampli	ng point	locatio	ons, tra	ansects,	important feat	ures, etc.

Remarks:

TP1 was located in the southeast section of the parcel. Because all three indicators were not met, the test plot is considered to be within uplands.

	Absolute	Dominant	Indicator	
Tree Stratum (Plot size: 30')	% Cover	Species?	Status	Dominance Test worksheet:
1				Number of Dominant Species That
2				Are OBL, FACW, or FAC: 2 (A)
3				Total Number of Dominant Species
4				Across All Strata: <u>2</u> (B)
		=Total Cover		Percent of Dominant Species That
Sapling/Shrub Stratum (Plot size: 15')				Are OBL, FACW, or FAC: 100.0% (A/B)
1				
2				Prevalence Index worksheet:
3				Total % Cover of: Multiply by:
4				OBL species x 1 =
5				FACW species x 2 =
		=Total Cover		FAC species x 3 =
Herb Stratum (Plot size: 5')				FACU species x 4 =
1. Festuca arundinacea	40	Yes	FAC	UPL species x 5 =
2. Phalaris arundinacea	30	Yes	FACW	Column Totals: (A) (B)
3. Poa pratensis	10	No	FAC	Prevalence Index = B/A =
4. Geranium lucidum	10	No	UPL	
5. Hypochaeris radicata	5	No	FACU	Hydrophytic Vegetation Indicators:
6. Ranunculus repens	5	No	FAC	1 - Rapid Test for Hydrophytic Vegetation
7.				X 2 - Dominance Test is >50%
8.				3 - Prevalence Index is ≤3.0 <sup>1</sup>
9.				4 - Morphological Adaptations <sup>1</sup> (Provide supporting
10				data in Remarks or on a separate sheet)
11				5 - Wetland Non-Vacular Plants <sup>1</sup>
	100	=Total Cover		Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)
Woody Vine Stratum (Plot size: 15')				<sup>1</sup> Indicators of hydric soil and wetland hydrology must
1.				be present, unless disturbed or problematic.
2.				Hydrophytic
		=Total Cover		Vegetation
% Bare Ground in Herb Stratum 0				Present? Yes X No
Remarks:				

SOIL

	Matrix			K Features	- 1	. 2	_		
(inches)	Color (moist)	<u>%</u> C	olor (moist)	<u>%</u> T	<sup>1</sup> Type <sup>1</sup>	Loc <sup>2</sup>		ture	Remarks
0-16	10YR 3/3	70					Loamy	/Clayey	
	10YR 3/4	30		<u> </u>			1		
							,		
	oncentration, D=Depl					ated Sa	and Grains.		on: PL=Pore Lining, M=Matrix.
-	Indicators: (Applica	ble to all LRR			ed.)				for Problematic Hydric Soils <sup>3</sup> :
Histosol		-	Sandy Rec	. ,					luck (A10)
	pipedon (A2)	-	Stripped M						arent Material (F21)
Black Histic (A3) Loamy Mucky Mineral (F1) (exce					except	MLRA 1)		hallow Dark Surface (F22)	
	n Sulfide (A4)	. (		yed Matrix	(F2)			Other (	Explain in Remarks)
	d Below Dark Surface ark Surface (A12)	(ATT) -	Depleted N	k Surface (l	(E6)				
	lucky Mineral (S1)	-		ark Surface	. ,			<sup>3</sup> Indicators	of hydrophytic vegetation and
	Mucky Peat or Peat (S		Redox Dep						d hydrology must be present,
2.5 cm k	•				0)				disturbed or problematic.
Sandv G	Bleved Matrix (S4)								
	Bleyed Matrix (S4)							uniess	
Restrictive I	Bleyed Matrix (S4) Layer (if observed):							uniess	
Restrictive I Type:	Layer (if observed):						Hydric S		
Restrictive I Type: Depth (ir	Layer (if observed):						Hydric S	oil Present?	
Restrictive I Type:	Layer (if observed):						Hydric S		
Restrictive I Type: Depth (ir	Layer (if observed):						Hydric S		
Restrictive I Type: Depth (ir	Layer (if observed):						Hydric S		
Restrictive I Type: Depth (ir Remarks:	Layer (if observed):						Hydric S		
Restrictive I Type: Depth (ir Remarks:	Layer (if observed): nches):						Hydric S		
Restrictive I Type: Depth (ir Remarks: HYDROLO Wetland Hyd	Layer (if observed): hches): OGY drology Indicators:		chock all that a				Hydric S	oil Present?	YesNo
Restrictive I Type: Depth (ir Remarks: HYDROLO Wetland Hyd Primary Indic	Layer (if observed): nches): DGY drology Indicators: cators (minimum of o	ne is required;			s (R9) (			oil Present?	Yes No No
Restrictive I Type: Depth (ir Remarks: HYDROLO Wetland Hyd Primary Indic Surface	DGY drology Indicators: cators (minimum of o Water (A1)	ne is required;	Water-Stai	ned Leaves	( )	•		oil Present?	Yes No No Indicators (2 or more required) Stained Leaves (B9) (MLRA 1, 2
Restrictive I Type: Depth (ir Remarks: HYDROLO Wetland Hyd Primary India Surface High Wa	Ager (if observed): hches): OGY drology Indicators: cators (minimum of o Water (A1) ater Table (A2)	ne is required;	Water-Stai MLRA	ned Leaves 1, 2, 4A, an	( )	•		oil Present?	Yes No No Indicators (2 or more required) Stained Leaves (B9) (MLRA 1, 2 and 4B)
Restrictive I Type: Depth (ir Remarks: HYDROLO Wetland Hyd Primary India Surface High Wa Saturatio	Ager (if observed): hches): OGY drology Indicators: cators (minimum of o Water (A1) ater Table (A2) on (A3)	ne is required;	Water-Stai MLRA <sup>2</sup> Salt Crust	ned Leaves 1, 2, 4A, an (B11)	nd 4B)	•		oil Present? Secondary Water- 4A, Drainag	Yes No Indicators (2 or more required) Stained Leaves (B9) (MLRA 1, 2 and 4B) ge Patterns (B10)
Restrictive I Type: Depth (ir Remarks: HYDROLO Wetland Hyd Primary Indio Surface High Wa Saturatic Water M	DGY drology Indicators: cators (minimum of o Water (A1) ater Table (A2) on (A3) larks (B1)	ne is required;	Water-Stai MLRA Salt Crust Aquatic Inv	ned Leaves I, 2, 4A, an (B11) vertebrates	nd <b>4B</b> ) (B13)	•		oil Present? Secondary Water- 4A, Drainaq Dry-Se	Yes No Indicators (2 or more required) Stained Leaves (B9) (MLRA 1, 2 and 4B) ge Patterns (B10) ason Water Table (C2)
Restrictive I Type: Depth (ir Remarks: HYDROLO Wetland Hyd Primary India Surface High Wa Saturatic Water M Sedimer	Ager (if observed): hches): OGY drology Indicators: cators (minimum of o Water (A1) ater Table (A2) on (A3)	ne is required;	Water-Stai	ned Leaves 1, 2, 4A, an (B11)	(B13) or (C1)	· •		oil Present?  Secondary Water- 4A, Drainag Dry-Se Saturat	Yes No Indicators (2 or more required) Stained Leaves (B9) (MLRA 1, 2 and 4B) ge Patterns (B10)
Restrictive I Type: Depth (ir Remarks: HYDROLO Wetland Hyo Primary Indio Surface High Wa Saturatio Water M Sedimer Drift Dep	DGY drology Indicators: cators (minimum of o Water (A1) ater Table (A2) on (A3) larks (B1) nt Deposits (B2)	ne is required;	Water-Stai	ned Leaves <b>I, 2, 4A, an</b> (B11) vertebrates Sulfide Odo hizosphere	(B13) or (C1) or L	iving Ro		oil Present? Secondary Water- 4A, Drainaq Dry-Se Saturat Geomo	Yes No Indicators (2 or more required) Stained Leaves (B9) (MLRA 1, 2 and 4B) ge Patterns (B10) ason Water Table (C2) tion Visible on Aerial Imagery (CS
Restrictive I Type: Depth (ir Remarks: HYDROLO Wetland Hyo Primary Indio Surface High Wa Saturatio Water M Sedimer Drift Dep Algal Ma	Ager (if observed): hches): DGY drology Indicators: cators (minimum of o Water (A1) ater Table (A2) on (A3) larks (B1) ht Deposits (B2) posits (B3)	ne is required;	Water-Stai MLRA Salt Crust Aquatic Inv Hydrogen 3 Oxidized R Presence o	ned Leaves <b>I, 2, 4A, an</b> (B11) vertebrates Sulfide Odo hizosphere	(B13) (B13) or (C1) es on L I Iron (C	iving Ro	t bots (C3)	oil Present?	Yes No Indicators (2 or more required) Stained Leaves (B9) (MLRA 1, 2 and 4B) ge Patterns (B10) ason Water Table (C2) tion Visible on Aerial Imagery (CS orphic Position (D2)
Restrictive I Type: Depth (ir Remarks: HYDROLO Wetland Hyd Primary India Surface High Wa Saturatic Water M Sedimer Drift Dep Algal Ma Iron Dep	Ager (if observed): hches): OGY drology Indicators: cators (minimum of o Water (A1) ater Table (A2) on (A3) larks (B1) ht Deposits (B2) posits (B3) at or Crust (B4)	ne is required;	Water-Stai MLRA Salt Crust Aquatic Inv Hydrogen 3 Oxidized R Presence o	ned Leaves <b>I, 2, 4A, an</b> (B11) vertebrates Sulfide Odo hizosphere of Reduced n Reductior	(B13) (B13) or (C1) es on L I Iron (C n in Till	iving Ro C4) ed Soil:	t boots (C3) s (C6)	oil Present?	Yes No Indicators (2 or more required) Stained Leaves (B9) (MLRA 1, 2 and 4B) ge Patterns (B10) ason Water Table (C2) tion Visible on Aerial Imagery (CS orphic Position (D2) w Aquitard (D3)
Restrictive I Type: Depth (ir Remarks: HYDROLO Wetland Hyd Primary India Surface High Wa Saturatic Water M Sedimer Drift Dep Algal Ma Iron Dep Surface	Ager (if observed): hches): OGY drology Indicators: cators (minimum of o Water (A1) ater Table (A2) on (A3) larks (B1) ht Deposits (B2) posits (B3) at or Crust (B4) posits (B5)	-	Water-Stai MLRA Salt Crust Aquatic Inv Hydrogen Oxidized R Presence o Recent Iro	ned Leaves <b>I, 2, 4A, an</b> (B11) vertebrates Sulfide Odo hizosphere of Reduced n Reductior Stressed P	(B13) (B13) or (C1) es on L I Iron (C n in Till Plants (	iving Ro C4) ed Soil:	t boots (C3) s (C6)	oil Present?	Yes No <u>Indicators (2 or more required)</u> Stained Leaves (B9) (MLRA 1, 2 and 4B) ge Patterns (B10) ason Water Table (C2) tion Visible on Aerial Imagery (CS orphic Position (D2) w Aquitard (D3) eutral Test (D5)

Surface Water Present?	Yes	No	Х	Depth (inches):		
Water Table Present?	Yes	No	Х	Depth (inches):		
Saturation Present?	Yes	No	Х	Depth (inches):	Wetland Hydrology Present?	Yes
(includes capillary fringe)		- ·				
Describe Recorded Data (s	tream dauge	monitoring	well.	aerial photos, previous inspecti	ons) if available:	

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

No X

Project/Site: CIS Hea	City/Co	ounty: Wilsonville	е		Sampling Date:	1/25/2022			
Applicant/Owner:	CIS					State:	WA	Sampling Point:	TP2
Investigator(s): Huffn	man, Coli			Section	, Township, Rang	ge: <u>S23, <sup>-</sup></u>	T3S, R1W		
Landform (hillside, te	errace, etc.):	Terrace		Local relief	(concave, conve>	x, none):	Concave	Slop	pe (%): 0-3
Subregion (LRR):	LRR A	Lat:	45.3027847		Long: -12	2.7790506		Datum:	NAD83
Soil Map Unit Name:	Willamette	silt loam, grave	elly substratum, C	) to 3 percent s	slopes		NWI classi	fication: None	
Are climatic / hydrold	ogic conditior	ns on the site ty	pical for this time	e of year?	Yes X	No	(If no, exp	olain in Remarks.)	
Are Vegetation	, Soil	, or Hydrology	significant	ly disturbed?	Are "Normal Cir	cumstance	es" present?	Yes <u>X</u> No	0
Are Vegetation	, Soil	, or Hydrology	naturally p	problematic?	(If needed, expl	ain any an	swers in Re	marks.)	
		A 44 la	4			-4: 4			

#### SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes	Х	No	Is the Sampled Area			
Hydric Soil Present?	Yes	Х	No	within a Wetland?	Yes	Х	No
Wetland Hydrology Present?	Yes	Х	No		_		

Remarks:

TP2 was located in the northern section of the site, in Wetland A. Because all three indicators were met, the test plot is considered to be within a wetland.

	Absolute	Dominant	Indicator		
Tree Stratum (Plot size: 30')	% Cover	Species?	Status	Dominance Test worksheet:	
1				Number of Dominant Species Tha	t
2				Are OBL, FACW, or FAC:	<u> </u>
3				Total Number of Dominant Specie	S
4				Across All Strata:	<u> </u>
		=Total Cover		Percent of Dominant Species Tha	t
Sapling/Shrub Stratum (Plot size: 15')				Are OBL, FACW, or FAC:	<u>100.0%</u> (A/B
1					
2				Prevalence Index worksheet:	
3.				Total % Cover of:	Multiply by:
4.				OBL species x 1	=
5.					=
		=Total Cover			=
Herb Stratum (Plot size: 5')					=
1. Phalaris arundinacea	80	Yes	FACW		=
2. Juncus effusus	10	No	FACW	Column Totals: (A)	
3. Galium aparine	5	No	FACU	Prevalence Index = $B/A$ =	
4.					
F				Hydrophytic Vegetation Indicate	ors:
6.				1 - Rapid Test for Hydrophytic	
7.				X 2 - Dominance Test is >50%	0
8.				3 - Prevalence Index is ≤3.0 <sup>1</sup>	
9.				4 - Morphological Adaptations	<sup>1</sup> (Provide supporting
				data in Remarks or on a se	
10 11.				5 - Wetland Non-Vacular Plar	
11	95	=Total Cover		Problematic Hydrophytic Vege	
Woody Vine Stratum (Plot size: 15')				<sup>1</sup> Indicators of hydric soil and wetla	
1,				be present, unless disturbed or pre-	
2.				Hydrophytic	
		=Total Cover		Vegetation	
% Bare Ground in Herb Stratum 5				•	lo
Remarks:					

Profile Desc	ription: (Describe	to the dept	th needed to doc	ument tl	he indica	tor or co	onfirm the absence of	indicators.)
Depth	Matrix		Redo	x Featur	res			
(inches)	Color (moist)	%	Color (moist)	%	Type <sup>1</sup>	Loc <sup>2</sup>	Texture	Remarks
0-6	10YR 3/2	100					Loamy/Clayey	
6-10	10YR 4/1	100					Loamy/Clayey	
10-16	10YR 5/1	92	7.5YR 4/6	8			Loamy/Clayey	
<sup>1</sup> Type: C=Cc	oncentration, D=Depl	letion RM=	Reduced Matrix (	S=Cove	ered or Co	bated Sa	nd Grains <sup>2</sup> Locati	ion: PL=Pore Lining, M=Matrix.
	ndicators: (Applica							of or Problematic Hydric Soils <sup>3</sup> :
Histosol			Sandy Re		,			Muck (A10)
Histic Ep	ipedon (A2)		Stripped N	Aatrix (Se	6)		Red Pa	arent Material (F21)
Black His	stic (A3)		Loamy Mu	icky Min	eral (F1) (	except	MLRA 1) Very S	Shallow Dark Surface (F22)
Hydrogei	n Sulfide (A4)		Loamy Gl	eyed Ma	trix (F2)		Other	(Explain in Remarks)
Depleted	Below Dark Surface	e (A11)	X Depleted	Matrix (F	3)			
Thick Da	rk Surface (A12)		Redox Da	rk Surfac	ce (F6)			
Sandy M	ucky Mineral (S1)		Depleted	Dark Sur	face (F7)		<sup>3</sup> Indicators	of hydrophytic vegetation and
2.5 cm N	lucky Peat or Peat (	S2) (LRR G	i) Redox De	pression	s (F8)		wetlan	d hydrology must be present,
Sandy G	leyed Matrix (S4)						unless	disturbed or problematic.
Restrictive L	ayer (if observed):							
Type:								
Depth (in	iches):						Hydric Soil Present?	Yes <u>X</u> No
Remarks:								

#### HYDROLOGY

Wetland Hydrology Indicators:				
Primary Indicators (minimum of one is required	Secondary Indicators (2 or more required)			
Surface Water (A1)	Water-Stained Leaves (B9) (except	Water-Stained Leaves (B9) (MLRA 1, 2		
High Water Table (A2)	<b>4A, and 4B</b> )			
X Saturation (A3)	Drainage Patterns (B10)			
Water Marks (B1)	Dry-Season Water Table (C2)			
Sediment Deposits (B2)	Saturation Visible on Aerial Imagery (C9)			
Drift Deposits (B3)	(C3) X Geomorphic Position (D2)			
Algal Mat or Crust (B4)	Shallow Aquitard (D3)			
Iron Deposits (B5)	6) FAC-Neutral Test (D5)			
Surface Soil Cracks (B6)	A) Raised Ant Mounds (D6) (LRR A)			
Inundation Visible on Aerial Imagery (B7)	Other (Explain in Remarks)	Frost-Heave Hummocks (D7)		
Sparsely Vegetated Concave Surface (B8)		—		
Field Observations:				
Surface Water Present? Yes	No X Depth (inches):			
Water Table Present? Yes X	No Depth (inches): 15			
Saturation Present? Yes X	No Depth (inches): 0	Wetland Hydrology Present? Yes X No		
(includes capillary fringe)		· · · · · · · · · · · · · · · · · · ·		
Describe Recorded Data (stream gauge, monito	oring well, aerial photos, previous inspections	s), if available:		
Remarks:				

Project/Site: CIS Hea	City/County: Wilsonville					Sampling Date:	1/25/2022			
Applicant/Owner:	CIS					Sta	ate:	WA	Sampling Point:	TP3
Investigator(s): Huffn	nan, Coli			Section	, Township, R	ange: <u>S2</u>	23, T3	8S, R1W		
Landform (hillside, te	errace, etc.): Te	errace		Local relief	(concave, con	ivex, none)	): <u>C</u>	onvex	Slop	be (%): 0-3
Subregion (LRR):	LRR A	Lat:	45.3027594		Long:	-122.77904	175		Datum:	NAD83
Soil Map Unit Name:	Willamette silt	loam, grave	ly substratum, (	) to 3 percent s	lopes		N	WI classifi	cation: None	
Are climatic / hydrolo	ogic conditions of	on the site ty	pical for this tim	e of year?	Yes X	No		(If no, exp	lain in Remarks.)	
Are Vegetation	, Soil, c	or Hydrology	significan	tly disturbed?	Are "Normal	Circumsta	nces	" present?	Yes <u>X</u> Ne	00
Are Vegetation	, Soil, c	or Hydrology	naturally	problematic?	(If needed, e	xplain any	ansv	vers in Ren	narks.)	
		• · · • •								

#### SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes	х	No		Is the Sampled Area			
Hydric Soil Present?	Yes		No	Х	within a Wetland?	Yes	No	Х
Wetland Hydrology Present?	Yes		No	Х			-	

Remarks:

TP3 was located in the northern section of the site, upslope of Test Plot 2. Because all three indicators were not met, the test plot is considered to be upland.

#### **VEGETATION – Use scientific names of plants.**

	Absolute	Dominant	Indicator	
Tree Stratum (Plot size: 30')	% Cover	Species?	Status	Dominance Test worksheet:
1				Number of Dominant Species That
2		·		Are OBL, FACW, or FAC: <u>3</u> (A)
3				Total Number of Dominant Species
4				Across All Strata: <u>3</u> (B)
		=Total Cover		Percent of Dominant Species That
Sapling/Shrub Stratum (Plot size: 15'	)			Are OBL, FACW, or FAC: 100.0% (A/B)
1		<u> </u>		
2				Prevalence Index worksheet:
3				Total % Cover of: Multiply by:
4				OBL species x 1 =
5				FACW species x 2 =
		=Total Cover		FAC species x 3 =
Herb Stratum (Plot size: 5')				FACU species x 4 =
1. Festuca arundinacea	40	Yes	FAC	UPL species x 5 =
2. Phalaris arundinacea	30	Yes	FACW	Column Totals: (A) (B)
3. Poa pratensis	20	Yes	FAC	Prevalence Index = B/A =
4. Galium aparine	5	No	FACU	
5. Geranium molle	5	No	UPL	Hydrophytic Vegetation Indicators:
6.				1 - Rapid Test for Hydrophytic Vegetation
7.				X 2 - Dominance Test is >50%
8.				3 - Prevalence Index is ≤3.0 <sup>1</sup>
9.				4 - Morphological Adaptations <sup>1</sup> (Provide supporting
10				data in Remarks or on a separate sheet)
11.		·		5 - Wetland Non-Vacular Plants <sup>1</sup>
	100	=Total Cover		Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)
Woody Vine Stratum (Plot size: 15'		•		<sup>1</sup> Indicators of hydric soil and wetland hydrology must
1.				be present, unless disturbed or problematic.
2.		·		
		=Total Cover		Hydrophytic Vegetation
% Bare Ground in Herb Stratum 0				Present? Yes X No
Remarks:				

SOIL

Depth	cription: (Describe Matrix			x Featur						
(inches)	Color (moist)	%	Color (moist)	%	Type <sup>1</sup>	Loc <sup>2</sup>	Тех	ture	Remark	s
0-12	10YR 3/3	100					Loamy	/Clayey		
12-16	10YR 3/3	95	7.5YR 5/6	5	С	М	Loamy	/Clayey		
1				_				2.		
	oncentration, D=Dep Indicators: (Applica					pated Sa	and Grains.		ation: PL=Pore Lining, rs for Problematic Hyd	<u>^</u>
Black H Hydroge Deplete Thick D Sandy M 2.5 cm I Sandy C	pipedon (A2) istic (A3) en Sulfide (A4) d Below Dark Surface ark Surface (A12) Mucky Mineral (S1) Mucky Peat or Peat (S) Gleyed Matrix (S4) Layer (if observed):	S2) (LRR G	Sandy Re Stripped M Loamy Mu Depleted I Redox Da Depleted I Redox De	Matrix (Se licky Mine eyed Ma Matrix (F rk Surfac Dark Sur	6) eral (F1) trix (F2) 3) ce (F6) face (F7)			Red Very Othe <sup>3</sup> Indicator wetla	n Muck (A10) Parent Material (F21) Shallow Dark Surface ( er (Explain in Remarks) rs of hydrophytic vegeta and hydrology must be p ss disturbed or problem t? Yes	ition and bresent,
HYDROLO	)GY									
Wetland Hy	drology Indicators:									
Primary Indi	cators (minimum of o	one is requir	ed; check all that	apply)				<u>Seconda</u>	ry Indicators (2 or more	required)
	Water (A1)		Water-Sta		. ,	•	t		er-Stained Leaves (B9)	(MLRA 1, 2
	ater Table (A2)				, and 4B)				A, and 4B)	
Saturati			Salt Crust	` '					hage Patterns (B10)	
	/arks (B1)		Aquatic In		```			´	Season Water Table (C	,
	nt Deposits (B2)		Hydrogen						ration Visible on Aerial	Imagery (C9)
	posits (B3)		Oxidized F	•		Ũ	oots (C3)		morphic Position (D2)	
	at or Crust (B4)		Presence			,			low Aquitard (D3)	
Iron Dep	posits (B5)		Recent Irc	n Reduc	ction in Ti	lled Soil	s (C6)	X FAC	-Neutral Test (D5)	

Surface Soil Cracks (B6) Inundation Visible on Aerial Imagery (B7) Sparsely Vegetated Concave Surface (B8)				or Stressed Plants (D1) ( <b>LR</b> (plain in Remarks)	RA) _	A) Raised Ant Mounds (D6) (LRR A) Frost-Heave Hummocks (D7)				
Field Observations:										
Surface Water Present?	Yes	No_	Х	Depth (inches):						
Water Table Present?	Yes	No	Х	Depth (inches):						
Saturation Present?	Yes	No	Х	Depth (inches):	Wetland	Hydrology Present?	Yes	No X		
(includes capillary fringe)										
Describe Recorded Data (st	ream gauge, mon	itoring v	vell, aeri	al photos, previous inspection	ons), if availa	able:				

Remarks:

Project/Site: CIS Hea	adquarters			City/Co	ounty: Wilso	onville			Sampling Date:	1/25/2022
Applicant/Owner:	CIS					Sta	ate:	WA	Sampling Point:	TP4
Investigator(s): Huffr	nan, Coli			Section	, Township, I	Range: S2	3, T3	BS, R1W		
Landform (hillside, te	errace, etc.):	Terraces		Local relief	(concave, co	nvex, none)	: <u>C</u>	onvex	Slo	pe (%): <u>3-8</u>
Subregion (LRR):	LRR A	Lat:	45.3027383		Long:	-122.77931	46		Datum:	NAD83
Soil Map Unit Name:	Latourell loa	am, 3 to 8 perc	ent slopes				N	WI classif	ication: None	
Are climatic / hydrold	ogic condition	is on the site ty	pical for this time	e of year?	Yes X	No		(If no, exp	lain in Remarks.)	
Are Vegetation	, Soil	, or Hydrology	significantl	ly disturbed?	Are "Norma	al Circumsta	nces	" present?	Yes <u>X</u> N	0
Are Vegetation	, Soil	, or Hydrology	naturally p	roblematic?	(If needed,	explain any	ansv	vers in Ren	narks.)	
SUMMARY OF	FINDINGS	– Attach s	ite map show	ving sampli	ing point	locations	, tra	insects,	important fea	tures, etc.

Hydrophytic Vegetation Present? Hydric Soil Present?	Yes Yes	Х	No No	X	Is the Sampled Area within a Wetland?	Yes	No	X
Wetland Hydrology Present?	Yes		No	<u>X</u>				

Remarks:

TP4 was located in the northwestern section of the site. Because all three indicators were not met, the test plot is considered to be upland.

	Absolute	Dominant	Indicator	
Tree Stratum (Plot size: 30')	% Cover	Species?	Status	Dominance Test worksheet:
1				Number of Dominant Species That
2				Are OBL, FACW, or FAC: <u>3</u> (A)
3				Total Number of Dominant Species
4				Across All Strata: <u>3</u> (B)
		=Total Cover		Percent of Dominant Species That
Sapling/Shrub Stratum (Plot size: 15')				Are OBL, FACW, or FAC: 100.0% (A/B)
1				
2				Prevalence Index worksheet:
3				Total % Cover of: Multiply by:
4				OBL species x 1 =
5.				FACW species x 2 =
		=Total Cover		FAC species x 3 =
Herb Stratum (Plot size: 5')				FACU species x 4 =
1. Festuca arundinacea	30	Yes	FAC	UPL species x 5 =
2. Poa pratensis	30	Yes	FAC	Column Totals: (A) (B)
3. Phalaris arundinacea	20	Yes	FACW	Prevalence Index = B/A =
4. Geranium lucidum	10	No	UPL	
5. Galium aparine	5	No	FACU	Hydrophytic Vegetation Indicators:
6. Plantago lanceolata	5	No	FACU	1 - Rapid Test for Hydrophytic Vegetation
7				X 2 - Dominance Test is >50%
8				3 - Prevalence Index is ≤3.0 <sup>1</sup>
9.				4 - Morphological Adaptations <sup>1</sup> (Provide supporting
10				data in Remarks or on a separate sheet)
11				5 - Wetland Non-Vacular Plants <sup>1</sup>
	100	=Total Cover		Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)
Woody Vine Stratum (Plot size: 15')				<sup>1</sup> Indicators of hydric soil and wetland hydrology must
1				be present, unless disturbed or problematic.
2.				Hydrophytic
		=Total Cover		Vegetation
% Bare Ground in Herb Stratum 0				Present? Yes $\times$ No
Remarks:				

SOIL

Depth	Matrix		Redo	x Featur	es				
(inches)	Color (moist)	%	Color (moist)	%	Type <sup>1</sup>	Loc <sup>2</sup>	Tex	ture	Remarks
0-12	10YR 3/2	100					Loamy	/Clayey	
12-16	10YR 3/2	99	10YR 4/6	1	С	Μ	Loamy	/Clayey	
				_					
<i>.</i> .	oncentration, D=Dep	-				Dated Sa	and Grains.		ation: PL=Pore Lining, M=Matrix.
Histosol Histic E Black H Hydroge Deplete	pipedon (A2) istic (A3) en Sulfide (A4) d Below Dark Surface		Sandy Re Stripped M Loamy Mu Loamy Glo Depleted I	dox (S5) /atrix (S6 icky Mine eyed Mat Matrix (F3	6) eral (F1) ( trix (F2) 3)	(except	MLRA 1)	2 cm Red I Very	<b>'s for Problematic Hydric Soils<sup>3</sup>:</b> Muck (A10) Parent Material (F21) Shallow Dark Surface (F22) r (Explain in Remarks)
Sandy N 2.5 cm I	ark Surface (A12) /lucky Mineral (S1) Mucky Peat or Peat ( Gleyed Matrix (S4)	S2) <b>(LRR G)</b>	Redox Da Depleted I Redox De	Dark Surf	face (F7)			wetla	s of hydrophytic vegetation and nd hydrology must be present, s disturbed or problematic.
_	Layer (if observed):								
Type: Depth (i	nches):		_				Hydric S	oil Present	? Yes No
Remarks:			_						
IYDROLC	DGY								
•	drology Indicators: cators (minimum of c	one is require	d: check all that	apply)				Secondar	y Indicators (2 or more required)
	Water (A1)		Water-Sta		ves (B9)	(except	t		er-Stained Leaves (B9) ( <b>MLRA 1, 2</b>
	ater Table (A2)				and 4B)	•			A, and 4B)
Saturati	. ,		Salt Crust		,				age Patterns (B10)
	larks (B1)		Aquatic Invertebrates (B13)						Season Water Table (C2)
	nt Deposits (B2)		Hydrogen						ation Visible on Aerial Imagery (C9)
Drift De	posits (B3)		Oxidized F	Rhizosph	eres on L	iving Ro	oots (C3)	Geon	norphic Position (D2)
	at or Crust (B4)		Presence	•		0	. ,		ow Aquitard (D3)

Wetland Hydrology Indicato	ors:						
Primary Indicators (minimum	of one is required	Secon	dary Indicators (2	2 or more required)			
Surface Water (A1)		Wa	Water-Stained Leaves (B9) (MLRA 1, 2				
High Water Table (A2)		MLR	RA 1, 2, 4A, and 4B)		4A, and 4B)		
Saturation (A3)		Salt Cru	ust (B11)	Dra	ainage Patterns	(B10)	
Water Marks (B1)		Aquatic	Invertebrates (B13)	Dr	y-Season Water	Table (C2)	
Sediment Deposits (B2)		Hydroge	en Sulfide Odor (C1)	Sa	turation Visible c	on Aerial Imagery (C9)	
Drift Deposits (B3)		Oxidize	d Rhizospheres on Living Roc	s (C3) Ge	eomorphic Positio	on (D2)	
Algal Mat or Crust (B4)		Presend	ce of Reduced Iron (C4)	Sh	nallow Aquitard (E	D3)	
Iron Deposits (B5)		Recent	Iron Reduction in Tilled Soils	C6) X FA	C-Neutral Test (	(D5)	
Surface Soil Cracks (B6)		Stunted	or Stressed Plants (D1) (LRF	<b>A</b> ) Ra	aised Ant Mounds	s (D6) ( <b>LRR A</b> )	
Inundation Visible on Aer	rial Imagery (B7)	Other (F	Explain in Remarks)	Fro	ost-Heave Humm	nocks (D7)	
Sparsely Vegetated Cond	cave Surface (B8)	1					
Field Observations:							
Surface Water Present?	Yes	No X	Depth (inches):				
Water Table Present?	Yes	No X	Depth (inches):				
Saturation Present?	Yes	No X	Depth (inches):	Wetland Hydro	logy Present?	Yes No X	
(includes capillary fringe)							
Describe Recorded Data (stre	eam gauge, monit	oring well, ae	erial photos, previous inspection	ns), if available:			
Remarks:							

Project/Site: CIS Hea	adquarters			City/Co	ounty: Wilse	onville			Sampling Date:	1/25/2022
Applicant/Owner:	CIS						State:	WA	Sampling Point:	TP5
Investigator(s): Huffn	nan, Coli			Section,	, Township,	Range:	S23, T3	3S, R1W		
Landform (hillside, te	errace, etc.):	Terrace		Local relief	(concave, c	onvex, no	ne): C	Convex	Slop	be (%): <u>3-8</u>
Subregion (LRR):	LRR A	Lat:	45.3026543		Long:	-122.77	93226		Datum:	NAD83
Soil Map Unit Name:	Latourell loa	am, 3 to 8 per	cent slopes				1	WI classifi	cation: None	
Are climatic / hydrold	ogic condition	ns on the site	typical for this time	e of year?	Yes X	No		(If no, exp	ain in Remarks.)	
Are Vegetation	, Soil	, or Hydrolog	ysignificant	ly disturbed?	Are "Norma	al Circum	stances	" present?	Yes <u>X</u> N	o
Are Vegetation	, Soil	, or Hydrolog	ynaturally p	roblematic?	(If needed,	, explain a	any ansv	wers in Rem	narks.)	
SUMMARY OF I	FINDINGS	– Attach s	site map show	ving sampli	ng point	locatio	ons, tra	ansects,	important feat	ures, etc.

Hydrophytic Vegetation Present? Hydric Soil Present?	Yes Yes	Х	No No X	Is the Sampled Area within a Wetland?	Yes	No	x
Wetland Hydrology Present?	Yes		No <u>X</u>				

Remarks:

TP5 was located in the northwestern section of the site. Because all three indicators were not met, the test plot is considered to be upland.

	Absolute	Dominant	Indicator	
Tree Stratum (Plot size: 30')	% Cover	Species?	Status	Dominance Test worksheet:
1. Pinus ponderosa	20	Yes	FACU	Number of Dominant Species That
2.				Are OBL, FACW, or FAC: 3 (A)
3.				Total Number of Dominant Species
4.				Across All Strata: 4 (B)
	20	=Total Cover		Percent of Dominant Species That
Sapling/Shrub Stratum (Plot size: 15')				Are OBL, FACW, or FAC: 75.0% (A/B)
1				
2.				Prevalence Index worksheet:
3.				Total % Cover of: Multiply by:
1				OBL species x 1 =
4 5				FACW species x 2 =
		=Total Cover		FAC species x 3 =
Herb Stratum (Plot size: 5')				FACU species x 4 =
1. Festuca arundinacea	55	Yes	FAC	UPL species x 5 =
2. Phalaris arundinacea	30	Yes	FACW	Column Totals: (A) (B)
3. Poa pratensis	15	No	FAC	Prevalence Index = B/A =
				Hydrophytic Vegetation Indicators:
6				1 - Rapid Test for Hydrophytic Vegetation
7				X 2 - Dominance Test is >50%
				$3$ - Prevalence Index is $\leq 3.0^{1}$
				4 - Morphological Adaptations <sup>1</sup> (Provide supporting
10				data in Remarks or on a separate sheet)
11				5 - Wetland Non-Vacular Plants <sup>1</sup>
···· <u>·</u>	100	=Total Cover		Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)
Woody Vine Stratum (Plot size: 15')				<sup>1</sup> Indicators of hydric soil and wetland hydrology must
1. Rubus armeniacus	15	Yes	FAC	be present, unless disturbed or problematic.
2.				Hydrophytic
	15	=Total Cover		Vegetation
% Bare Ground in Herb Stratum 0				Present? Yes $\times$ No
Remarks:				

Profile Desc Depth	ription: (Describe Matrix	to the dep		ument tl ox Featur		tor or co	onfirm the absen	ce of indic	ators.)	
(inches)	Color (moist)	%	Color (moist)	%	Type <sup>1</sup>	Loc <sup>2</sup>	Texture		Remark	S
0-10	10YR 3/3	40					Loamy/Clayey	,		
	10YR 3/2	60								
10-16	10YR 3/3	50					Loamy/Clayey	,		
10 10	10YR 3/4	<u> </u>					Loung, oldy by			
	1011( 3/4									
		·								
	oncentration, D=Dep					pated Sa			PL=Pore Lining, N	
•	ndicators: (Applica	able to all I							Problematic Hyd	ric Soils <sup>3</sup> :
Histosol	. ,		Sandy Re	. ,				cm Muck	. ,	
Histic Ep	ipedon (A2)		Stripped N	/latrix (Se	5)		F	ed Parent	Material (F21)	
Black His	stic (A3)		Loamy Mu	icky Min	eral (F1)	(except	MLRA 1) V	ery Shallov	w Dark Surface (F	-22)
Hydroge	n Sulfide (A4)		Loamy Gle	eyed Ma	trix (F2)			ther (Expla	ain in Remarks)	
Depleted	Below Dark Surface	e (A11)	Depleted I	Matrix (F	3)					
Thick Da	rk Surface (A12)		Redox Da	rk Surfac	ce (F6)					
Sandy M	ucky Mineral (S1)		Depleted I	Dark Sur	face (F7)		<sup>3</sup> Indic	ators of hy	drophytic vegetat	ion and
2.5 cm M	lucky Peat or Peat (	S2) (LRR (	G) Redox De	pression	s (F8)		v	etland hyd	rology must be p	resent,
Sandy G	leyed Matrix (S4)						u	nless distu	rbed or problema	ıtic.
Restrictive L	ayer (if observed):									
Type:										
Depth (ir	iches):						Hydric Soil Pres	sent?	Yes	<u>No X</u>
Remarks:						<b>.</b>				
HYDROLO	GY									
	Irology Indicators:									

Primary Indicators (minimum of one is require	Secondary Indicators (2 or more required)				
Surface Water (A1)	Surface Water (A1) Water-Stained Leaves (B9) (except				
High Water Table (A2)	MLRA 1, 2, 4A, and 4B)	<b>4A, and 4B</b> )			
Saturation (A3)	Salt Crust (B11)	Drainage Patterns (B10)			
Water Marks (B1)	Aquatic Invertebrates (B13)	Dry-Season Water Table (C2)			
Sediment Deposits (B2)	Hydrogen Sulfide Odor (C1)	Saturation Visible on Aerial Imagery (C9)			
Drift Deposits (B3)	Oxidized Rhizospheres on Living Root	ts (C3) Geomorphic Position (D2)			
Algal Mat or Crust (B4)	Presence of Reduced Iron (C4)	Shallow Aquitard (D3)			
Iron Deposits (B5)	Recent Iron Reduction in Tilled Soils (	C6) FAC-Neutral Test (D5)			
Surface Soil Cracks (B6)	Stunted or Stressed Plants (D1) (LRR	A) Raised Ant Mounds (D6) (LRR A)			
Inundation Visible on Aerial Imagery (B7)	nundation Visible on Aerial Imagery (B7) Other (Explain in Remarks)				
Sparsely Vegetated Concave Surface (B8	3)	—			
Field Observations:					
Surface Water Present? Yes	No X Depth (inches):				
Water Table Present? Yes	No X Depth (inches):				
Saturation Present? Yes	No X Depth (inches):	Wetland Hydrology Present? Yes No X			
(includes capillary fringe)					
Describe Recorded Data (stream gauge, mon	itoring well, aerial photos, previous inspection	ns), if available:			
Remarks:					

Project/Site: CIS Hea	adquarters			City/Co	ounty: Wils	onville			Sampling Date:	1/25/2022
Applicant/Owner:	CIS						State:	WA	Sampling Point:	TP6
Investigator(s): Huffr	nan, Coli			Section	, Township,	Range:	S23, T3	3S, R1W		
Landform (hillside, te	errace, etc.):	Terrace		Local relief	(concave, c	onvex, no	one): C	Concave	Slo	pe (%): <u>3-8</u>
Subregion (LRR):	LRR A	La	at: 45.3027719		Long	-122.77	792243		Datum:	NAD83
Soil Map Unit Name:	Latourell loa	am, 3 to 8 p	ercent slopes				1	WI classifi	ication: None	
Are climatic / hydrold	ogic conditior	ns on the sit	e typical for this ti	me of year?	Yes X	No	)	(If no, exp	lain in Remarks.)	
Are Vegetation	, Soil	, or Hydrold	ogysignifica	antly disturbed?	Are "Norm	al Circum	nstances	" present?	Yes <u>X</u> N	lo
Are Vegetation	, Soil	, or Hydrold	gynaturally	y problematic?	(If needed	, explain	any ansv	wers in Ren	narks.)	
SUMMARY OF	FINDINGS	– Attach	site map sho	wing sampl	ing point	locatio	ons, tra	ansects,	important fea	tures, etc.

Hydrophytic Vegetation Present?	Yes	х	No	Is the Sampled Area			
Hydric Soil Present?	Yes	Х	No	within a Wetland?	Yes	Х	No
Wetland Hydrology Present?	Yes	Х	No		_		

Remarks:

TP6 was located in the northern section of the site, in Wetland A. Because all three indicators were met, the test plot is considered to be within a wetland.

	Absolute	Dominant	Indicator		
Tree Stratum (Plot size: 30')	% Cover	Species?	Status	Dominance Test worksheet:	
1				Number of Dominant Species That	
2				Are OBL, FACW, or FAC: <u>3</u> (A)	
3				Total Number of Dominant Species	
4				Across All Strata: <u>3</u> (B)	
		=Total Cover		Percent of Dominant Species That	
Sapling/Shrub Stratum (Plot size: 15'	)			Are OBL, FACW, or FAC:100.0% (A/	B)
1					
2.				Prevalence Index worksheet:	
3.				Total % Cover of: Multiply by:	
4				OBL species x 1 =	
5.				FACW species x 2 =	
		=Total Cover		FAC species x 3 =	
Herb Stratum (Plot size: 5')				FACU species x 4 =	
1. Festuca arundinacea	40	Yes	FACW	UPL species x 5 =	
2. Festuca arundinacea	35	Yes	FAC	Column Totals: (A) (B)	
3. Juncus effusus	20	Yes	FACW	Prevalence Index = B/A =	
4					
5.				Hydrophytic Vegetation Indicators:	-
6				1 - Rapid Test for Hydrophytic Vegetation	
7.				X 2 - Dominance Test is >50%	
8.				3 - Prevalence Index is ≤3.0 <sup>1</sup>	
				4 - Morphological Adaptations <sup>1</sup> (Provide supportir	na
9. 10				data in Remarks or on a separate sheet)	.9
11				5 - Wetland Non-Vacular Plants <sup>1</sup>	
	95	=Total Cover		Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)	
Woody Vine Stratum (Plot size: 15'	)			<sup>1</sup> Indicators of hydric soil and wetland hydrology must	t
1				be present, unless disturbed or problematic.	
2.				Hydrophytic	
		=Total Cover		Vegetation	
% Bare Ground in Herb Stratum 5				Present? Yes X No	
Remarks:					

	Matrix		Redo	ox Featu				
inches)	Color (moist)	%	Color (moist)	%	Type <sup>1</sup>	Loc <sup>2</sup>	Texture	Remarks
0-12	10YR 3/1	100					Loamy/Clayey	
12-16	10YR 3/1	45					Loamy/Clayey	
	10YR 4/1	50	10YR 4/6	5	С	M		Prominent redox concentrations
		· ·		·				
	ncentration, D=Depl ndicators: (Applica					bated Sa		tion: PL=Pore Lining, M=Matrix. s for Problematic Hydric Soils <sup>3</sup> :
Histosol (			Sandy Re					Muck (A10)
	ipedon (A2)		Stripped N	. ,				Parent Material (F21)
Black His	• • • •		Loamy Mu		,	(except l		Shallow Dark Surface (F22)
Hvdroger	n Sulfide (A4)		Loamy Gl	eyed Ma	trix (F2)		Other	r (Explain in Remarks)
				•	• •			
	Below Dark Surface	e (A11)	X Depleted	Matrix (F	3)			· · · ·
Depleted	Below Dark Surface rk Surface (A12)	e (A11)	X Depleted Redox Da		,			
Depleted Thick Da		e (A11)		rk Surfa	ce (F6)		<sup>3</sup> Indicator	s of hydrophytic vegetation and
Depleted Thick Da	rk Surface (A12) ucky Mineral (S1)	. ,	Redox Da	rk Surfac Dark Sur	ce (F6) face (F7)			s of hydrophytic vegetation and
Depleted Thick Da Sandy M 2.5 cm M	rk Surface (A12)	. ,	Redox Da	rk Surfac Dark Sur	ce (F6) face (F7)		wetla	
Depleted Thick Da Sandy M 2.5 cm M Sandy Gl	rk Surface (A12) ucky Mineral (S1) lucky Peat or Peat (	S2) <b>(LRR</b> )	Redox Da	rk Surfac Dark Sur	ce (F6) face (F7)		wetla	s of hydrophytic vegetation and nd hydrology must be present,
Depleted Thick Da Sandy M 2.5 cm M Sandy Gl	rk Surface (A12) ucky Mineral (S1) lucky Peat or Peat ( leyed Matrix (S4)	S2) <b>(LRR</b> )	Redox Da	rk Surfac Dark Sur	ce (F6) face (F7)		wetla	s of hydrophytic vegetation and nd hydrology must be present,
Depleted Thick Da Sandy M 2.5 cm M Sandy Gl	rk Surface (A12) ucky Mineral (S1) lucky Peat or Peat (S leyed Matrix (S4) .ayer (if observed):	S2) <b>(LRR</b> )	Redox Da	rk Surfac Dark Sur	ce (F6) face (F7)		wetla	s of hydrophytic vegetation and nd hydrology must be present, s disturbed or problematic.
Depleted Thick Da Sandy M 2.5 cm M Sandy Gl Restrictive L Type:	rk Surface (A12) ucky Mineral (S1) lucky Peat or Peat (S leyed Matrix (S4) .ayer (if observed):	S2) <b>(LRR</b> )	Redox Da	rk Surfac Dark Sur	ce (F6) face (F7)		wetla unles	s of hydrophytic vegetation and nd hydrology must be present, s disturbed or problematic.
Depleted Thick Da Sandy M 2.5 cm M Sandy Gl Sestrictive L Type: Depth (in	rk Surface (A12) ucky Mineral (S1) lucky Peat or Peat (S leyed Matrix (S4) .ayer (if observed):	S2) <b>(LRR</b> )	Redox Da	rk Surfac Dark Sur	ce (F6) face (F7)		wetla unles	s of hydrophytic vegetation and nd hydrology must be present, s disturbed or problematic.
Depleted Thick Da Sandy M 2.5 cm M Sandy Gl Sestrictive L Type: Depth (in	rk Surface (A12) ucky Mineral (S1) lucky Peat or Peat (S leyed Matrix (S4) .ayer (if observed):	S2) <b>(LRR</b> )	Redox Da	rk Surfac Dark Sur	ce (F6) face (F7)		wetla unles	s of hydrophytic vegetation and nd hydrology must be present, s disturbed or problematic.
Depleted Thick Da Sandy M 2.5 cm M Sandy Gl Sestrictive L Type: Depth (in	rk Surface (A12) ucky Mineral (S1) lucky Peat or Peat (S leyed Matrix (S4) .ayer (if observed):	S2) <b>(LRR</b> )	Redox Da	rk Surfac Dark Sur	ce (F6) face (F7)		wetla unles	s of hydrophytic vegetation and nd hydrology must be present, s disturbed or problematic.

Wedana nyarology malea	.013.					
Primary Indicators (minimun	n of one is required	Secondary Indicators (2 or more required)				
Surface Water (A1)		Water-Stained Leaves (B9) (MLRA 1, 2				
X High Water Table (A2)		MLR	A 1, 2, 4A, and 4B)	4A, and 4B)		
Saturation (A3)		Salt Cru	st (B11)	Drainage Patterns (B10)		
Water Marks (B1)		Aquatic	Invertebrates (B13)	Dry-Season Water Table (C2)		
Sediment Deposits (B2)	)	Hydroge	en Sulfide Odor (C1)	Saturation Visible on Aerial Imagery (C9)		
Drift Deposits (B3)		Oxidized	d Rhizospheres on Living Ro	ots (C3) X Geomorphic Position (D2)		
Algal Mat or Crust (B4)		Presenc	e of Reduced Iron (C4)	Shallow Aquitard (D3)		
Iron Deposits (B5)		Recent	Iron Reduction in Tilled Soils	(C6) X FAC-Neutral Test (D5)		
Surface Soil Cracks (B6	i)	R A) Raised Ant Mounds (D6) (LRR A)				
Inundation Visible on Ae	erial Imagery (B7)	Other (E	Explain in Remarks)	Frost-Heave Hummocks (D7)		
Sparsely Vegetated Cor	ncave Surface (B8	)				
Field Observations:						
Surface Water Present?	Yes	No X	Depth (inches):			
Water Table Present?	Yes X	No	Depth (inches): 0			
Saturation Present?	Yes	No X	Depth (inches):	Wetland Hydrology Present? Yes X No		
(includes capillary fringe)						
Describe Recorded Data (st	ream gauge, moni	toring well, ae	rial photos, previous inspecti	ons), if available:		
Remarks:						

Project/Site: CIS Hea	adquarters			City/Co	unty: Wilso	onville			Sampling Date:	1/25/2022
Applicant/Owner:	CIS					s	State:	WA	Sampling Point:	TP7
Investigator(s): Huffn	nan, Coli			Section,	Township,	Range:	S23, T3	3S, R1W		
Landform (hillside, te	errace, etc.):	Terrace		Local relief (	concave, co	onvex, non	ne): <u>C</u>	Convex	Slop	be (%): <u>3-8</u>
Subregion (LRR):	LRR A	Lat:	45.3025288		Long:	-122.779	3974		Datum:	NAD83
Soil Map Unit Name:	Latourell loa	am, 3 to 8 per	cent slopes				<u> </u>	WI classifi	cation: None	
Are climatic / hydrold	ogic condition	ns on the site	ypical for this time	e of year?	Yes X	No		(If no, exp	lain in Remarks.)	
Are Vegetation	, Soil	, or Hydrolog	ysignificant	ly disturbed?	Are "Norma	al Circums	stances	" present?	Yes <u>X</u> No	D
Are Vegetation	, Soil	, or Hydrolog	ynaturally p	oroblematic?	(If needed,	explain ar	ny ansv	vers in Ren	narks.)	
SUMMARY OF I	FINDINGS	– Attach s	site map show	ving sampli	ng point	locatior	ns, tra	ansects,	important feat	ures, etc.

Hydrophytic Vegetation Present?	Yes X	No	Is the Sampled Area		
Hydric Soil Present?	Yes	No X	within a Wetland?	Yes	No_X
Wetland Hydrology Present?	Yes	No X			

Remarks:

TP7 was located in the northwestern section of the site. Because all three indicators were not met, the test plot is considered to be upland.

	Absolute	Dominant	Indicator	
Tree Stratum (Plot size: 30')	% Cover	Species?	Status	Dominance Test worksheet:
1				Number of Dominant Species That
2				Are OBL, FACW, or FAC: 1 (A)
3				Total Number of Dominant Species
4				Across All Strata: 1 (B)
		=Total Cover		Percent of Dominant Species That
Sapling/Shrub Stratum (Plot size: 15')				Are OBL, FACW, or FAC: 100.0% (A/B)
1				
2				Prevalence Index worksheet:
3				Total % Cover of: Multiply by:
4				OBL species x 1 =
5.				FACW species x 2 =
		=Total Cover		FAC species x 3 =
Herb Stratum (Plot size: 5')				FACU species x 4 =
1. Phalaris arundinacea	100	Yes	FACW	UPL species x 5 =
2. Cytisus scoparius	5	No	UPL	Column Totals: (A) (B)
3.				Prevalence Index = B/A =
4.				
5.				Hydrophytic Vegetation Indicators:
6.				1 - Rapid Test for Hydrophytic Vegetation
7.				X 2 - Dominance Test is >50%
				3 - Prevalence Index is $\leq 3.0^{1}$
9.				<ul> <li>4 - Morphological Adaptations<sup>1</sup> (Provide supporting</li> </ul>
10				data in Remarks or on a separate sheet)
11				5 - Wetland Non-Vacular Plants <sup>1</sup>
	105	=Total Cover		Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)
Woody Vine Stratum (Plot size: 15')				<sup>1</sup> Indicators of hydric soil and wetland hydrology must
1.				be present, unless disturbed or problematic.
2.				Hydrophytic
		=Total Cover		Vegetation
% Bare Ground in Herb Stratum 0				Present? Yes X No
Remarks:				

SOIL

Depth	cription: (Describe Matrix			x Features					
(inches)	Color (moist)	%	Color (moist)	% Typ	pe <sup>1</sup> Loc <sup>2</sup>	– Tex	xture	Remarks	
0-16	10YR 2/1	100	i			Loamy	//Clayey		
	·								
<sup>1</sup> Type: C=C	Concentration, D=Dep	letion, RM=R	educed Matrix, C	S=Covered c	or Coated {	Sand Grains	. <sup>2</sup> Locatior	n: PL=Pore Lining, M=N	Natrix.
Histosol Histic Ep Black Hi Hydroge Depleted	pipedon (A2) listic (A3) en Sulfide (A4) d Below Dark Surface		Sandy Red Stripped M Loamy Mud Loamy Gle	dox (S5) latrix (S6) cky Mineral (F eyed Matrix (F Matrix (F3)	- <sup>-</sup> 1) <b>(excep</b> '2)	ot MLRA 1)	2 cm Mu Red Pare Very Sha	or Problematic Hydric S ck (A10) ent Material (F21) allow Dark Surface (F22 xplain in Remarks)	
Sandy N 2.5 cm N	ark Surface (A12) Mucky Mineral (S1) Mucky Peat or Peat ( Gleyed Matrix (S4)	S2) <b>(LRR G)</b>	Depleted D	k Surface (F6 Dark Surface ( Dressions (F8)	(F7)		wetland I	hydrophytic vegetation hydrology must be prese isturbed or problematic.	
Restrictive Type: Depth (i	Layer (if observed):		-			Hydric S	oil Present?	Yes	NoX
Remarks:					_				
HYDROLC	)GY								
•	vdrology Indicators: icators (minimum of o	ne is required	d; check all that a	apply)			Secondary Ir	ndicators (2 or more requ	uired)
High Wa Saturatio Water M Sedimer	/larks (B1) nt Deposits (B2)		MLRA 1 Salt Crust ( Aquatic Inv Hydrogen S	ined Leaves ( <b>1, 2, 4A, and</b> (B11) vertebrates (B Sulfide Odor Rhizospheres	<b>4B</b> ) 313) (C1)		4A, a Drainage Dry-Seas Saturatic	tained Leaves (B9) ( <b>ML</b> ) <b>nd 4B</b> ) Patterns (B10) son Water Table (C2) on Visible on Aerial Imag	
	posits (B3) at or Crust (B4)			of Reduced In	-	(UUIS (US)		ohic Position (D2) Aquitard (D3)	

Wetland Hydrology Indicators:		
Primary Indicators (minimum of one is required	; check all that apply)	Secondary Indicators (2 or more required)
Surface Water (A1)	Water-Stained Leaves (B9) (except	Water-Stained Leaves (B9) (MLRA 1, 2
High Water Table (A2)	MLRA 1, 2, 4A, and 4B)	<b>4A, and 4B</b> )
Saturation (A3)	Salt Crust (B11)	Drainage Patterns (B10)
Water Marks (B1)	Aquatic Invertebrates (B13)	Dry-Season Water Table (C2)
Sediment Deposits (B2)	Hydrogen Sulfide Odor (C1)	Saturation Visible on Aerial Imagery (C9)
Drift Deposits (B3)	Oxidized Rhizospheres on Living Roc	ots (C3) Geomorphic Position (D2)
Algal Mat or Crust (B4)	Presence of Reduced Iron (C4)	Shallow Aquitard (D3)
Iron Deposits (B5)	Recent Iron Reduction in Tilled Soils	(C6) FAC-Neutral Test (D5)
Surface Soil Cracks (B6)	Stunted or Stressed Plants (D1) (LRF	R A) Raised Ant Mounds (D6) (LRR A)
Inundation Visible on Aerial Imagery (B7)	Other (Explain in Remarks)	Frost-Heave Hummocks (D7)
Sparsely Vegetated Concave Surface (B8)		—
Field Observations:		
Surface Water Present? Yes	No X Depth (inches):	
Water Table Present? Yes	No X Depth (inches):	
Saturation Present? Yes	No X Depth (inches):	Wetland Hydrology Present? Yes No X
(includes capillary fringe)		· · · · · · · · · · · · · · · · · · ·
Describe Recorded Data (stream gauge, monito	oring well, aerial photos, previous inspection	ons), if available:
Remarks:		

Project/Site: CIS Hea	adquarters			City/Co	unty: <u>Wi</u>	lsonville			Sampling Date:	1/25/2022
Applicant/Owner:	CIS						State:	WA	Sampling Point:	TP8
Investigator(s): Huffn	nan, Coli			Section,	Township	o, Range:	S23, T3	3S, R1W		
Landform (hillside, te	errace, etc.):	Terrace		Local relief (	concave,	convex, no	one): C	Convex	Slop	oe (%): 0-3
Subregion (LRR):	LRR A	Lat:	45.3026002		Lon	g: <u>-122.77</u>	785711		Datum:	NAD83
Soil Map Unit Name:	Willamette	silt loam, grav	elly substratum, 0	to 3 percent sl	opes		<u> </u>	WI classifi	ication: None	
Are climatic / hydrold	ogic condition	ns on the site t	pical for this time	e of year?	Yes >		)	(If no, exp	lain in Remarks.)	
Are Vegetation	, Soil	, or Hydrology	significantl	ly disturbed?	Are "Nori	mal Circun	nstances	" present?	Yes <u>X</u> No	)
Are Vegetation	, Soil	, or Hydrology	naturally p	oroblematic?	(If neede	d, explain	any ansv	vers in Ren	narks.)	
SUMMARY OF I	FINDINGS	– Attach s	ite map show	ving sampli	ng poin	t locatio	ons, tra	ansects,	important feat	ures, etc.

Hydrophytic Vegetation Present? Hydric Soil Present?	Yes Yes	Х	No No X	Is the Sampled Area within a Wetland?	Yes	No	X
Wetland Hydrology Present?	Yes		No <u>X</u>				

Remarks:

TP8 was located in the northeastern section of the site. Because all three indicators were not met, the test plot is considered to be upland.

-				Absolute	Dominant	Indicator		
Tree Stratum	(Plot size:	30'	)	% Cover	Species?	Status	Dominance Test worksheet	<i>t</i> :
							Number of Dominant Species	
							Are OBL, FACW, or FAC:	<u> </u>
3							Total Number of Dominant S	
4.							Across All Strata:	<u> </u>
					=Total Cover		Percent of Dominant Species	s That
Sapling/Shrub Stra	<u>itum</u> (Plot	size:	15' )				Are OBL, FACW, or FAC:	(A/B)
1								
2.							Prevalence Index workshee	ət:
3.							Total % Cover of:	Multiply by:
4.							OBL species	x 1 =
5.							FACW species	x 2 =
					=Total Cover		FAC species	x 3 =
Herb Stratum	(Plot size:	5'	)				FACU species	x 4 =
1. Festuca arundi	nacea		_	60	Yes	FAC	UPL species	x 5 =
2. Poa pratensis				20	Yes	FAC	Column Totals:	(A) (B)
3. Geranium molle	Э			10	No	UPL	Prevalence Index = B/A =	=
4. Vicia sativa				10	No	UPL		
5.							Hydrophytic Vegetation Ind	licators:
6							1 - Rapid Test for Hydrog	phytic Vegetation
7.							X 2 - Dominance Test is >	50%
-							 3 - Prevalence Index is ≤	3.0 <sup>1</sup>
-							4 - Morphological Adapta	
10							data in Remarks or on	· · · · ·
11.							5 - Wetland Non-Vacular	Plants <sup>1</sup>
				100	=Total Cover		Problematic Hydrophytic	
Woody Vine Stratu	ım (Plot	size:	15'					• • • •
1. Rubus armenia				10	Yes	FAC	<sup>1</sup> Indicators of hydric soil and be present, unless disturbed	, .,
2.							Urdrenbreic	
				10	=Total Cover		Hydrophytic Vegetation	
% Bare Ground in	Herb Stratum	0					Present? Yes $\times$	No
Remarks:							-	

SOIL

Depth	Matrix			x Features				absence of indicators.)
(inches)	Color (moist)	%	Color (moist)		Type <sup>1</sup>	Loc <sup>2</sup>	Tex	ture Remarks
0-16	10YR 3/3	100					Loamy	/Clayey
		·						
		•						
		·						
				· •				
<sup>1</sup> Type: C=Co	oncentration, D=Dep	letion, RM=R	educed Matrix, C	CS=Covere	d or Co	bated Sa	and Grains.	<sup>2</sup> Location: PL=Pore Lining, M=Matrix.
Hydric Soil	ndicators: (Applica	able to all LR	Rs, unless othe	erwise not	ed.)			Indicators for Problematic Hydric Soils <sup>3</sup> :
Histosol	(A1)		Sandy Ree	dox (S5)				2 cm Muck (A10)
Histic Ep	pipedon (A2)		Stripped N	/latrix (S6)				Red Parent Material (F21)
Black Hi	stic (A3)		Loamy Mu	ucky Minera	al (F1) <b>(</b>	except	MLRA 1)	Very Shallow Dark Surface (F22)
Hydroge	n Sulfide (A4)		Loamy Gle	eyed Matrix	‹ (F2)			Other (Explain in Remarks)
	Below Dark Surface	e (A11)		Matrix (F3)				
	ark Surface (A12)			rk Surface	• •			2
	lucky Mineral (S1)			Dark Surfac				<sup>3</sup> Indicators of hydrophytic vegetation and
	lucky Peat or Peat (	S2) (LRR G)	Redox De	pressions (	(F8)			wetland hydrology must be present,
	ileyed Matrix (S4)							unless disturbed or problematic.
Restrictive I	_ayer (if observed):							
Туре:			_					
Depth (ir	iches):						Hydric So	oil Present? Yes <u>No</u>
Remarks:								
HYDROLO	GY							
Wetland Hyd	drology Indicators:							
Primary Indic	ators (minimum of c	one is required	d; check all that	apply)				Secondary Indicators (2 or more required)
Surface	Water (A1)		Water-Sta	ined Leave	∋s (B9)	(except	:	Water-Stained Leaves (B9) (MLRA 1, 2
High Wa	ter Table (A2)		MLRA	1, 2, 4A, a	nd 4B)			4A, and 4B)
Saturatio	on (A3)		Salt Crust	(B11)				Drainage Patterns (B10)
Water M	arks (B1)		Aquatic In	vertebrates	s (B13)			Dry-Season Water Table (C2)
Sedimer	nt Deposits (B2)			Sulfide Od	. ,			Saturation Visible on Aerial Imagery (C9)
Drift Dep	oosits (B3)		Oxidized F	Rhizospher	es on L	iving Ro	oots (C3)	Geomorphic Position (D2)
Algal Ma	t or Crust (B4)		Presence	of Reduced	d Iron (	C4)		Shallow Aquitard (D3)
Iron Dep	osits (B5)		Recent Irc	on Reductio	on in Til	led Soils	s (C6)	FAC-Neutral Test (D5)

- FAC-Neutral Test (D5) Raised Ant Mounds (D6) (LRR A) Frost-Heave Hummocks (D7)

Sparsely Vegetated Co	ncave Surface	(B8)				
Field Observations:						
Surface Water Present?	Yes	No <u>X</u>	Depth (inches):			
Water Table Present?	Yes	No X	Depth (inches):			
Saturation Present?	Yes	No X	Depth (inches):	Wetland Hydrology Present?	Yes	<u>No X</u>
(includes capillary fringe)						_
Describe Recorded Data (s	tream gauge, r	nonitoring well, aer	ial photos, previous inspect	ions), if available:		

Stunted or Stressed Plants (D1) (LRR A) Other (Explain in Remarks)

Remarks:

Surface Soil Cracks (B6) Inundation Visible on Aerial Imagery (B7)

APPENDIX C – GROUND LEVEL COLOR PHOTOGRAPHS



Photo 1. Coffee Lake Creek at the southern portion of the site, facing north.



Photo 3. Typical upland conditions onsite.



Photo 2. Existing stormwater facility in the southern portion of the site.



Photo 4. Wetland A, facing west.



1157 3rd Ave., Suite 220A Longview, WA 98632 Phone: (360) 578-1371 Fax: (360) 414-9305 DATE: 11/8/2023 DWN: AJR PRJ. MGR: AJR PROJ #: 3688.02 Photoplate Site Photos CIS Headquarters CIS Wilsonville, Oregon Section 23, Township 3S, Range1W, W.M. APPENDIX D: ADDITIONAL TABLES AND INFORMATION

#### **Vegetation Wetland Indicator Status**

The indicator status, following the scientific names, indicates the likelihood of the species to be found in wetlands. Listed from most likely to least likely to be found in wetlands, the indicator status categories are:

- **OBL** (obligate wetland) occur almost always under natural conditions in wetlands.
- FACW (facultative wetland) usually occur in wetlands, but occasionally found in non-wetlands.
- FAC (facultative) equally likely to occur in wetlands or non-wetlands.
- FACU (facultative upland) usually occur in non-wetlands, but occasionally found in wetlands.
- UPL (obligate upland) occur almost always under natural conditions in non-wetlands.
- NI (no indicator) insufficient data to assign to an indicator category.

#### **Routine Wetland Determination Methodology**

The wetland delineation followed the Routine Determination Method according to the U.S. Army Corps of Engineers, *Wetland Delineation Manual* (Environmental Laboratory 1987) and the *Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Western Mountains, Valleys and Coast Region (Version 2.0)* (U.S. Army Engineer Research and Development Center 2010).

The Routine Determination Method examines three parameters—vegetation, soils, and hydrology—to determine if wetlands exist in a given area. Hydrology is critical in determining what is wetland, but is often difficult to assess because hydrologic conditions can change periodically (hourly, daily, or seasonally). Consequently, it is necessary to determine if hydrophytic vegetation and hydric soils are present, which would indicate that water is present for long enough duration to support a wetland plant community. By definition, wetlands are those areas that are inundated or saturated by surface or ground water at a frequency and duration sufficient to support, and that under normal circumstances do support, a prevalence of vegetation typically adapted for life in saturated soil conditions. Wetlands are regulated as "Waters of the United States" by the US Army Corps of Engineers, as "Waters of State" by the Oregon Department of State Lands, and locally by the City of Wilsonville, Oregon.

# **Precipitation Information**

#### WETS Table

	(s							
WETS Station: OREGON CITY, OR								
Requested years: 1992 - 2022								
Month	Avg Max Temp	Avg Min Temp	Avg Mean Temp	Avg Precip	30% chance precip less than	30% chance precip more than	Avg number days precip 0.10 or more	Avg Snowfall
Jan	48.5	36.8	42.7	6.25	4.29	7.45	13	0.2
Feb	52.2	37.2	44.7	4.24	2.66	5.13	9	1.0
Mar	57.9	39.6	48.8	5.28	3.44	6.35	11	0.1
Apr	63.6	43.2	53.4	3.69	2.32	4.46	9	0.0
May	71.1	48.8	59.9	2.21	1.18	2.70	6	0.0
Jun	76.6	53.1	64.9	1.48	0.92	1.78	4	0.0
Jul	83.8	57.2	70.5	0.42	0.15	0.45	1	0.0
Aug	84.1	56.9	70.5	0.56	0.15	0.56	2	0.0
Sep	78.0	53.0	65.5	1.67	0.73	2.00	4	0.0
Oct	65.3	46.7	56.0	4.20	2.68	5.06	7	0.0
Nov	53.4	40.3	46.8	6.29	4.36	7.48	12	0.0
Dec	47.3	36.2	41.8	7.14	5.11	8.44	13	0.9
Annual:					-			
Average	65.1	45.8	55.5	-	-	-	+	-
Total		-	-	43.44			90	2.2

Climatological Data for OREGON CITY, OR - October 2021

Date	Max Temperature	Min Temperature	Avg Temperature	GDD Base 40	GDD Base 50	Precipitation	Snowfall	Snow Depth
2021-10-01	65	50	57.5	18	8	0.00	0.0	0
2021-10-02	70	44	57.0	17	7	0.00	0.0	0
2021-10-03	70	44	57.0	17	7	2.00	0.0	0
2021-10-04	67	53	60.0	20	10	0.00	0.0	0
2021-10-05	66	51	58.5	19	9	0.32	0.0	0
2021-10-06	73	44	58.5	19	9	0.00	0.0	0
2021-10-07	59	44	51.5	12	2	0.03	0.0	0
2021-10-08	59	39	49.0	9	0	0.00	0.0	0
2021-10-09	62	42	52.0	12	2	0.00	0.0	0
2021-10-10	62	42	52.0	12	2	0.36	0.0	0
2021-10-11	57	41	49.0	9	0	0.00	0.0	0
2021-10-12	56	43	49.5	10	0	0.06	0.0	0
2021-10-13	53	43	48.0	8	0	0.19	0.0	0
2021-10-14	59	48	53.5	14	4	0.09	0.0	0
2021-10-15	67	42	54.5	15	5	0.00	0.0	0
2021-10-16	67	42	54.5	15	5	0.00	0.0	0
2021-10-17	66	45	55.5	16	6	0.00	0.0	0
2021-10-18	60	47	53.5	14	4	0.70	0.0	0
2021-10-19	63	42	52.5	13	3	0.01	0.0	0
2021-10-20	63	42	52.5	13	3	0.27	0.0	0
2021-10-21	70	50	60.0	20	10	0.08	0.0	0
2021-10-22	64	49	56.5	17	7	1.05	0.0	0
2021-10-23	54	48	51.0	11	1	0.39	0.0	0
2021-10-24	58	50	54.0	14	4	0.40	0.0	0
2021-10-25	58	51	54.5	15	5	0.15	0.0	0
2021-10-26	56	50	53.0	13	3	0.35	0.0	0
2021-10-27	57	50	53.5	14	4	0.00	0.0	0
2021-10-28	м	м	м	м	м	S	0.0	0
2021-10-29	67	49	58.0	18	8	0.81A	0.0	0
2021-10-30	62	43	52.5	13	3	0.00	0.0	0
2021-10-31	63	48	55.5	16	6	0.00	0.0	0
Average Sum	62.4	45.9	54.2	433	137	7.26	0.0	0.0

Date	Max Temperature	Min Temperature	Avg Temperature	GDD Base 40	GDD Base 50	Precipitation	Snowfall	Snow Dept
2021-11-01	60	48	54.0	14	4	0.17	0.0	0
2021-11-02	54	42	48.0	8	0	0.01	0.0	0
2021-11-03	59	45	52.0	12	2	0.10	0.0	0
2021-11-04	61	49	55.0	15	5	0.52	0.0	0
2021-11-05	56	46	51.0	11	1	0.00	0.0	0
2021-11-06	54	42	48.0	8	0	0.95	0.0	0
2021-11-07	49	39	44.0	4	0	0.45	0.0	0
2021-11-08	М	м	м	М	м	S	0.0	0
2021-11-09	М	М	м	М	М	м	0.0	0
2021-11-10	55	43	49.0	9	0	0.35A	0.0	0
2021-11-11	61	48	54.5	15	5	1.30	0.0	0
2021-11-12	62	58	60.0	20	10	0.35	0.0	0
2021-11-13	65	53	59.0	19	9	0.00	0.0	0
2021-11-14	м	м	м	М	м	S	0.0	0
2021-11-15	62	41	51.5	12	2	0.30A	0.0	0
2021-11-16	53	37	45.0	5	0	0.00	0.0	0
2021-11-17	55	34	44.5	5	0	0.00	0.0	0
2021-11-18	51	42	46.5	7	0	0.14	0.0	0
2021-11-19	М	М	м	М	М	S	0.0	0
2021-11-20	М	м	м	М	М	м	0.0	0
2021-11-21	49	26	37.5	0	0	0.01A	0.0	0
2021-11-22	44	36	40.0	0	0	0.15	0.0	0
2021-11-23	49	43	46.0	6	0	0.37	0.0	0
2021-11-24	49	35	42.0	2	0	0.00	0.0	0
2021-11-25	53	38	45.5	6	0	0.00	0.0	0
2021-11-26	54	45	49.5	10	0	0.17	0.0	0
2021-11-27	61	50	55.5	16	6	0.09	0.0	0
2021-11-28	61	55	58.0	18	8	0.00	0.0	0
2021-11-29	61	47	54.0	14	4	0.45	0.0	0
2021-11-30	57	47	52.0	12	2	0.04	0.0	0
Average Sum	55.8	43.6	49.7	248	58	5.92	0.0	0.0

Climatological Data for OREGON CITY, OR - November 2021

Climatological Data	for OREGON CITY	, OR - December 2021
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Date	Max Temperature	Min Temperature	Avg Temperature	GDD Base 40	GDD Base 50	Precipitation	Snowfall	Snow Depth
2021-12-01	61	45	53.0	13	3	0.00	0.0	0
2021-12-02	55	44	49.5	10	0	0.00	0.0	0
2021-12-03	51	31	41.0	1	0	0.00	0.0	0
2021-12-04	51	35	43.0	3	0	0.08	0.0	0
2021-12-05	51	32	41.5	2	0	0.13	0.0	0
2021-12-06	48	40	44.0	4	0	0.50	0.0	0
2021-12-07	54	46	50.0	10	0	0.30	0.0	0
2021-12-08	52	43	47.5	8	0	0.06	0.0	0
2021-12-09	46	36	41.0	1	0	0.09	0.0	0
2021-12-10	46	39	42.5	3	0	0.03	0.0	0
2021-12-11	49	44	46.5	7	0	0.00	0.0	0
2021-12-12	47	39	43.0	3	0	0.00	0.0	0
2021-12-13	44	40	42.0	2	0	0.65	0.0	0
2021-12-14	44	37	40.5	1	0	0.02	0.0	0
2021-12-15	42	35	38.5	0	0	0.28	0.0	0
2021-12-16	46	38	42.0	2	0	0.25	0.0	0
2021-12-17	45	38	41.5	2	0	0.03	0.0	0
2021-12-18	52	38	45.0	5	0	0.22	0.0	0
2021-12-19	53	33	43.0	3	0	1.90	0.0	0
2021-12-20	42	39	40.5	1	0	1.24	0.0	0
2021-12-21	43	33	38.0	0	0	0.01	0.0	0
2021-12-22	48	40	44.0	4	0	0.38	0.0	0
2021-12-23	49	42	45.5	6	0	0.28	0.0	0
2021-12-24	М	м	М	М	М	м	0.0	0
2021-12-25	М	М	М	М	М	М	0.0	0
2021-12-26	М	м	М	М	М	м	м	м
2021-12-27	М	М	М	М	М	м	м	м
2021-12-28	35	34	34.5	0	0	0.19	м	м
2021-12-29	М	м	м	М	М	М	0.0	0
2021-12-30	м	м	м	м	м	М	0.0	0
2021-12-31	41	33	37.0	0	0	0.00	0.0	0
Average Sum	47.8	38.2	43.0	91	3	6.64	0.0	0.0

#### Climatological Data for OREGON CITY, OR - January 2022

Date	Max Temperature	Min Temperature	Avg Temperature	GDD Base 40	GDD Base 50	Precipitation	Snowfall	Snow Depth
2022-01-01	35	22	28.5	0	0	0.25	0.0	0
2022-01-02	51	27	39.0	0	0	0.01	0.0	0
2022-01-03	53	36	44.5	5	0	2.06	0.0	0
2022-01-04	44	35	39.5	0	0	0.19	0.0	0
2022-01-05	44	39	41.5	2	0	0.52	0.0	0
2022-01-06	55	38	46.5	7	0	0.94	0.0	0
2022-01-07	54	43	48.5	9	0	0.33	0.0	0
2022-01-08	50	39	44.5	5	0	0.50	0.0	0
2022-01-09	50	32	41.0	1	0	0.00	0.0	0
2022-01-10	49	33	41.0	1	0	0.05	0.0	0
2022-01-11	52	42	47.0	7	0	0.18	0.0	0
2022-01-12	61	47	54.0	14	4	0.00	0.0	0
2022-01-13	56	42	49.0	9	0	0.17	0.0	0
2022-01-14	52	39	45.5	6	0	0.00	0.0	0
2022-01-15	52	33	42.5	3	0	0.00	0.0	0
2022-01-16	46	36	41.0	1	0	0.00	0.0	0
2022-01-17	46	36	41.0	1	0	0.00	0.0	0
2022-01-18	48	39	43.5	4	0	0.05	0.0	0
2022-01-19	52	45	48.5	9	0	0.29	0.0	0
2022-01-20	57	50	53.5	14	4	0.28	0.0	0
2022-01-21	54	39	46.5	7	0	0.00	0.0	0
2022-01-22	46	41	43.5	4	0	0.00	0.0	0
2022-01-23	56	36	46.0	6	0	0.00	0.0	0
2022-01-24	52	30	41.0	1	0	0.00	0.0	0
2022-01-25	50	32	41.0	1	0	0.00	0.0	0
2022-01-26	48	29	38.5	0	0	0.00	0.0	0
2022-01-27	47	33	40.0	0	0	0.00	0.0	0
2022-01-28	м	м	м	м	м	S	0.0	0
2022-01-29	М	М	М	М	М	М	0.0	0
2022-01-30	52	30	41.0	1	0	0.24A	0.0	0
2022-01-31	М	м	м	М	М	М	0.0	0
Average Sum	50.4	36.5	43.5	118	8	6.06	0.0	0.0

APPENDIX E – LITERATURE CITATIONS

- City of Wilsonville. 2023. Wilsonville Municipal Code (WMC) Section 4.139.00 Significant Overlay Resource Zone (SROZ). Wilsonville, Oregon. March 15, 2023.
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- U.S. Fish and Wildlife Service (USFWS). *National Wetlands Inventory*. <<u>http://wetlandsfws.er.usgs.gov/wtlnds/launch.html</u>>. Accessed May 2023.



DESIGN DRIVEN I CLIENT FOCUSED



# STORM DRAINAGE REPORT

**Project** CIS Collaboration Center Planning DB No. \_\_\_\_\_

#### Applicant

CIS - Oregon Attn: Steve Norman 25117 SW Parking Ave. Aumsville, OR 97070

#### **Design Engineer**

Mackenzie Attn: Greg Mino 1515 SE Water Ave, #100 Portland, OR 97214 503.224.9560

Submitted

Date of submittal

Mackenzie Project # 2220098.00



# Μ.

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APPENDIX C – GEOTECHNICAL REPORT

#### I. PROJECT DESCRIPTION

This report documents the stormwater management calculations and design approach carried out by Mackenzie to manage stormwater runoff for the CIS Collaboration Center project compliant with applicable code(s). The proposed project is located at the SW corner of the intersection of SW Wilsonville Road and SW Kinsman Road in Wilsonville, Oregon (see Figure 1, Vicinity Map). The project site is on Tax Lot 100 of Tax Map 3-1W-23B, is approximately 2.05 acres, and will be addressed as 30125 SW Kinsman Road.

In pursuit of this project, the applicant (or their contractor(s)) is applying for the following permits: Development, Commercial Building, Mechanical, Plumbing, Clackamas County Electrical, Grading, Fire Alarm, Fire Sprinkler, DEQ 1200-C, and Tree Removal permits as required. No right-of-way permits or environmental/regulatory permits are expected to be required at this time.

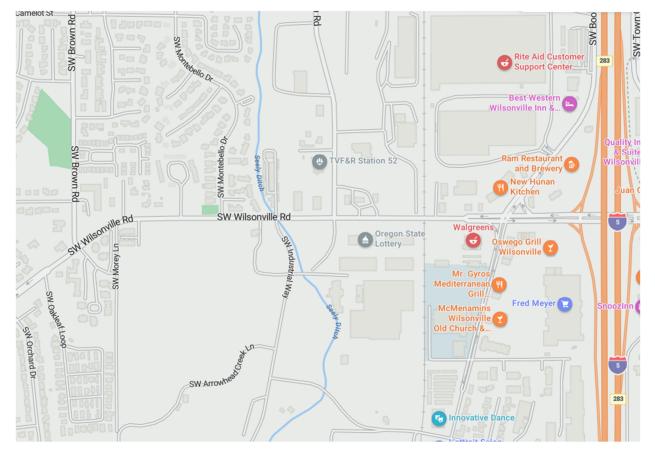


Figure 1: Vicinity Map

# **Existing Conditions**

The existing site consists of a generally open grassy area bounded by Coffee Lake Creek (identified as a wetland) on the property side of SW Industrial Way to the west, SW Wilsonville Road to the north, and SW Kinsman Road to the east and south. Figure 2 provides a simplified graphical depiction of the existing conditions.

Stormwater that falls onsite generally either infiltrates into the grassy area or drains in a predominantly westerly direction over shallow sloped ground and into Coffee Lake Creek to the west. There are no identifiable upstream drainage basins to consider in design.

SW Kinsman Rd and SW Wilsonville Rd are fully improved roads with their own public drainage system.

# Soil Conditions

A geotechnical investigation was conducted by Northwest Geotech, Inc to fully evaluate the soil conditions on-site. The site has a fill layer that extends to depths ranging from 3 to 6 feet. The existing fill consists of poorly compacted soil with debris and organics. The native soil below the fill consists of medium stiff to stiff, slightly sandy, and clayey silt. Field infiltration testing was conducted in the native fill at two locations onsite. These test results indicate a rate of 0.1-0.2 inches per hour and that Type C soils exist onsite.

Please see the Geotechnical Report in Appendix C.

# Hydrologic Analysis (Existing)

The hydrologic analysis of the existing conditions was performed using the Water Environment Services (WES) BMP Sizing Tool. For the purposes of hydrologic modeling, the WES BMP Sizing Tool models the historical vegetation which existed onsite prior to development. Please see the WES BMP Sizing Report, Appendix A, for details on the hydrologic pre-developed conditions onsite.

# Μ.

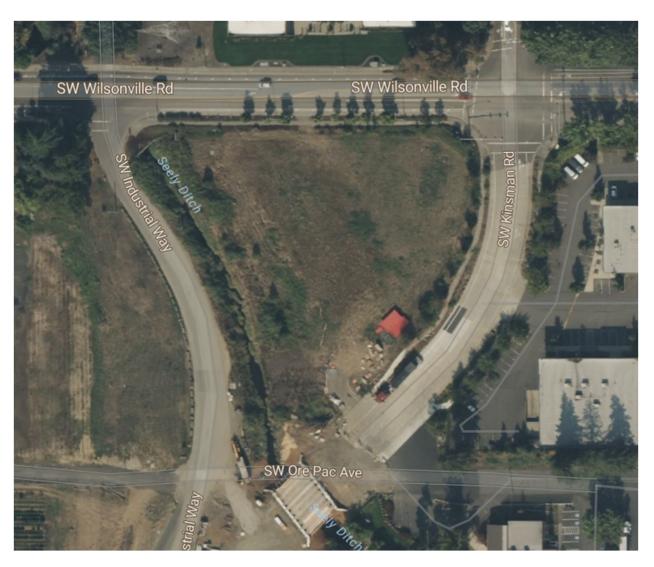


Figure 2: Existing Conditions

# II. DEVELOPED CONDITIONS

The proposed development consists of the construction of a 15,744 square foot (footprint) commercial building with an associated drive aisles and parking, an exterior trash enclosure, and associated utility services to the building and site. Although the site area is 2.05 acres, the area to be developed is substantially less due to the utility easements and critical areas encumbering 42% of the project site. The total site area being developed is 1.20 acres. Figure 3 provides a simplified graphical depiction of the developed conditions.

See the Basin Map (DMA) Map in Appendix A that provides a breakdown of impervious and pervious areas within each DMA/subbasin.

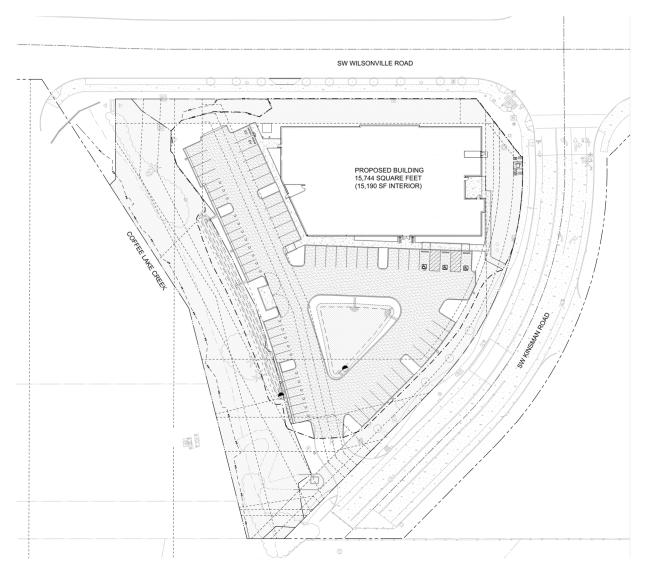


Figure 3: Developed Conditions

# Water Quality Standard

Water quality facilities shall be designed to capture and treat 80% of the average annual runoff volume to the Maximum Extent Practicable (MEP) with the goal of 70% total suspended soils (TSS) removal. In this context, MEP means less effective treatment may not be substituted when it is practicable to provide more effective treatment. This treatment volume equates to a design storm of <u>1.0 inch over 24 hours</u>.

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.

# Flow Control Standard

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 <u>42% of the 2-year storm peak flow rate up to the 10-year peak flow rate</u>.

# Hydrologic Analysis (Proposed)

## Water Quality

In order to meet the goals of Low Impact Development, a rain garden and vegetative swale have been selected as the proposed BMPs to provide water quality treatment for this project. Although the project site has low infiltration rates (0.1-.02 inches per hour), the BMP facilities are not proposed to be lined in order to promote any amount of infiltration that may still occur. The stormwater facilities are dispersed throughout the site at strategic locations for capture of runoff, upon which underground piping collects the water and routes it to an existing outfall to Coffee Lake Creek for discharge.

Please refer to the DMA Map and WES BMP Sizing Report (Appendix A) for facility sizes and impervious areas that are conveyed to each facility. Appendix B contains the Operations & Maintenance Manual for the proposed facilities.

## Flow Control

As noted in the Water Quality section, a rain garden and vegetative swale have been selected as the proposed BMP which will meet both treatment and flow control requirements.

Please refer to the Drainage Management Area (DMA) Map and WES BMP Sizing Report, Appendix A, for further detail. Appendix B contains the Operations & Maintenance Manual for the proposed facilities.

# Hydraulic Design Computations

The proposed underground storm drainage system for this project has been designed to collect and convey the runoff from a 25-year storm event per the City of Wilsonville 2015 Stormwater & Surface Water Design & Construction Standards. The peak flow has been calculated using the Santa Barbara Urban Hydrograph (SBUH) for Autodesk Civil3D software. The peak flow from the 25-year event over the project site has then been calculated for the various drainage management areas (DMA's)/subbasins throughout



the site. Underground piping has then been sized accordingly using Hydraflow software. Please refer to the DMA Map and Hydraflow report, in Appendix A. In the occurrence of a storm event in excess of the design storm, adequate overland flow has been provided to Coffee Lake Creek to prevent flooding of habitable structures.

# **Downstream Analysis**

The existing drainage system downstream of the development has been analyzed to verify that it has the capacity to convey the 25-year design storm. The analysis is intended to extend downstream to a point in the drainage system where the proposed development site constitutes 10% or less of the total tributary drainage flow. The site is adjacent to Coffee Lake Creek and has a direct overflow to the creek. The proposed discharge is significantly less than the 10% of the tributary flow of Coffee Lake Creek and therefor the downstream requirement is achieved.

APPENDIX A – HYDRAULIC DESIGN COMPUTATIONS AND DMA MAP

# WES BMP Sizing Software Version 1.6.0.2, May 2018

# WES BMP Sizing Report

# **Project Information**

Project Name	CIS Oregon
Project Type	Commercial
Location	9770 SW Wilsonville Road
Stormwater Management Area	52069
Project Applicant	
Jurisdiction	CCSD1NCSA

# Drainage Management Area

Name	Area (sq-ft)	Pre-Project Cover	Post-Project Cover	DMA Soil Type	BMP
DMA 01 (Impervious) - Central	14,534	Grass	ConventionalCo ncrete	С	BMP - Central
DMA 02 (Roof) - Central	15,744	Grass	Roofs	С	BMP - Central
DMA 03 (Landscape) - Central	5,047	Grass	LandscapeCsoil	С	BMP - Central
DMA 04 (Impervious) - West	13,404	Grass	ConventionalCo ncrete	С	BMP - West
DMA 05 (Landscape) - West	3,340	Grass	LandscapeCsoil	С	BMP - West

# LID Facility Sizing Details

LID ID	Design Criteria	ВМР Туре	Facility Soil Type			Orifice Diameter (in)
	FlowControlA ndTreatment	Rain Garden - Filtration	C3	1,640.1	2,606.0	1.6
BMP - West	FlowControlA ndTreatment	U U	C3	904.4	907.0	1.2

Pond Sizing Details

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.

# Hydrograph Summary Report

Hydraflow Hydrographs Extension for Autodesk® Civil 3D® by Autodesk, Inc. v2021

Hyd. No.	Hydrograph type (origin)	Peak flow (cfs)	Time interval (min)	Time to Peak (min)	Hyd. volume (cuft)	Inflow hyd(s)	Maximum elevation (ft)	Total strge used (cuft)	Hydrograph Description
1	SBUH Runoff	0.198	2	474	2,837				Site Basin 1
2	SBUH Runoff	0.133	2	474	1,874				Site Basin 2
3	SBUH Runoff	0.367	2	474	5,153				Site Basin 3
4	SBUH Runoff	0.064	2	474	931				Roof Basin 1
5	SBUH Runoff	0.037	2	474	532				Roof Basin 2
6	SBUH Runoff	0.027	2	474	399				Roof Basin 3
7	SBUH Runoff	0.046	2	474	665				Roof Basin 4
8	SBUH Runoff	0.055	2	474	798				Roof Basin 5
9	SBUH Runoff	0.046	2	474	665				Roof Basin 6
10	SBUH Runoff	0.055	2	474	798				Roof Basin 7
<b>D</b> .:	sin Areas.gpw					Period: 25 \	/	The same 1 and	10 / 26 / 2023

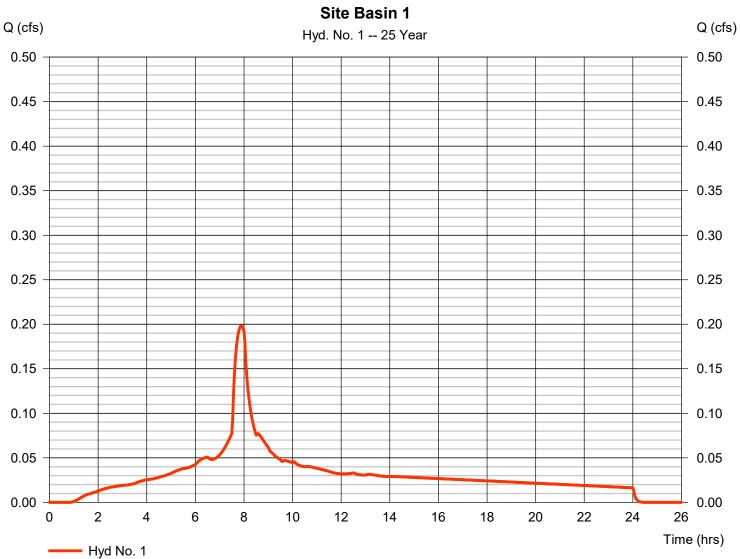
Hydraflow Hydrographs Extension for Autodesk® Civil 3D® by Autodesk, Inc. v2021

# Hyd. No. 1

Site Basin 1

Hydrograph type	= SBUH Runoff	Peak discharge	= 0.198 cfs
Storm frequency	= 25 yrs	Time to peak	= 7.90 hrs
Time interval	= 2 min	Hyd. volume	= 2,837 cuft
Drainage area	= 0.220 ac	Curve number	= 97*
Basin Slope	= 0.0 %	Hydraulic length	= 0 ft
Tc method	= User	Time of conc. (Tc)	= 5.00 min
Total precip.	= 3.90 in	Distribution	= Type IA
Storm duration	= 24 hrs	Shape factor	= n/a

\* Composite (Area/CN) = [(0.180 x 98) + (0.040 x 80)] / 0.220



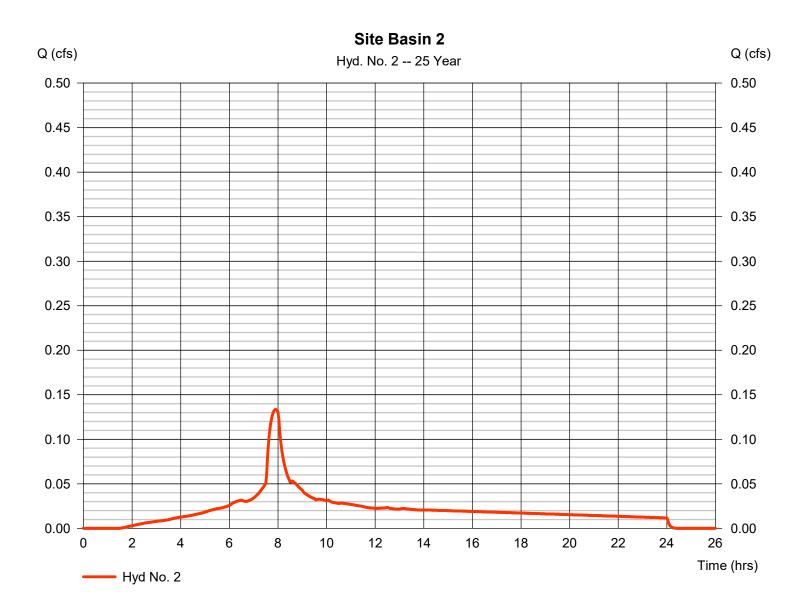
Hydraflow Hydrographs Extension for Autodesk® Civil 3D® by Autodesk, Inc. v2021

# Hyd. No. 2

Site Basin 2

Hydrograph type	= SBUH Runoff	Peak discharge	= 0.133 cfs
Storm frequency	= 25 yrs	Time to peak	= 7.90 hrs
Time interval	= 2 min	Hyd. volume	= 1,874 cuft
Drainage area	= 0.160 ac	Curve number	= 94*
Basin Slope	= 0.0 %	Hydraulic length	= 0 ft
Tc method	= User	Time of conc. (Tc)	= 5.00 min
Total precip.	= 3.90 in	Distribution	= Type IA
Storm duration	= 24 hrs	Shape factor	= n/a

\* Composite (Area/CN) = [(0.120 x 98) + (0.040 x 80)] / 0.160



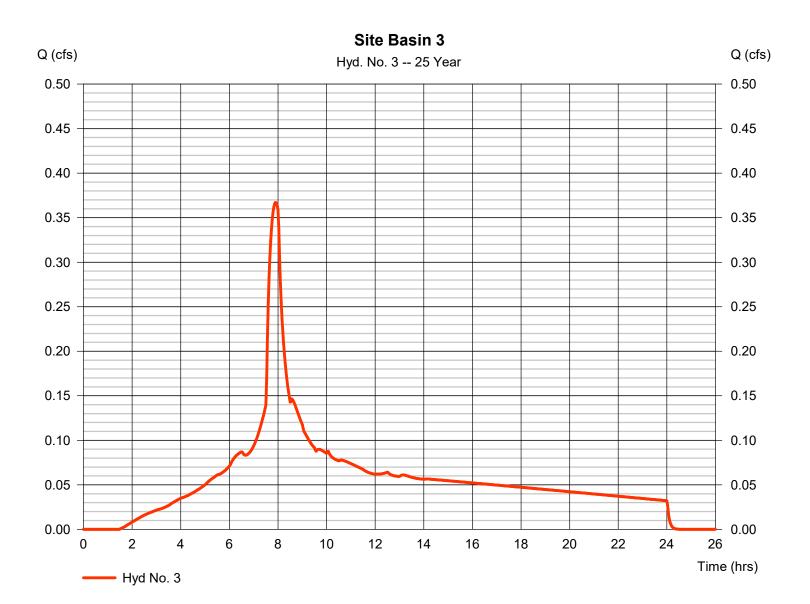
Hydraflow Hydrographs Extension for Autodesk® Civil 3D® by Autodesk, Inc. v2021

# Hyd. No. 3

Site Basin 3

Hydrograph type	= SBUH Runoff	Peak discharge	= 0.367 cfs
Storm frequency	= 25 yrs	Time to peak	= 7.90 hrs
Time interval	= 2 min	Hyd. volume	= 5,153 cuft
Drainage area	= 0.440 ac	Curve number	= 94*
Basin Slope	= 0.0 %	Hydraulic length	= 0 ft
Tc method	= User	Time of conc. (Tc)	= 5.00 min
Total precip.	= 3.90 in	Distribution	= Type IA
Storm duration	= 24 hrs	Shape factor	= n/a

\* Composite (Area/CN) = [(0.330 x 98) + (0.110 x 80)] / 0.440



Thursday, 10 / 26 / 2023

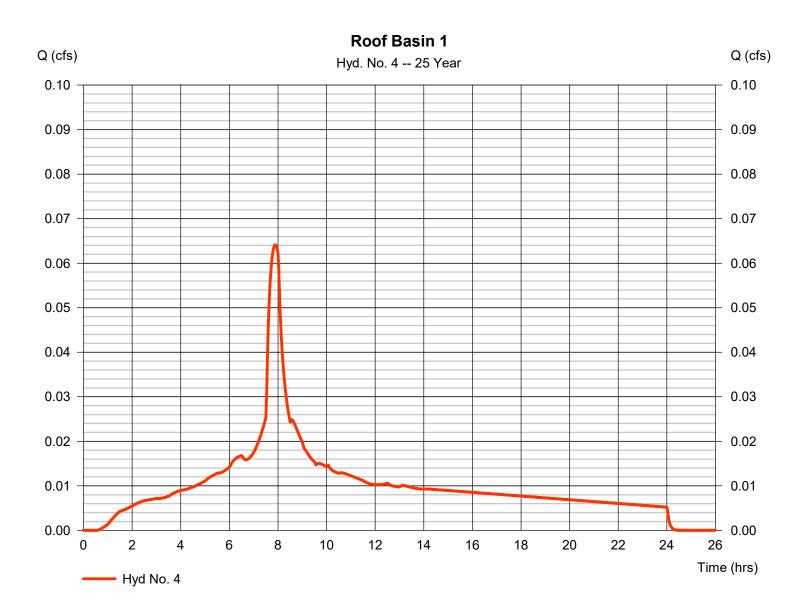
Hydraflow Hydrographs Extension for Autodesk® Civil 3D® by Autodesk, Inc. v2021

# Hyd. No. 4

Roof Basin 1

Hydrograph type	= SBUH Runoff	Peak discharge	= 0.064 cfs
Storm frequency	= 25 yrs	Time to peak	= 7.90 hrs
Time interval	= 2 min	Hyd. volume	= 931 cuft
Drainage area	= 0.070 ac	Curve number	= 98*
Basin Slope	= 0.0 %	Hydraulic length	= 0 ft
Tc method	= User	Time of conc. (Tc)	= 5.00 min
Total precip.	= 3.90 in	Distribution	= Type IA
Storm duration	= 24 hrs	Shape factor	= n/a

\* Composite (Area/CN) = [(0.080 x 98) + (0.010 x 80)] / 0.070



Thursday, 10 / 26 / 2023

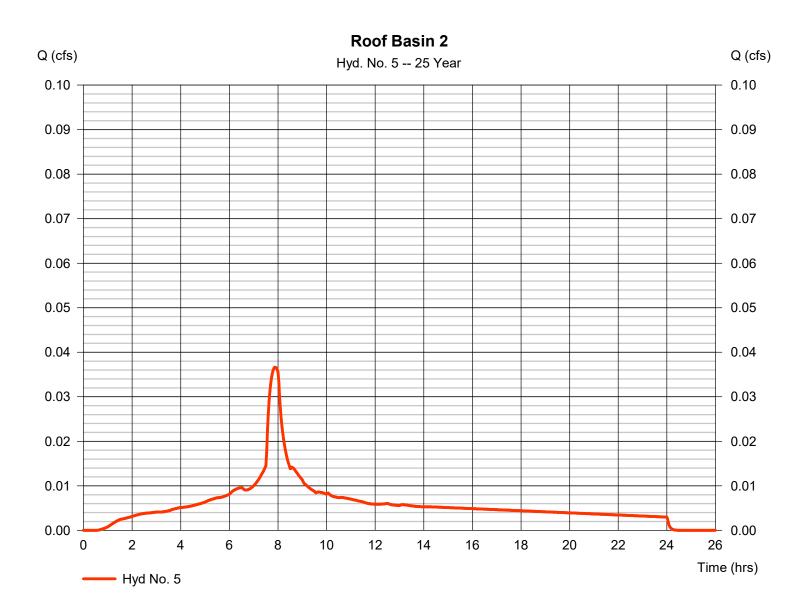
Hydraflow Hydrographs Extension for Autodesk® Civil 3D® by Autodesk, Inc. v2021

# Hyd. No. 5

Roof Basin 2

Hydrograph type	= SBUH Runoff	Peak discharge	= 0.037 cfs
Storm frequency	= 25 yrs	Time to peak	= 7.90 hrs
Time interval	= 2 min	Hyd. volume	= 532 cuft
Drainage area	= 0.040 ac	Curve number	= 98*
Basin Slope	= 0.0 %	Hydraulic length	= 0 ft
Tc method	= User	Time of conc. (Tc)	= 5.00 min
Total precip.	= 3.90 in	Distribution	= Type IA
Storm duration	= 24 hrs	Shape factor	= n/a

\* Composite (Area/CN) = [(0.150 x 98) + (0.100 x 80)] / 0.040



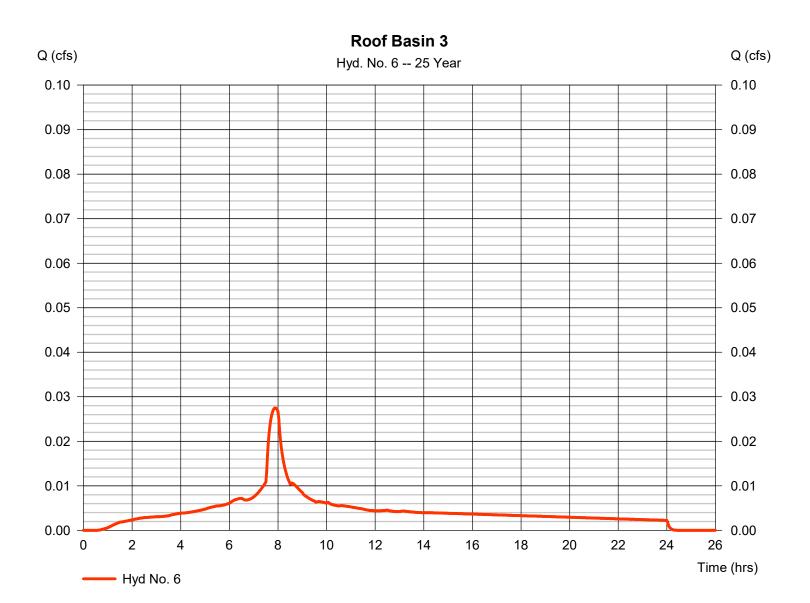
Hydraflow Hydrographs Extension for Autodesk® Civil 3D® by Autodesk, Inc. v2021

# Hyd. No. 6

Roof Basin 3

Hydrograph type	= SBUH Runoff	Peak discharge	= 0.027 cfs
Storm frequency	= 25 yrs	Time to peak	= 7.90 hrs
Time interval	= 2 min	Hyd. volume	= 399 cuft
Drainage area	= 0.030 ac	Curve number	= 98*
Basin Slope	= 0.0 %	Hydraulic length	= 0 ft
Tc method	= User	Time of conc. (Tc)	= 5.00 min
Total precip.	= 3.90 in	Distribution	= Type IA
Storm duration	= 24 hrs	Shape factor	= n/a

\* Composite (Area/CN) = [(0.100 x 98) + (0.020 x 80)] / 0.030



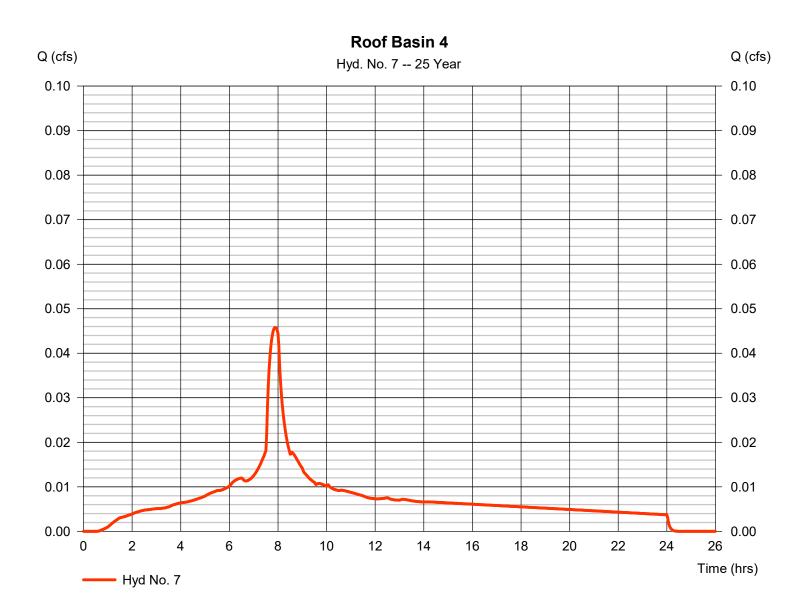
Hydraflow Hydrographs Extension for Autodesk® Civil 3D® by Autodesk, Inc. v2021

# Hyd. No. 7

Roof Basin 4

Hydrograph type	= SBUH Runoff	Peak discharge	= 0.046 cfs
Storm frequency	= 25 yrs	Time to peak	= 7.90 hrs
Time interval	= 2 min	Hyd. volume	= 665 cuft
Drainage area	= 0.050 ac	Curve number	= 98*
Basin Slope	= 0.0 %	Hydraulic length	= 0 ft
Tc method	= User	Time of conc. (Tc)	= 5.00 min
Total precip.	= 3.90 in	Distribution	= Type IA
Storm duration	= 24 hrs	Shape factor	= n/a

\* Composite (Area/CN) = [(0.130 x 98) + (0.040 x 80)] / 0.050



Thursday, 10 / 26 / 2023

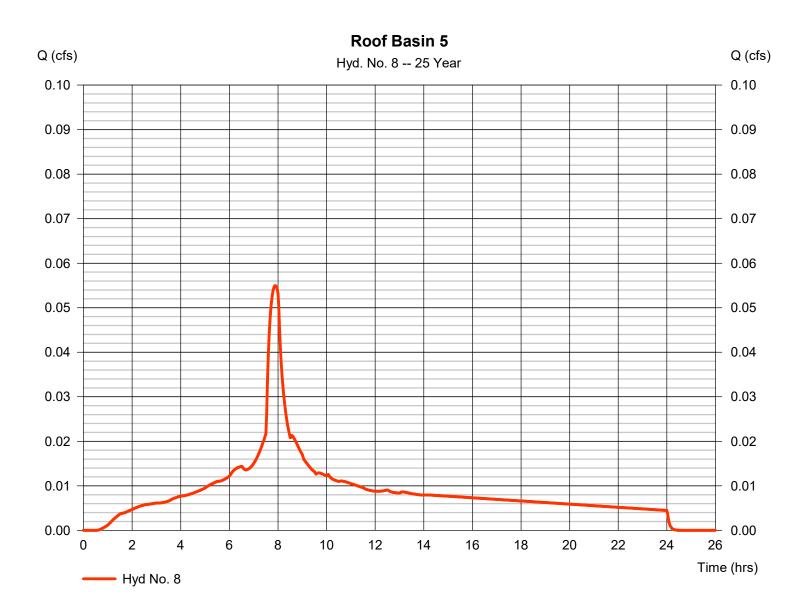
Hydraflow Hydrographs Extension for Autodesk® Civil 3D® by Autodesk, Inc. v2021

# Hyd. No. 8

Roof Basin 5

Hydrograph type	= SBUH Runoff	Peak discharge	= 0.055 cfs
Storm frequency	= 25 yrs	Time to peak	= 7.90 hrs
Time interval	= 2 min	Hyd. volume	= 798 cuft
Drainage area	= 0.060 ac	Curve number	= 98*
Basin Slope	= 0.0 %	Hydraulic length	= 0 ft
Tc method	= User	Time of conc. (Tc)	= 5.00 min
Total precip.	= 3.90 in	Distribution	= Type IA
Storm duration	= 24 hrs	Shape factor	= n/a

\* Composite (Area/CN) = [(0.080 x 98) + (0.010 x 80)] / 0.060

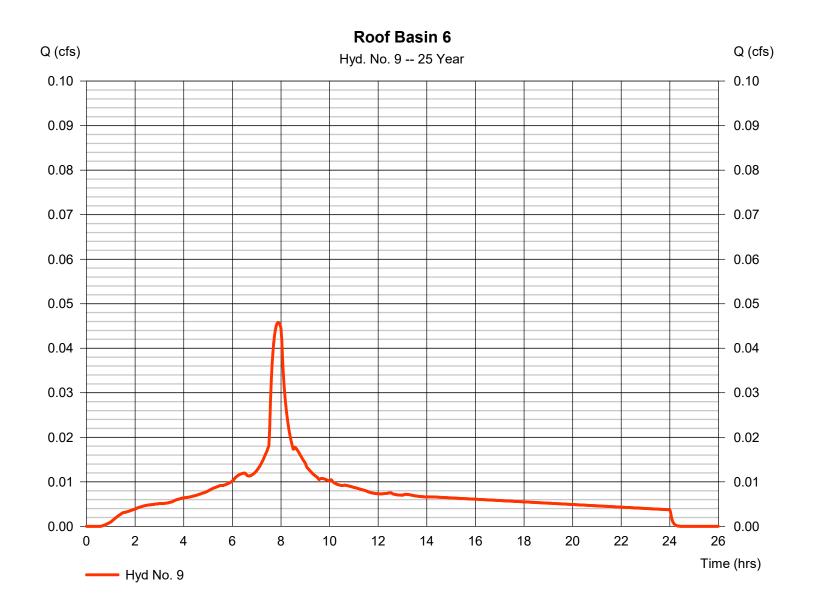


Hydraflow Hydrographs Extension for Autodesk® Civil 3D® by Autodesk, Inc. v2021

# Hyd. No. 9

Roof Basin 6

Hydrograph type	= SBUH Runoff	Peak discharge	= 0.046 cfs
Storm frequency	= 25 yrs	Time to peak	= 7.90 hrs
Time interval	= 2 min	Hyd. volume	= 665 cuft
Drainage area	= 0.050 ac	Curve number	= 98
Basin Slope	= 0.0 %	Hydraulic length	= 0 ft
Tc method	= User	Time of conc. (Tc)	= 5.00 min
Total precip.	= 3.90 in	Distribution	= Type IA
Storm duration	= 24 hrs	Shape factor	= n/a



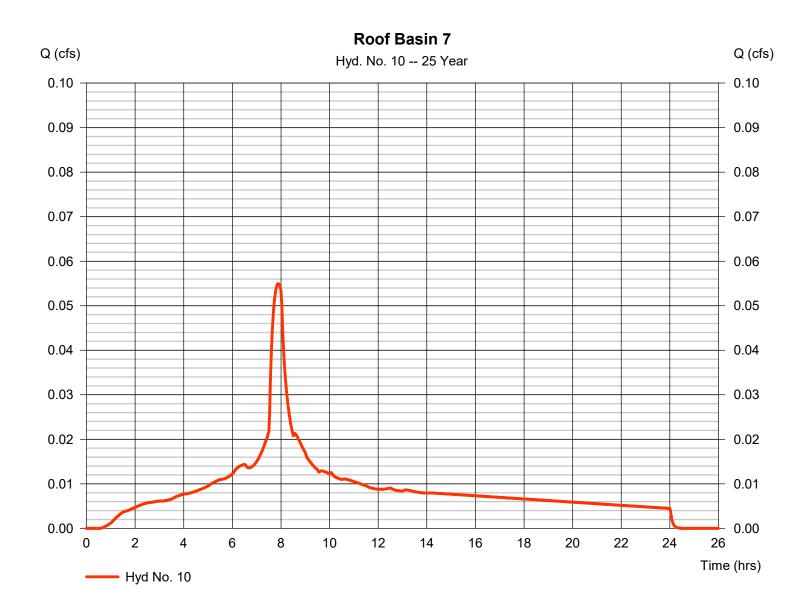
Thursday, 10 / 26 / 2023

Hydraflow Hydrographs Extension for Autodesk® Civil 3D® by Autodesk, Inc. v2021

# Hyd. No. 10

Roof Basin 7

Hydrograph type	= SBUH Runoff	Peak discharge	= 0.055 cfs
Storm frequency	= 25 yrs	Time to peak	= 7.90 hrs
Time interval	= 2 min	Hyd. volume	= 798 cuft
Drainage area	= 0.060 ac	Curve number	= 98
Basin Slope	= 0.0 %	Hydraulic length	= 0 ft
Tc method	= User	Time of conc. (Tc)	= 5.00 min
Total precip.	= 3.90 in	Distribution	= Type IA
Storm duration	= 24 hrs	Shape factor	= n/a



11

Thursday, 10 / 26 / 2023

# **Hydraflow Rainfall Report**

Hydraflow Hydrographs Extension for Autodesk® Civil 3D® by Autodesk, Inc. v2021

Return Period	Intensity-Duration-Frequency Equation Coefficients (FHA)							
(Yrs)	В	D	E	(N/A)				
1	0.0000	0.0000	0.0000					
2	69.8703	13.1000	0.8658					
3	0.0000	0.0000	0.0000					
5	79.2597	14.6000	0.8369					
10	88.2351	15.5000	0.8279					
25	102.6072	16.5000	0.8217					
50	114.8193	17.2000	0.8199					
100	127.1596	17.8000	0.8186					
	1		1	1				

File name: SampleFHA.idf

# Intensity = B / (Tc + D)^E

Return								ues (in/hr)				
Period (Yrs)	5 min	10	15	20	25	30	35	40	45	50	55	60
1	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
2	5.69	4.61	3.89	3.38	2.99	2.69	2.44	2.24	2.07	1.93	1.81	1.70
3	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
5	6.57	5.43	4.65	4.08	3.65	3.30	3.02	2.79	2.59	2.42	2.27	2.15
10	7.24	6.04	5.21	4.59	4.12	3.74	3.43	3.17	2.95	2.77	2.60	2.46
25	8.25	6.95	6.03	5.34	4.80	4.38	4.02	3.73	3.48	3.26	3.07	2.91
50	9.04	7.65	6.66	5.92	5.34	4.87	4.49	4.16	3.88	3.65	3.44	3.25
100	9.83	8.36	7.30	6.50	5.87	5.36	4.94	4.59	4.29	4.03	3.80	3.60

Tc = time in minutes. Values may exceed 60.

			Fiech	b. me name.	G. Design	Stornwat	еплучтано	w.cws.pc		
		Rainfall Precipitation Table (in)								
Storm Distribution	1-yr	2-yr	3-yr	5-yr	10-yr	25-yr	50-yr	100-yr		
SCS 24-hour	1.25	2.50	0.00	3.10	3.45	3.90	4.20	4.50		
SCS 6-Hr	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
Huff-1st	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
Huff-2nd	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
Huff-3rd	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
Huff-4th	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
Huff-Indy	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
Custom	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		

### Precip. file name: G:\Design\Stormwater\Hydraflow\CWS.pcp

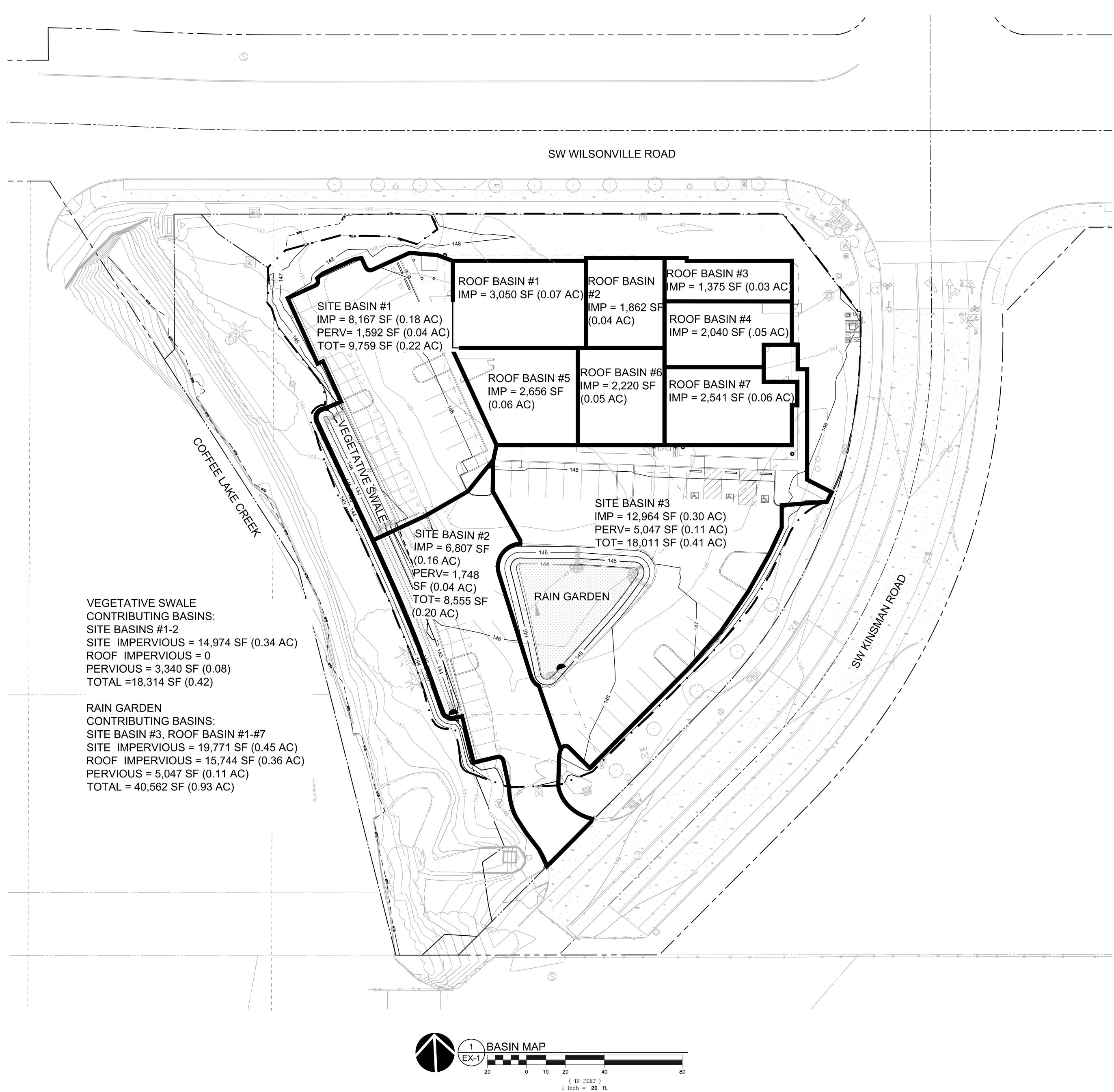
# **Pipe Sizing Calculation** Based on SCS flow inputs (Flows calculated in "Hydraflow")

Project:	CIS Collaboration Center
By:	CTL
Checked:	GIM
Date:	10/31/2023
Job:	2220098.00

## Mannings n= 0.012

Pipe		Incremental Flow	Total Flow	Pipe Slope	Pipe Diameter	Pipe Capacity	Pipe Velocity	
(#)	Storm Input Descriptions	(cfs)	(cfs)	(%)	(inches)	(cfs)	-	Capacity
1	RB2	0.037	0.037	0.3	6	0.33	0.19	11%
2	#1 + RB1	0.198	0.198	0.3	6	0.33	1.01	60%
3	#2 + RB5	0.055	0.253	0.3	6	0.33	1.29	76%
4	#3 + RB6	0.046	0.299	0.3	6	0.33	1.52	90%
5	#4 + #10	0.128	0.427	2.48	6	0.96	2.18	45%
6	#5 + SB3	0.367	0.794	2.81	8	2.19	2.28	36%
7	#6 + SB1+ SB2	0.331	1.125	2.8	8	2.19	3.22	51%
8	RB3	0.027	0.027	0.3	6	0.33	0.14	8%
9	#8+RB4	0.046	0.073	0.3	6	0.33	0.37	22%
10	#9+RB7	0.055	0.128	2.48	6	0.96	0.65	13%

Basin	25yr Peak Flow	
Site Basin 1		0.198
Site Basin 2		0.133
Site Basin 3		0.367
Roof Basin 1		0.064
Roof Basin 2		0.037
Roof Basin 3		0.027
Roof Basin 4		0.046
Roof Basin 5		0.055
Roof Basin 6		0.046
Roof Basin 7		0.055





**Architecture - Interiors** Planning - Engineering

**Portland, OR** 503.224.9560 Vancouver, WA 360.695.7879 Seattle, WA 206.749.9993 www.mcknze.com MACKENZIE. DESIGN DRIVEN I CLIENT FOCUSED Client **CIS - OREGON** 25117 SW Parkway Avenue, Wilsonville, OR, 97070

Project CIS COLLABORATION CENTER

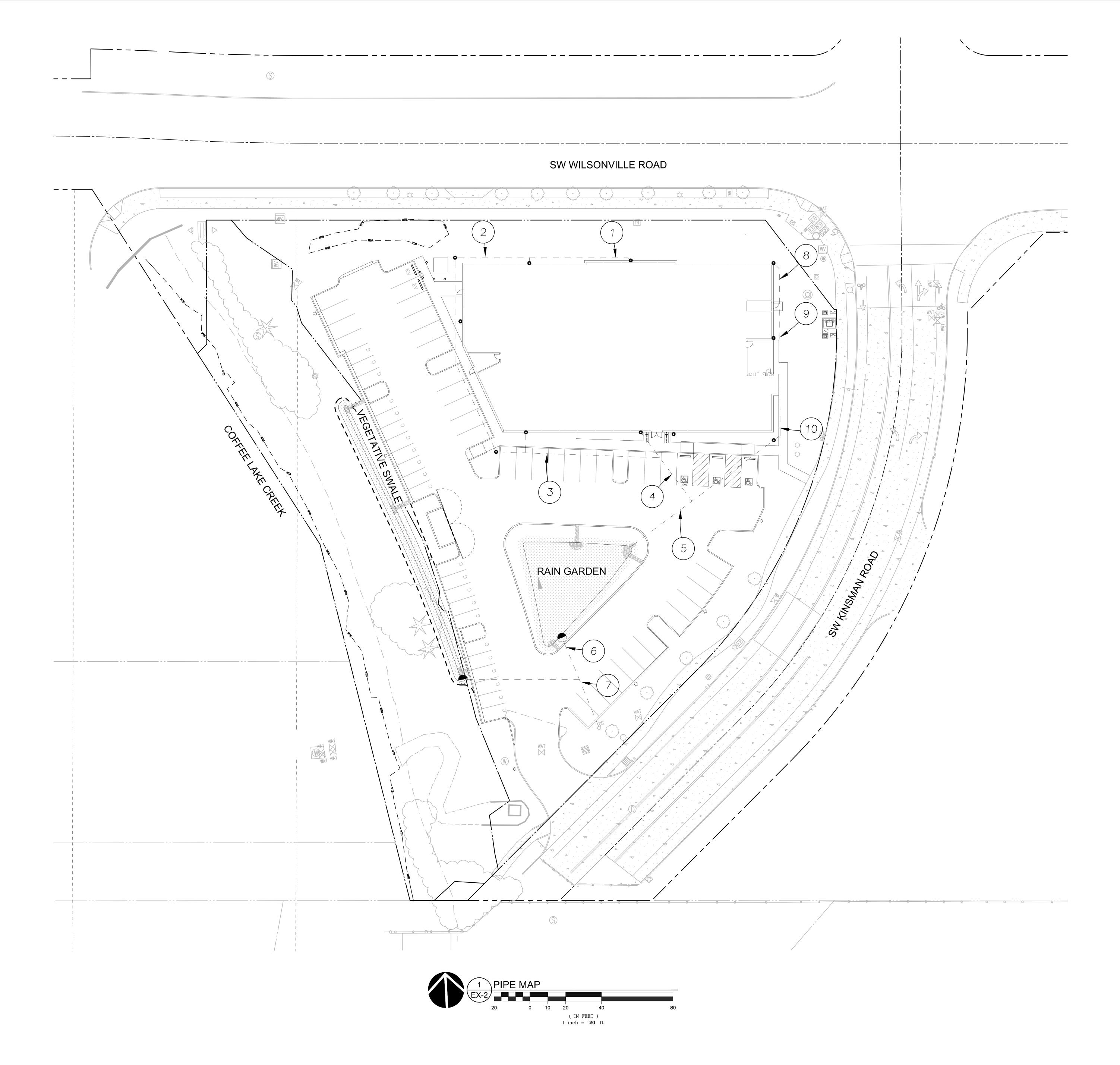
30125 SW KINSMAN RD, WILSONVILLE, OR 97070

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SHEET TITLE: BASIN MAP







Architecture = Interiors Planning = Engineering

Portland, OR 503.224.9560 Vancouver, WA 360.695.7879 Seattle, WA 206.749.9993 www.mcknze.com MACCECENE Esign Driven I client Focused Client Client CIS - OREGON 25117 SW Parkway Avenue, Wilsonville, OR, 97070

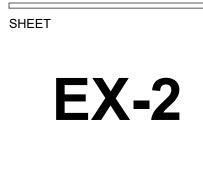
Project CIS COLLABORATION CENTER

30125 SW KINSMAN RD, WILSONVILLE, OR 97070

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SHEET TITLE: PIPE MAP



JOB NO. **2220098.00** 

APPENDIX B – OPERATIONS AND MAINTENANCE MANUAL

# **Stormwater Operations & Maintenance Manual**

For:

# CIS Collaboration Center Wilsonville, Oregon

October 2023

Prepared by:

Mackenzie 1515 SE Water Avenue Suite 100 Portland, OR 97214 2210115.00



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# ATTACHMENTS

- 1. O&M Facility Map
- 2. Sample Maintenance Report
- 3. City of Wilsonville 2012 Manual for the Operation & Maintenance of Privately Owned Stormwater Facilities



## I. GENERAL- SITE DESCRIPTION, ASSUMPTIONS AND GENEREAL SYSTEM DESCRIPTION

This plan was developed to provide a basis for maintenance of stormwater facilities for the CIS Collaboration Center project located in Wilsonville, Oregon. The proposed development consists of the construction of a 15,744 square foot (footprint) commercial building with an associated drive aisles and parking, an exterior trash enclosure, and associated utility services to the building and site.

Runoff from the site sheets flows to curb curbs and into the proposed vegetative swale. Roof runoff is collected via hard pipe and routed to the proposed rain garden.

This Operations and Maintenance Plan generally provides maintenance requirements of the stormwater collection and treatment system. Best Management Practices (BMPs) related to maintenance of the facilities shall include regular maintenance and upkeep of the parking and landscape areas.

## II. GENERAL MAINTENANCE AND FACILITY-SPECIFIC MAINTENANCE REQUIREMENTS

The CIS Collaboration Center Facilities Manager shall be responsible for regular inspections and maintenance of the storm drainage system and related facilities. Inspections shall include observations of the landscaping, parking areas, curb cut inlets for debris, loose soil or sediment that may enter the system. Inspection of the collection system includes observation of the inlets, and conveyance lines. General maintenance requirements of those facilities include removal of sediment and debris, repair of damaged components and general maintenance of mechanical systems.

Facility-specific maintenance requirements shall also be the responsibility of the CIS Collaboration Center Facilities Manager. Inspections shall include documentation of observations and maintenance or repairs of each of the drainage system facilities. This would include:

- Landscape areas
- Parking areas
- Curb cut inlets
- Cleanouts
- Conveyance pipes
- Treatment devices
- Detention elements

# Μ.

# **Operations and Maintenance Contact**

CIS Collaboration Center – Facilities Manager

Steve Norman 503.763.3890 snorman@cisoregon.com

# III. GENERAL MAINTENANCE ACTIVITIES

Maintenance of stormwater system components is the key to a successful stormwater plan. Most stormwater systems can fail in the first few years due to lack of adequate maintenance. The following guidelines will be used for general maintenance of the stormwater system.

- 1. Dry sweeping of the parking area to reduce accumulation of sediments and debris in the facilities will be conducted regularly.
- 2. Quarterly visual inspection of the curb cut inlets for debris and obstructions. All curb cut inlets or other structures shall be kept clear of sediment, debris or other obstructions that may affect the flow or treatment of stormwater.
- 3. Visually inspect the rain gardens and vegetative swale after all major storm events for evidence of system problems. Look for ponded water, debris, erosion, or any other signs of system problems.
- 4. Annually inspect the spill kit to ensure all supplies are available and have not deteriorated or expired (Note: each tenant shall have a separate spill kit or access to a shared spill kit). Check with city staff to stay aware of newly available products or spill containment procedures. Become familiar with the spill control plan (included with this O&M Plan) and ensure that at least one employee during each work shift is familiar with the plan (always have someone onsite who is aware of the spill containment kit and procedures).

# IV. SITE PLAN SHOWING LOCATION OF FACILITY COMPONENTS

The attached O&M Facility Map shows the general location of the facility components. The site utility "Asbuilt" drawings should be consulted for further information regarding facility locations, sizes or details.



# V. INSPECTION PROGRAM – PERFORMANCE MEASURES FOR MAINTENANCE ACTIVITIES

## Objective

The objective of this manual is to help the property owner to maintain the storm sewer system for CIS Collaboration Center so it can continue to operate as designed.

## Requirements

Conduct inspections with the as-built plans in hand. Inspect the facility on a quarterly basis for the first 3 years from construction, and a minimum or semi-annually thereafter. Additional inspections will be necessary after long dry periods, large storms or spills. Immediately remove spilled material, taking the appropriate safety and disposal precautions.

Keep inspection records to track the progressive development of the system over time. The inspection records shall include:

- 1. Sediment condition and depth in curb inlets
- 2. Water elevation/observations (sheen, smell, etc.)
- 3. Conditions of the inlet and outlet pipes, and remaining storage capacity
- 4. Unscheduled maintenance needs
- 5. Components that do not meet performance criteria and require immediate maintenance
- 6. Common problem areas, solutions, and general observations
- 7. Aesthetic conditions

# Μ.

# **Collection System**

The collection system consists of underground pipes and sheet flow.

## Storm Sewer Pipes

The storm sewer pipes are plastic with associated fittings. The pipes need to be inspected and cleaned quarterly (if necessary) following major storm events. Cleanouts and manholes are provided for access to the pipe system. The pipes need to be inspected for sediment buildup and cleaned out, if necessary, using a vactor truck so that sediment is removed.

## **Rain Gardens**

Refer to attached City of Wilsonville 2012 Manual for the Operation & Maintenance of Privately Owned Stormwater Facilities.

## Vegetative Swale

Refer to attached City of Wilsonville 2012 Manual for the Operation & Maintenance of Privately Owned Stormwater Facilities.



## Maintenance Schedule

Summer: Make structural repairs; clean gutters and downspouts; remove any build-up of weeds or organic debris.

Fall: Replant exposed soil and replace dead plants. Remove sediment and plant debris.

Winter: Clear gutters and downspouts.

Spring: Remove sediment and plant debris. Replant exposed soil and replace dead plants.

All season: Weed as necessary.

## Maintenance Record

All facility operators are required to keep an inspection and maintenance log. Record date, description, and contractor (if applicable) for all repairs, landscape maintenance, and facility cleanout activities. Keep work orders and invoices on file and make available upon request of the City inspector.

## Access

Maintain ingress/egress per design standards.

## Vector (Mosquitoes and Rats)

Facilities must not harbor mosquito larvae or rodents. Record the time/date, weather, and site conditions when vector activity is observed. Record when vector abatement started and ended.



# VI. O&M INSPECTION SCHEDULE

- Quarterly inspection of the curb cut inlets and drainage system for accumulation of sediments or oils
- Annual inspection of the emergency spill kit to ensure that all supplies are available and have not deteriorated or expired
- Quarterly inspection of the swale for proper landscape maintenance, removal of trash or sediment and repair of erosion
- Materials removed from the pipes shall be disposed of in accordance with state law

## **Employee and Public Education**

Employees will be trained upon hiring and thereafter annually, when new requirements are published or when there are any changes to the system equipment. Employee training will include:

- Reading this Stormwater Management Plan
- Familiarity of all components and locations for materials indicated in the SWMP
- Spill response and Personal Protective Equipment (PPE)
- Documentation requirements

### VII. MAINTENANCE EQUIPMENT

Hand tools or other specialized equipment may be necessary to maintain the facilities. Suggested maintenance equipment is listed in the Inspection Checklist. The Facility Manager shall be responsible to maintain on-site, or be able to make available, all required equipment.

### **Suggested Maintenance Equipment and Materials**

- Push broom
- Rake
- Shovel
- Spill kit
- Manhole lid puller
- General landscape tools (weed cutters, pruning clippers, leak rake, etc.)
- Vactor Truck



# VIII. SEDIMENT STORAGE, TESTING, AND DISPOSAL

Maintenance of the storm drainage facilities may include removal of oils, sediments or debris that requires specialized testing or disposal. All removed oils, sediments or other debris shall be disposed of in accordance with applicable regulations. The Facility Manager shall be responsible to retain a qualified company to dispose of this material or otherwise comply with the applicable regulations. The Facility Manager should contact the City of Wilsonville Public Works to verify current regulations or requirements. Local companies providing testing, storage and disposal services:

Clearwater Environmental Services in Wilsonville: (503) 582-1951 River City Environmental in Portland: (503) 252-6144 Bravo Environmental in NW Portland: (503) 261-9800

# IX. EMERGENCY CONTACTS

## **Emergency Contacts**

Steve Norman 503.763.3890 snorman@cisoregon.com

## **Maintenance Responsibilities**

The Facility Manager shall be responsible to inspect, maintain or otherwise repair the stormwater facilities. Regular inspections shall occur, and documentation of the inspections, maintenance or repairs kept on-site for a minimum of three years from the date of the activity.

## X. SPILL PREVENTION AND CONTROL PLAN

Spill prevention is an important factor in the successful operation of a stormwater management system. All employees will be trained to this plan so that they are certain of the location of materials, who to notify in case of a spill, and how to initially contain the spill of hazardous materials. Employees shall never dump water materials into the stormwater collection/treatment system. Employees shall be observant of other potential contamination occurrences. All employees will review the following page regarding detailed spill response steps.

This data will be posted in an accessible area.

# Μ.

# WHAT TO DO IN CASE OF A SPILL

- 1. The spill kit is located at the stand up shelter near the site entry
- 2. Get the spill kit (and spill kit instructions when provided)
  - a. If possible, determine visually what type of fluids have been spilled
  - b. Put on gloves and glasses or any other necessary Personal Protective Equipment (PPE)
  - c. Get the absorbent material provided in the kit and drain block cover (pig)
  - d. Place the absorbent material in the path of the spill
  - e. Remove any debris from the vicinity of the curb inlets in the parking lot
  - f. Unroll the drain blocker, and place is snugly over the curb inlet
  - g. Verify the cover has full contact with the opening of the curb inlet
  - h. Use snakes, pillow or pigs to completely contain the areas
- 3. Notify the following personnel immediately:

City of Wilsonville Public Works:	(503) 682-4092
After Hours:	(866) 252-3614
Department of Environmental Quality:	(800) 452-0311 (800) 452-4011 (503) 229-5263

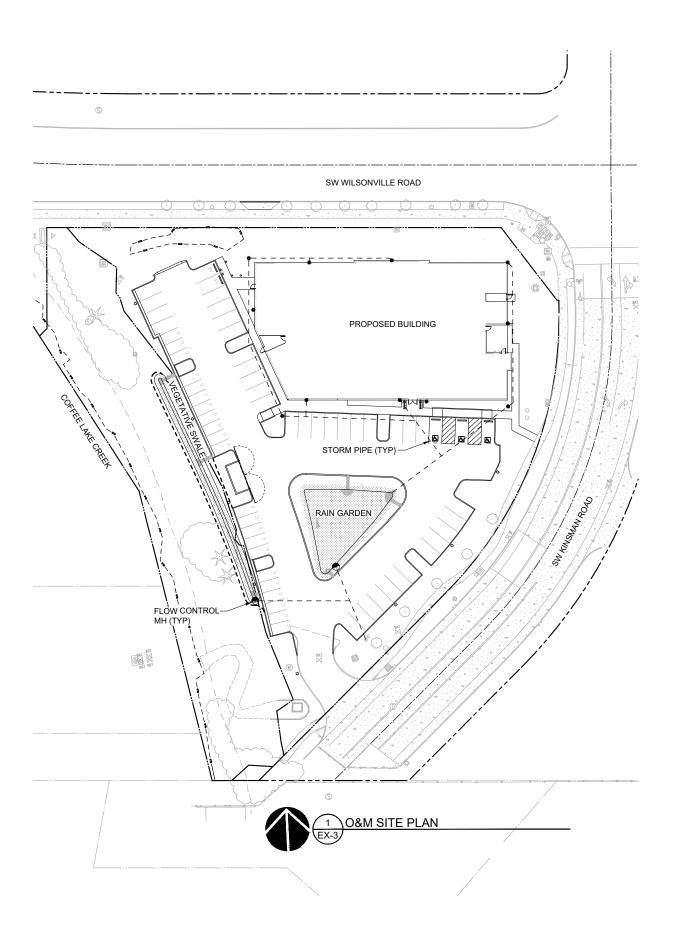
Note: Only dry cleanup methods may be employed to clean up spills (i.e. no use of water to wash spilled materials from pavement will be conducted).



# XI. ADDITIONAL MAINTENANCE REQUIREMENTS FOR INITIAL ESTABLISHMENT PERIOD

Initial maintenance of landscape vegetation may require additional attention to ensure that landscaping, groundcover and erosion control measures are established or maintained as intended. Proper landscaping and groundcover are an important feature of a successful storm drainage system.

- 1. During the initial 3-year establishment period, remove undesired vegetation using minimal (or preferably no) use of toxic herbicides and pesticides at least 3 times a year. Replace plants that die during this period.
- 2. Irrigate as necessary to establish site landscaping
- 3. Replenish mulch at least annually. Make sure that all exposed soil is covered with mulch or other groundcover
- 4. Do not use excessive fertilizers, herbicides or pesticides for vegetation maintenance
- 5. Use replacement plants that conform to the initial planting list





#### City of Wilsonville Annual Stormwater Facility Inspection and Maintenance Report

Name of Development:
Location/Site Address:
Contact Name:
Telephone:
Email:
Mailing Address (if different from Site Address):

#### Facilities to be Maintained:

Catch Basin(s)	
Pretreatment Manhole(s)	
Flow Control Manhole(s)	
 Detention Pond(s)	# of inlets
	# of outlets
 Rain Garden(s)	# of inlets
	#of outlets
Stormwater Planter(s)	# of inlets
	# of outlets
Vegetated Swale(s)	# of inlets
	# of outlets
All Other Facilities as Describe	d on Plans:

#### **Inspection Date:**

**Describe Inspection, Maintenance, Repair, or Replanting Activities** (attach invoices for work performed):

Owner or Representative Signature

Date

Phone 503-682-4960 Fax 503-682-7025 CITY OF WILSONVILLE • COMMUNITY DEVELOPMENT 29799 SW Town Center Loop East Wilsonville, OR 97070

www.ci.wilsonville.or.us info@ci.wilsonville.or.us The Owner(s) or Owner's designee shall be responsible for annually conducting inspections and performing maintenance on the above stormwater management facilities annually, in conformance with Section 301.13.00, "Operation and Maintenance Requirements," of the City of Wilsonville Public Works Standards. This requirement pertains to all Stormwater Facilities, including but not limited to: catch basins, pipes, treatment manholes, manholes, trash racks, vegetated swales, and detention ponds.

For vegetated stormwater facilities, particular attention will be given to:

- Examine inlets, outlets, and curb cuts for sediment buildup. Remove sediment as necessary to maintain flow into and out of facility.
- Inspect facility for erosion, gullies, and slope slippage. Repair if present.
- Check for evidence of ponding or slow draining soil media. If necessary, remove and clean or replace the clogged soil media.
- Remove weeds manually.
- Ensure that all plants are healthy. Replace all dead or dying plants with approved plantings.
- Remove trash and excess debris.
- Ensure overflow covers are in place.

For structural facilities and components, particular attention will be given to:

- Remove sediment at least once a year or when basin is half full of sediment.
- Remove trash, oils, and debris.
- Ensure facility is structurally sound by repairing or replacing cracked, loose, askew, or damaged pipes.
- Access covers, trash racks, and metal grates shall be kept free of trash and debris, closed, and in good working order.
- Maintain filter cartridges and other proprietary systems according to manufacturer's recommendations.

Spring	Summer	Fall	Winter
Remove sediment	Remove sediment	Remove sediment	Remove sediment
Remove trash	Remove trash	Remove trash	Remove trash
Remove weeds	Remove weeds	Remove weeds	Fix erosion
Fix erosion	Fix erosion	Fix erosion	Prune trees &
Plant	Check irrigation	Plant	shrubs
Prune grasses	Water plants	Drain irrigation	
Check irrigation	Structural repairs	Structural repairs	

City of Wilsonville:

A Manual for the Operation & Maintenance of Privately Owned Stormwater Facilities March 2012

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## CARING FOR YOUR STORMWATER FACILITY

#### THANK YOU

As the owner of a stormwater management facility, you are making a meaningful contribution to the health of Wilsonville's streams, wetlands and the Willamette River. This handbook will help you maintain your facility to make sure it performs the work it is designed to accomplish.

#### WHAT ARE STORMWATER FACILITIES?

Stormwater facilities are any combination of landscape and structural features that slow, filter, or infiltrate (absorb) runoff on your property after a rainfall. Types of facilities include vegetated systems (planters, swales, ponds, created wetlands, etc.), and structural systems (ecoroofs, porous pavement and manufactured facilities). Piping, inlets and catch basins are also important components that need adequate maintenance to assure facility function. All of these serve a common purpose: control-ling the quality and quantity of stormwater runoff from your site to help safeguard our valuable water resources.

### PROPERTY OWNER RESPONSIBILITIES

Federal, state and local agencies created management regulations and guidelines so as to improve stormwater quality and protect watersheds, rivers, streams and drinking water resources. The City of Wilsonville has a Stormwater Maintenance and Access Easement that includes the following requirements:

- Annual maintenance on storm drainage facilities in conformance with City of Wilsonville's Public Works Standards. For more information go to: <u>www.ci.wilsonville.or.us/Index.aspx?page=127</u> Go to Important Links at the bottom of the page and click on Public Works Construction Standards 2006 (section 301.6.00 Operations and Maintenance Req.)
- Removal of debris, leaves and sediment from manholes, detention outlet structures, and catch basins.
- Disposal of all oils, sediment and debris in an approved dumpsite.
- Replacement of all dead or dying plants in ponds and swales. Maintenance of original plantings.
- Removal of trash from ditches, swales, catch basins, or any stormwater conveyance.

The steps we take today will greatly influence Wilsonville's environmental health and quality of life for years to come. Individual actions can make a big difference. Thank you for the significant part you and your stormwater management facility are playing.

\* For information or questions about your facility, call the Natural Resources Program at (503) 682-4960

## INSPECTING AND MAINTAINING YOUR FACILITY

#### **PROTECTING YOUR RESOURCES**

It is essential to maintain your facility so it functions as intended and limits off-site environmental impacts. You are required to inspect your facility at a minimum of once a year to determine maintenance needs. Routine inspection and maintenance can help keep overall maintenance costs low by detecting problems early and avoiding large repair or replacement costs. This section identifies general guidelines on what to look for and how to maintain your facility. It also notes non-routine maintenance that may require professional assistance. If you are unsure of what type of facility you have, call the City of Wilsonville's Natural Resources Program at (503) 682-4960.

#### LEGAL REQUIREMENTS: OPERATIONS AND MAINTENANCE PLAN

As a property owner, you are legally required to follow all of the maintenance tasks and schedules outlined in your recorded maintenance and access easement. An Annual Inspection and Maintenance Report must be submitted to the City of Wilsonville no later than May 1 each year (see sample form on page 7). Pictures included with the report are very helpful. Include copies of invoices of work performed by contractors. While inspecting your facility, please keep in mind that it will be necessary for you to refer to your landscape plan in order to maintain your facility as it was originally designed.

## **INSPECTION SCHEDULE: HOW OFTEN**

It is recommended that you inspect your facility at least ::

- Quarterly for the first two years
- Once a year there after, and
- Within 48 hours of major rainfall events (more than one inch of rain over a 24-hour period).

## SAMPLE REPORTING FORM

Stormwater Annual Insp	pection and Maintenance Report
<ul> <li>The owner(s) or owner's designee shall be responsible for h stormwater facilities annually, in conformance with Section Works Standards. All oils, sediment and debris will be rem equipment will be repaired promptly.</li> <li>Particular attention will be given to sedimentation and poll debris shall be removed to assure proper functioning.</li> <li>The grates of all catch basins shall be kept free of debris an The stormwater facility outlet structure(s) shall be checked stormwater facility outlet structure(s) shall be checked stormwater facility outlet. Sediment shall be removed as The outlet control manhole shall be inspected to assure that malfunction.</li> <li>Inspect all stormwater facilities for survival and viability of remove sediments and debris. Maintain all original lands: This includes all stormwater facilities including but not lim structural controls.</li> <li>The above inspection and maintenance activities shall be dwas completed to the City of Wilsonville at the mailing ad submitted no later than May 1 each year.</li> </ul>	aving inspections conducted and maintenance performed on the above prival a 301.6.00, "Operation and Maintenance," of the City of Wilsonville Public noved and deposited in an approved waste disposal site. Any damaged ution control manholes, and stormwater facility inlet and outlet structures. A id leaves. to assure that sediment accumulation has not encroached on the required necessary to maintain that required volume. t all parts are intact and the orifice is free of any debris that could cause f plantings. Replace all dead or dying plants with in-kind plantings, and
Na	ame of Development
Contact	
Telephone	
Mailing Address	
Location	
Tax Lot	
Street Address	
Facilities to be maintained Trapped catch basin(s) (number Pollution control manhole(s) (num Outlet control manhole(s) (number Detention pond(s);	umber of each) per of each) (number of each) l(s); vault(s);
Inspection Date	
Describe inspection, maintenance, repair or	replanting
(Attach invoices for work performed)	(Continue above on additional sheet if needed)
(Attach invoices for work performed) Owner, Owners or their Representative	2.3.4

## SEDIMENT REMOVAL AND DISPOSAL

# FACILITIES AND SYSTEM COMPONENTS THIS APPLIES TO

**Vegetated Facilities:** ecoroofs, infiltration basins, planters, ponds, swales, trees, vegetated filters, and created wetlands.

**Structural Facilities:** catch basins, curb cuts, inlets, manufactured facilities, piping, sedimentation manholes, and vaults.

Pervious Pavement: porous concrete or asphalt, permeable pavers.

#### IMPACT ON FACILITY PERFORMANCE

The purpose of a stormwater treatment facility is to remove pollutants, including suspended solids, by capturing sediment. Sediment can include dirt, leaves, and litter. These materials can restrict or clog the facility. Timely removal of sediment will improve infiltration rates, water quality, and help prevent clogging and flooding.

#### WHAT TO LOOK FOR

Check the depth of accumulated sediments. Sediment markers can be placed in the facility to help identify depths. Remove sediment when:

#### **Vegetated Facilities:**

- Sediment is 4" deep,
- Sediment depth is damaging or killing vegetation, or
- Sediment is preventing the facility from draining within a 24-48 hour period.

#### **Structural Facilities:**

- At least once a year, or
- When the basin is half full of sediment.

#### **Pervious Pavement:**

• Sediment is preventing the facility from draining in 24 hours.

#### WHAT TO DO

Often sediment can be removed by hand. Large facilities and underground facilities will need to be cleaned with heavy equipment by trained professionals.

• Remove sediment during dry months when it is easier to remove, weighs less, and creates fewer secondary environmental impacts (such as wet sediment running off the site).

## NOTE: It is illegal to hose sediments through your system.

#### Doing it yourself

#### **Vegetated Facilities:**

- Use rakes and shovels to dig out accumulated sediment.
- Avoid damage to existing vegetation.
- If sediment is deep, plants may need to be removed in order to excavate sediment.
- Reseed and mulch disturbed areas to prevent erosion.
- Excavate sand or gravel and clean or replace.

#### Doing it yourself (continued)

#### Structural Facilities, Dispersion Trenches and Pervious Pavement:

- Catch Basins: Clean debris off the grate and bars. Lift the grate and use a bucket to remove water and a shovel to dig out sediment.
- Curb cuts, piping and other conveyance facilities: Use a shovel, router, air hose or other dry method to clear sediment and debris.
- Dispersion Trenches: Excavate sand or gravel and clean or replace.
- Pervious Pavement: Remove accumulated sediment from the surface with a dry broom, vacuum system, or other hand tools.

#### Hiring Professionals

Cleaning certain facilities will require professional assistance.

- Underground facilities such as manholes, and manufactured facilities must be cleaned by a vactor truck. Do not enter these facilities. They are defined by the Oregon Occupational Safety and Health Division as confined spaces and require proper certification to enter.
- Certain components such as collection basins, piping or pervious pavement systems may require vacuuming with a vactor truck or street sweeping equipment.

#### DISPOSAL

When deciding how to dispose of sediment, you need to consider the types of activities and pollutants on site. Sediment from commercial or industrial sites is usually not considered hazardous waste. However, as the generator of this waste you are responsible for deciding how to properly manage the removed solids.

#### Contaminated Water and Sediment

Catch basins and stormwater facilities in areas used for chemical or hazardous waste storage, material handling or equipment maintenance may collect the chemicals used in these activities from spills or via stormwater runoff. If you observe an oily sheen, odors, discoloration, or other signs of pollution, hire a professional laboratory or sampling firm to assess whether the material needs specialized hauling, treatment or disposal to comply with Oregon State Department of Environmental Quality (DEQ) rules. If you need assistance deciding whether the solids should be managed as hazardous waste, contact DEQ.

#### Non-Contaminated Water and Sediment

If the pollutant load is non-hazardous, water may be spread across vegetation onsite. Let the solids dry out, then properly dispose of them. Temporary erosion control measures may be needed to contain the material onsite. Dry materials may be reused elsewhere on your site, may be eligible for reuse by others, or can be disposed of at a designated solid waste facility.

# REDUCING SEDIMENT ACCUMULATION AND POLLUTION IN YOUR FACILITY

- Minimize outside sources of sediment, such as eroding soil upstream of your facility.
- Sweep paved areas on your property regularly.
- Make sure chemical and waste storage areas are not exposed to rainfall and stormwater runoff.
- Don't let water from washing vehicles or equipment drain to your stormwater facility.

## RESOURCES

**City of Wilsonville Public Works Standards:** www.ci.wilsonville.or.us/Index.aspx?page=127 Go to *Important Links* at the bottom of the page and click on *Public Works Construction Standards 2006* (section 301.6.00 Operations and Maintenance Req.)

Environmental Protection Agency: www.cfpub.epa.gov/npdes/home.cfm?program\_id=6

Department of Environmental Quality: www.oregon.gov/DEQ

**Private Maintenance Companies** (listed below are just a few examples of companies that provide maintenance services, more companies are available)

- Clearwater Environmental Services in Wilsonville (503) 582-1951
- River City Environmental in Portland (503) 252-6144
- Bravo Environmental NW in Portland (503) 261-9800

Stormwater runoff has substantial impacts on the water quality and habitat that fish depend on. By reducing those impacts, we are taking direct action on behalf of threatened species as well as other fish and wildlife that are under stress.

## **VEGETATION MANAGEMENT**

#### FACILITIES THIS APPLIES TO

Vegetated Facilities: ecoroofs, infiltration basins, planters, ponds, swales, trees, vegetated filters, and created wetlands.

## IMPORTANCE TO FACILITY PERFORMANCE

Plants play an important role in stormwater facilities. They absorb water, improve infiltration rates of soil, prevent erosion by stabilizing soil, cool water, and capture pollutants. Plants create habitat for birds and other wildlife and provide aesthetic value to a property. Proper maintenance of vegetation improves the appearance and performance of your facility. Your facility must be kept in accordance with the original landscape design.

## WHAT TO LOOK FOR

When identifying maintenance needs it is helpful to have a copy of your landscape plan, this shows the plants you are required to have in your facility. Facilities should be checked for maintenance needs quarterly for the first two years and once a year after that.

Facility needs maintenance when:

- Areas of soil are bare.
- Vegetation is buried by sediment.
- Vegetation appears unhealthy or has died.
- Nuisance and invasive plants are present.
- Vegetation is compromising the facility's structure by blocking inlets or outlets, or roots are intruding into a component of the facility.
- Dropped leaves and other debris are contributing to sediment accumulation or are blocking inlets or outlets.

## WHAT TO DO

Maintenance activities can easily be incorporated into existing site landscape maintenance contracts. Vegetation can be maintained with a formal or more natural appearance depending on your preference.

General Maintenance

- Remove dropped leaves, dead plants, and grass and other plant clippings. Plant debris adds nutrient pollution as it breaks down, and can clog facility piping and reduce infiltration.
- Avoid using fertilizers, herbicides, or pesticides in the facility. These products add to the pollution problems the facilities are designed to remedy.
- Use mulch to inhibit weed growth, retain moisture, and add nutrients. Replenish when needed. Ensure mulch does not inhibit water flow.
- Irrigate all new plantings as needed for the first two years.

#### Caring for wanted vegetation

Facility owners are responsible for maintaining healthy vegetation and must replace any plants that have died or been removed.

- You are required to maintain vegetation to the density approved on your landscape plans or specified in the City's Public Works Standards.
- Replant with vegetation approved for use in the original planting plan or from the recommended plant list in the City's Public Works Standards.

#### Caring for wanted vegetation (continued)

- Plant in late fall or early spring so plant roots can establish during the cool, rainy seasons, before summer.
- Amend and aerate compacted soils before replanting by adding compost to increase nutrients and enhance soil texture.
- If plants are not surviving, determine the reason for the plant die-off. Survivability may be improved by planting vegetation better suited for the site conditions or by irrigating more. You may need to test planting bed soils for pH, moisture, and other factors such as nutrient levels, soil structure, and organic matter content.

#### Mowing

- Grassy facilities are designed for routine mowing. Mow at least twice a year.
- Grass should be mowed to keep it 4" to 9" tall. Grass that is at least 4" tall captures more pollutants and is hardier. Do not allow grass to become a fire hazard.

#### Nuisance and unwanted vegetation

- Remove nuisance and invasive vegetation, such as Himalayan blackberry, English ivy and reed canarygrass, before it goes to seed in the spring. Do additional weeding in the fall. A list of nuisance plants can be found in the Portland Plant List (see below).
- Immediately remove vegetation that is clogging or impeding flow into the facility.
- Remove potentially large and deep-rooted trees or bushes when they might impede the flow path or compromise facility structures.
- Provide ground cover on any dirt exposed by vegetation removal.

#### Wildlife

Vegetated facilities create habitat, especially for birds. The Migratory Bird Treaty Act protects all native bird species. Birds and other animals will generally adjust to human activity. However, there are simple measures that should be taken to avoid disturbance:

- Avoid maintenance during bird nesting season from early March to late July. Prune and mow during late summer. Many baby birds will spend some time on the ground after leaving a nest.
- Walk the site before you do maintenance. Look for nests, burrows and animals in the facility. Reroute around animal areas by at least a few yards.

#### **RESOURCES**

Clackamas County Resources: Clackamas County Soil and Water Conservation District: www.conservationdistrict.org Plant Identification: Native Plant Society: www.npsoregon.org Master Gardeners: www.extension.oregonstate.edu/mg Native Plant Nurseries: Native Plant Nursery: www.plantnative.org

## EROSION, BANK FAILURE, CHANNEL FORMATION

## FACILITIES THIS APPLIES TO

Vegetated Facilities: ecoroofs, infiltration basins, planters, ponds, swales, trees, vegetated filters, and created wetlands.

## IMPORTANCE TO FACILITY PERFORMANCE

Stormwater flowing through a facility can cause erosion. Erosion can increase sediment build up, clog outlets, reduce water quality benefits, add to pollution and cause facility components to fail. Eroded channels create an easy path for water to travel down reducing the ability of the facility to filter pollutants and infiltrate water.

## WHAT TO LOOK FOR

Any area with erosion more than two inches deep needs maintenance. Signs of erosion and common locations:

- The formation of flow restricting channels in the bottom of the facility, around inlet pipes and curb cuts, or at overflows.
- Undercutting, scouring, and slumping along banks or berms.
- Channels and undercutting through check dams. (check dams are small berms built across a facility to slow water and create small areas of ponding).

## WHAT TO DO

- Fill the eroded area with soil, compact it lightly, and cover with mulch, compost, seed, sod, or other erosion prevention materials.
- Plant banks with deep or heavily rooted plants to permanently stabilize soil.
- Install or repair structures designed to dissipate energy and spread flow, such as splash blocks on downspouts, or riprap around inlet pipes and curb cuts. See the City's Public Works Standards for requirements.
- If erosion continues to be a problem, consult a professional to determine the cause and a solution.
- Replant in accordance with the landscape plan.

## STRUCTURAL DEFICIENCIES

## FACILITIES THIS APPLIES TO

Most stormwater facilities have some structural components. Some facilities such as vaults, drywells, and sediment manholes are completely structural. In vegetated facilities, structural components often control how water enters, travels through, or exits a facility. Common structural components include:

- Inflow and outflow pipes, curb cuts, and trenches.
- Valves, orifices, trash racks, and pipes.
- Concrete, metal, and plastic structures and components such as curbs, retaining walls, and manholes.
- Manufactured devices such as filter cartridges.
- Earthworks such as embankments, check dams, dikes, berms and side slopes.
- Riprap and other flow spreading elements.
- Access roads, gates and signs.

#### IMPORTANCE TO FACILITY PERFORMANCE

These elements need to be in good working order to route flows into a facility and for the facility to function properly.

## WHAT TO LOOK FOR

Look at the general condition of these elements. Do they need repair or replacement? Are they still properly aligned? Look for:

- cracks, scratches, dents, rust, or other conditions of wear.
- loose fittings, broken or missing components.
- · insufficient oil/grease for moving parts.
- appropriate gravel cover or bedding to support the structures.
- misaligned parts or other impediments to the component's ability to still pass flow.

#### MAINTENANCE

- Immediately repair or replace any major damage to prevent catastrophic failure. This includes any structural component that is cracked, loose or askew. You may need to consult a professional engineer or hire a trained contractor to design and perform any repairs. Refer to page 10 for a list of resources.
- Minor damage such as dents, or rust spots may not need immediate replacement but should be monitored.
- Maintain access to the facility by keeping the access route open and structurally sound, fence gates and vault lids oiled and locks functioning. Access must be available in an emergency.

## PONDING WATER

#### FACILITIES THIS APPLIES TO

**Vegetated Facilities:** dry ponds, infiltration basins, planters, rain gardens, sand filters, swales, created wetlands, and vegetated filter strips.

Structural Facilities: manufactured facilities and pervious pavement.

NOTE: Some facilities are specifically designed to always hold water such as: wet ponds, spill control manholes, and sedimentation manholes.

#### IMPORTANCE TO FACILITY PERFORMANCE

Most facilities are designed to drain in a certain amount of time. This varies from 2 to 48 hours depending on the type of facility. This time is stated in the Operations and Maintenance plan for the type of facility. Ponding water is usually a sign that the facility's outlet is clogged or it is not infiltrating properly.

#### WHAT TO LOOK FOR

- clogging of overflows or outlets with debris, trash or other obstructions.
- fine sediments filtering into the soil or other filtration media (like sand or gravel) that can prevent proper infiltration.
- water that has remained ponded for more than 48 hours.

#### MAINTENANCE

- For surface facilities, first try raking the top few inches of soil to break up clogged sections and restore water flow.
- Clean out overflows and outlets with hand tools, if possible. Difficult or hard to access blockages may require a professional contractor.
- Identify sources of sediment and debris to prevent them from entering the facility. Simple actions like sweeping a parking lot regularly can keep sediment out of facilities.
- Make sure the facility has enough vegetation. Vegetation absorbs water and roots help keep soil loose so it can infiltrate water.

For more thorough instructions on removing sediment, see the "Sediment Removal and Disposal" section of this handbook. Sediment accumulated in stormwater facilities may be considered hazardous waste and must be handled and disposed of properly.

If ponding still occurs, contact a landscape architect, professional engineer or trained contractor for more assistance.

## PESTS

#### FACILITIES THIS APPLIES TO

All types of stormwater facilities

#### IMPORTANCE TO FACILITY PERFORMANCE

Mosquitoes can breed in ponded or other stagnant water. Vegetated areas

can be attractive habitat for rats, nutria, beaver, and a variety of birds and amphibians. While some species are desirable, others can be public health or nuisance concerns. In particular, mosquitoes and rats can breed quickly and cause a public health hazard if not removed. The presence of pests does not necessarily impact the ability of your facility to treat and manage stormwater but may indicate maintenance needs, such as lack of proper infiltration.

#### WHAT TO LOOK FOR

- Check for mosquito larvae in any system with open, slow, or non-moving waters especially during warmer weather. Larvae look like tiny wiggling sticks floating perpendicular to the water's surface.
- Look for nutria, rat, and other animal droppings year round. Also check for structural indicators such as beaver dams and rodent holes and burrows.

#### WHAT TO DO

#### Mosquitos

- The best way to avoid breeding mosquitoes is to prevent ponding water. Mosquitoes need standing water to lay their eggs, and for their larvae and pupae to develop. Most stormwater facilities are designed to drain in at least 48 hours. If your facility is not draining properly see the "Ponding Water" and "Sediment Removal and Disposal" sections of this handbook.
- As a temporary control for mosquitoes, the county or other licensed professionals can apply pesticides to kill mosquito larvae in the water or adult insects in the air.

#### Rats

Rats need shelter, food and water to survive.

- Remove plant debris that may provide shelter for rats from the facility.
- Remove fruits and nuts that fall to the ground.
- Fill in burrows.
- Trap and remove individual animals.

**Other Wildlife** Other non-native and invasive animal species may take up residence in your facility. Contact the Oregon Department of Fish and Wildlife (ODFW) to help identify these species and suggest removal processes. Permits from ODFW are required to capture and relocate native wildlife. Some common non-native species are:

- Opossum
- Fox squirrel
- Snapping turtle

- Eastern gray squirrel
- Eastern cottontail
- Nutria
   Egyptian goose
- Bullfrog
- Red-eared slider turtle

#### PEST RESOURCES

Rats and mosquitoes: Clackamas County Vector Control (includes Washington County) www.clackamas.us\vector (503) 655-8394

Other pest issues: Look in yellow pages or on the internet under "Pest Control"

*Other Wildlife:* Oregon Department of Fish and Wildlife www.dfw.state.or.us/wildlife/ (503) 947-6000 or (800) 720-6339

## POLLUTION YOU CAN SEE OR SMELL

#### FACILITIES THIS APPLIES TO

All types of stormwater facilities.

## IMPORTANCE TO FACILITY PERFORMANCE

Stormwater facilities often collect a variety of trash and debris. Trash and debris, especially floating debris, can clog pipes or treatment media. It can also cause odors through decay or by collecting spilled or dumped materials. Stormwater facilities are designed to help prevent pollutants from entering rivers and streams. Any visible water quality pollutants may wash out of the facility spreading the pollution problem.

#### WHAT TO LOOK FOR

• Check monthly for Trash and debris.

Any unusual or unpleasant smells from sources such as:

- Natural plant decay.
- Dying plants trapped under sediment.
- A spill or a leak (e.g., gasoline or sewage).

Visible pollution such as:

- Sheens
- Turbid (cloudy) water
- Discoloration, or
- Other pollutants on the surface of the water.

Pollution You Can See And Smell (continued)

## WHAT TO DO

- Regularly remove trash and plant debris.
- Remove accumulated sediment (see "Sediment Removal and Disposal" in this manual).
- Make sure inlets and outlets are not clogged.
- Identify the source of trash, debris or pollutant, such as a spill, leak, or illicit discharge.
- If there is evidence of a spill or leak, contact a professional laboratory or sampling firm to assess whether the material needs specialized removal, treatment, and disposal. Use trained professional staff for any cleanup and remediation.

## SAFETY

In addition to keeping the facility in good working order, maintenance should also strive to meet safety and aesthetic goals that benefit the community and protect your site workers. Consider establishing maintenance triggers and practices that respond to the following issues below. Keep in mind the safety of both the employees who maintain your facility and the general public.

## WHAT TO LOOK FOR

#### Site Conditions

Conditions, such as steep slopes, slick surfaces, and vegetation debris, can create a falling hazard to employees and visitors.

#### Public Safety

Some stormwater facilities, such as ponds and created wetlands, can be "attractive nuisances" attracting undesirable activity, vandalism, or use that could be harmful to public safety. Consider the safety features now in place at your facility.

## WHAT TO DO

- Use barrier plantings or fencing to bar entry into the facility area.
- Install road bollards, lighting, and signage to discourage illegal dumping.
- Avoid maintaining facilities in wet weather to reduce the risk of injuries from slipping. Always make sure that appropriate safety gear (e.g., harness, gloves, face shields, safety line) is used.
- For underground facilities, avoid entering anything defined as a confined space. Vaults, deep ponds, manufactured facilities or manholes are examples of confined spaces. These areas require special permits, training and entry techniques. Some can be inspected and cleaned from above without entering. Always use caution when working with underground facilities. You are legally required to meet Oregon Occupational Safety and Health Division (OR-OSHA) requirements for such activities.

#### RESOURCES

Confined space entry: OR-OSHA (confined space entry requirements) www.orosha.org/subjects/confined\_spaces.html (503) 229-5910

## PAYING FOR MAINTENANCE

Specific maintenance costs depend on the characteristics of the facility, the site, and the area draining to the facility. The general rule of thumb is that annual maintenance costs will be 5 to 10% of the facility's total capital cost. Routine, scheduled maintenance can help keep overall costs down by addressing problems before they require major attention. Contact your stormwater system manufacturer for information about your system.

## FINANCING MAINTENANCE

You need to determine how you will finance your maintenance needs. A facility maintenance fund is recommended for both capital maintenance procedures (e.g., facility replacement and non-routine maintenance, such as sediment removal, facility component repair or replacement, major replanting, or safety structure construction) and operating maintenance procedures (routine activities such as facility inspection, debris removal, and vegetation management). For homeowner associations, this could be a portion of homeowner fees or a specific assessment.

#### HOW MUCH TO SAVE

- An average 5 to 10% per year of the facility's capital cost for annual routine maintenance.
- A percentage of the non-routine maintenance costs per year (i.e. for sediment removal, vegetation replacement) based on the needed frequency. For example, if the facility is designed to need mechanical sediment removal every five years, 20% of the total cost should be put aside each year.
- An additional 3 to 5% of the facility's capital cost per year for eventual facility replacement (based on the facility's life expectancy). Most of these facilities have a life expectancy of 25 to 50 years.

#### **VEGETATED FACILITIES**

- Most required routine maintenance (excluding major repair and replacement) is estimated to have an annual cost of \$200 to \$600 dollars per acre of facility, above current landscape maintenance costs. Costs can vary depending on the types and level of maintenance practices used.
- The cost and intensity of maintenance activities are usually higher during the two-year plant establishment period. During this time, plants will need additional watering and plants that die will need to be replaced.

## WHERE TO GET MORE ASSISTANCE

#### City of Wilsonville Natural Resources Program

www.ci.wilsonville.or.us/Index.aspx?page=91 (503) 682-4960

#### City of Wilsonville Public Works Standards:

www.ci.wilsonville.or.us/Index.aspx?page=127 Go to *Important Links* at the bottom of the page and click on *Public Works Construction Standards 2006* (section 301.6.00 Operations and Maintenance Req.) (503) 682-4092

#### HIRING CONTRACTORS

Professional maintenance services phone book/internet references:

- Vegetation Management:
- "Landscape Contractors"

Sediment Removal and Disposal:

- "Sewage," or
- "Waste Disposal"

#### Facility Alterations:

- "Landscape Architects" or
- "Engineers Civil"

Manufactured Facilities:

• Find the specific manufacturer

## **CONFINED SPACE ENTRY**

Oregon Occupational Safety and Health Division (OR-OSHA): www.orosha.org/subjects/confined\_spaces.html (503) 229-5910

#### A Detailed Guide to Stormwater Operations & Maintenance

#### PEST RESOURCES

Rats and mosquitoes: Clackamas County Vector Control (includes Washington County) www.clackamas.us\vector (503) 655-8394

Other pest issues: Look in yellow pages or on the internet under "Pest Control"

*Other Wildlife:* Oregon Department of Fish and Wildlife www.dfw.state.or.us/wildlife/ (503) 947-6000 or (800) 720-6339

Portland Audubon Wildlife Care Center Help with injured animals and animal identification questions: www.audubonportland.org (503) 292-0304



The Audubon Wildlife Care Center is the oldest and busiest wildlife rehabilitation facility in Oregon. Each year they treat over 3,000 wild animals for release back to the wild and respond to more than 15,000 wildlife related inquiries.

#### VEGETATION

*Clackamas County Resources:* Clackamas County Soil and Water Conservation District: www.conservationdistrict.org

Plant Identification: Native Plant Society: www.npsoregon.org

Master Gardeners: www.extension.oregonstate.edu/mg

Native Plant Nurseries: Native Plant Nursery: www.plantnative.org





## City of Wilsonville

29799 SW Town Center Loop E

Phone: 503-682-4960 Fax: 503-682-7025

#### www.ci.wilsonville.or.us



This brochure was prepared by the City of Wilsonville's Natural Resources Program staff. March 2012 NOTE: A considerable amount of information was obtained from the City of Portland's Stormwater Management Facilities Operations and Maintenance for Private Property Owners guide.

# OTHER WAYS TO PROTECT OUR STREAMS AND THE WILLAMETTE RIVER

#### In Your Home or Business

- Use nontoxic cleaners.
- Properly dispose of hazardous materials.
- Conserve energy: switch to compact fluorescent bulbs, turn down the heat, do the laundry with cold water, purchase energy-efficient appliances.
- Use water wisely: fix leaks, use low-flow showerheads, use only the water you need.

#### In Your Yard

- Plant native vegetation.
- Consider planting perennials versus annuals.
- Sweep instead of hose.
- Cover bare soil with mulch or plants.
- Compost yard debris.
- Disconnect downspouts (where appropriate).
- Use drip irrigation.

#### In and Out of Your Car

- · Properly maintain vehicles.
- Wash vehicles where water is recycled.
- Drive less: use transit, bike, walk, or carpool.
- Recycle motor oil.
- Clean up spills or leaks.

#### In Your Community

- Volunteer for tree planting, cleanup, stream restoration, or invasive plant species removal projects.
- Report spills and illegal dumping (call 503-823-7180).
- Don't litter, and pick up litter when you see it.
- Pick up pet waste and put it in the garbage or toilet.

#### In Parks and Natural Areas

- Stay on designated hiking trails and biking areas.
- Keep dogs on leashes and away from the streambanks and water. Pick up pet

## THANK YOU

for helping keep Wilsonville clean, healthy and sustainable and for stewarding this beautiful place that we all share.

Printed on recycled paper.

APPENDIX C – GEOTECHNICAL REPORT

## Geotechnical Investigation Proposed Building and Site Improvements Citycounty Insurance Services 9990 SW Wilsonville Road Wilsonville, Oregon

## Prepared For

Citycounty Insurance Services Attention: Steve Norman 15875 Boones Ferry Road, #1469 Lake Oswego, Oregon 97035

> June 26, 2023 Project No. 00-231391-0





9120 SW Pioneer Court, Suite B, Wilsonville, Oregon 97070 | ph: 503.682.1880 fax: 503.682.2753 | www.nwgeotech.com

June 26, 2023 Proposal No. 00-231391-0

Citycounty Insurance Services Attention: Steve Norman 15875 Boones Ferry Road, #1469 Lake Oswego, Oregon 97035

- Attention: c/o Mr. Mark A. Galusha Cumming Group
- Subject: Geotechnical Investigation Proposed Building and Site Improvements Citycounty Insurance Services 9990 SW Wilsonville Road Wilsonville, Oregon

Dear Mr. Galusha:

As requested, Northwest Geotech, Inc. (NGI) has completed a geotechnical investigation in support of the design and construction of the proposed Citycounty Insurance Services office development. Our work consisted of subsurface exploration, field infiltration testing, engineering analysis, and preparation of this report which summarizes our findings and presents specific recommendations for design and construction of the project.

## SITE DESCRIPTION

The subject site is located at 9990 SW Wilsonville Road in Wilsonville, Oregon. The 2.05-acre site is bounded by SW Wilsonville Road to the north, SW Kinsman Road to the southeast, and Coffee Lake Creek and its associated wetland to the west. The location of the site is shown on the attached Figure 1. The site is undeveloped and consists of an open grass field. The majority of the site is relatively flat and sloping gently down to the Coffee Creek drainage to the west. At the time of our work, temporary construction access was allocated for the construction of a water transmission line along the easterly portion of the site which included a bore pit for the bore crossing beneath SW Wilsonville Road.

## **PROJECT DESCRIPTION**

The development is planned to consist of constructing a roughly 15,500 square foot single story office building in the northeasterly quadrant of the property. In addition, access drives and approximately 46 parking spaces are proposed to the south and west building. A vegetated stormwater facility is also planned to be located in the southerly portion of the property.

## SUBSURFACE EXPLORATION

The subsurface exploration consisted of drilling four geotechnical borings and two combination geotechnical-infiltration borings at the site. The borings were drilled using a small trailer mounted drill rig with solid stem auger tooling with the exception of boring B-4 which was performed with a hand auger. The geotechnical borings were drilled to practical refusal at depths of 4 to 12 feet, and the combination geotechnical borings were advanced to depths of 6.5 and 10 feet (practical refusal). The approximate locations of the exploratory borings are shown on the Site Plan, Figure 2.

OPY

The borings were logged by a geologist from our office who visually classified the subsurface soils in general accordance with the Unified Soil Classification System (USCS). Standard penetration testing (SPT) and Cal modified sampling were performed at closely spaced intervals. Dynamic cone penetrometer (DCP) tests were conducted within borings B-3 and B-4. Detailed logs of the borings are presented in Appendix A. The results of the DCP tests are also shown on the boring logs.

## FIELD INFILTRATION TESTING

Field infiltration testing was conducted at two locations within the proposed vegetated stormwater facility location at depths of 6.0 feet and 10.0 feet (practical refusal). The infiltration tests were performed by installing a 6-inch diameter temporary PVC casing to the depth of the test. Clean water was then introduced into the casing and allowed to stand overnight to presoak the soils. The infiltration tests were conducted the following day by measuring the drop in head over time.

## SUBSURFACE CONDITIONS

Based on the subsurface explorations, the site is mantled by existing fill to depths ranging from 3 to 6 feet. The existing fill is considered to be poorly compacted and laden with debris and organics at the locations of borings B-4, I-1 and I-2. The depths of the existing fill soils at each boring location are shown on the Site Plan, Figure 2.

Below the fill, native deposits of medium stiff to stiff, slightly sandy, clayey silt was encountered extending to depths of 8 to 9 feet. Below the clayey silt deposit, dense deposits of sandy gravel, with cobbles, and boulders in a clayey silt matrix were encountered extending to the maximum depth explored of 11.5 feet.

Groundwater was not encountered during our subsurface exploration; however, groundwater levels are expected to fluctuate seasonally.

## FINDINGS AND CONCLUSIONS

From a geotechnical engineering standpoint, the site is considered to be suitable for the proposed development provided the recommendations presented below are incorporated into the design and construction of the project.

The fill that mantles the site to depths of 3 to 6 feet is considered to be poorly compacted and appeared to be laden with debris and organics in three of the borings. The existing fill is considered to be unsuitable for direct support of building structures; however, the existing fill may be suitable for surface improvements if the poor compaction issue is mitigated as discussed below. The following building foundation and pavement area recommendations are tailored to the fill removal and replacement option; however, alternative recommendations are provided for consideration.

## **Building Structures**

For the building envelope, options available to mitigate the existing fill issue include overexcavation and replacement with engineered fill within the building footprint, or shallow drilled pier foundations combined with a structural slab supported by the pier/grade-beam system. Geopiers on a closely spaced grid or other proprietary systems may also be an option.



## Surface Improvements

For the paved surface improvement areas, alternatives are also available and listed below in order of decreasing risk:

- scarification, moisture conditioning and re-compaction of the upper 12 inches of subgrade, followed by proof-rolling
- cement treating of the subgrade in the upper 12 inches
- removal and replacement with engineered fill to the full depth of the fill

It should be understood that without the full removal and replacement of the non-engineered fill, risk of poor performance such as pavement warpage and bird baths are anticipated. In our opinion, the cement treated subgrade option may provide an acceptable degree of both performance and owner risk.

## SITE EARTHWORK RECOMMENDATIONS

## Site Preparation

Prior to grading, the portions of the site to be developed should be cleared of vegetation, sod and root balls, and any surface or buried obstructions. For estimating purpose, we anticipate the sod stripping depths on the order of 4 to 6 inches be utilized. Water wells to be removed (if any) should be capped below finished site grades and abandoned in accordance with local and state guidelines. Stripping depths will need to be confirmed by the geotechnical engineer's representative.

## Materials for Fill

The existing fill soils are not generally recommended for reuse as structural fill. Accordingly, the use of imported granular fill such as clean sand, pit run gravel, or crushed aggregate (containing less than 5 percent material passing the No. 200 sieve) is recommended. (See Wet Weather Grading/Erosion Control section below).

Representative samples of the materials to be used for structural fill will need to be approved by NGI and tested in our laboratory to determine the maximum density and optimum moisture content.

## Structural Fill

All fill materials placed within the building footprint should be moisture conditioned to near optimum moisture and compacted to a density that is not less than 92 percent of the maximum dry density as determined in accordance with ASTM D1557 (modified Proctor). Unless otherwise specified, the fill materials should be placed in layers that, when compacted, do not exceed 8 inches in thickness. Structural fill will need to be tested by the geotechnical engineer's representative during construction.



## Trench Backfill

Trench backfill should consist of a clean crushed aggregate (or other suitable granular material) containing less than 7 percent fine materials passing the No. 200 sieve. Appropriate bedding materials should be placed beneath pipes to ensure no point or concentrated loading. All trench backfill within the building footprint should be compacted by mechanical means to at least 92 percent of the maximum dry density as determined in accordance with ASTM D1557 (modified Proctor). Trench backfill outside of the building footprint and above the pipe zone may be compacted to 90% of the modified Proctor. Structural fill will need to be tested by the geotechnical engineer's representative during construction.

## Protection of Exposed Ground

Excavation and construction operations may expose the near-surface moisture sensitive soils to inclement weather conditions. The exposed soils will likely rapidly deteriorate due to precipitation and/or the action of repetitive heavy construction equipment. Accordingly, walls and floors of excavations should be protected from the elements and from the action of repetitive construction traffic.

NGI has provided the following wet weather geotextile and aggregate thickness recommendations for construction of access roads and staging areas, and these should be considered minimum sections to be used in conjunction with track-mounted equipment.

#### Wet Weather Grading/Erosion Control

Wet weather grading of the near surface, moisture-sensitive soils is generally not recommended. If wet weather grading is unavoidable due to construction schedules, stabilization of the subgrade soils with a geotextile and aggregate (or by other means such as amendment with Portland cement) will become necessary. Based on selected alternatives beneath paved areas discussed previously, construction traffic or haul routes may require over-filling with crushed aggregate to protect prepared subgrades. Up to a total of 14 inches of crushed aggregate may be necessary to protect compacted subgrades; the Contractor should be made responsible for protecting prepared subgrades. Erosion control measures will need to be undertaken to meet Clackamas County, City of Wilsonville, and project requirements.

#### **Excavations**

Based on the subsurface exploration, it is anticipated that excavations can be accomplished using conventional heavy earthmoving equipment. Temporary excavations in excess of 5 feet in depth will require shoring or sloping of the sidewalls to provide for worker safety. At the time of the subsurface exploration in May 2023, groundwater was not encountered; however, groundwater conditions are expected to fluctuate seasonally and perched groundwater may be present at times and may seep into open excavations, particularly during periods of prolonged wet weather. Any water that accumulates in excavations should be removed by pumping or other suitable means.

Large cobbles and boulders are present at the site and were reportedly encountered during the excavation for the adjacent waterline improvements. Accordingly, large boulders may require splitting or other techniques to reduce the material to manageable size.



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## SEISMIC CONSIDERATIONS

Based on the subsurface exploration and the 2018 IBC as modified by the 2019 OSSC and applicable provisions of ASCE 7-16, the following seismic design parameters are recommended for the project.

Mapped Spectral Acceleration for Short Periods:  $S_s = 0.82$ Mapped Spectral Acceleration for a 1-Second Period:  $S_1 = 0.38$ Site Class: D Site Coefficients:  $F_a = 1.2$ Design Spectral Response Acceleration at Short Periods:  $S_{DS} = 0.65$ 

Based on the subsurface explorations, the potential for seismic induced soil liquefaction is considered to be low.

Based on the USGS Earthquake Hazard Program Quaternary Fault Inventory of Oregon, the nearest mapped fault traces are the Canby-Molalla fault located approximately 6.5 miles east of the site and the Newberg fault located approximately 8.6 miles west of the site. Generally, the risk of surface displacement is considered to be low if a site is more than 1,000 feet from a mapped fault trace.

## **BUILDING FOUNDATION RECOMMENDATIONS**

Building loads may be supported on individual and/or continuous spread footings bearing on undisturbed native soils at depth or compacted structural fill. Spread footings may be designed for an allowable dead plus live load bearing capacity of 2,000 pounds per square foot. As an alternative to removing and replacing the fill present beneath the building footprint, drilled piers on the order of 24 inches in diameter and founded on the medium dense to dense gravel could be utilized. An allowable dead plus live load pier bearing pressure of 4000 psf may be utilized and in our opinion, either the spread footings or pier bearing pressures may be increased by 50% for short term wind or seismic loads. Settlement under static loading is anticipated to be within typical construction tolerances of one inch of total settlement and one-quarter to one-half inch of differential settlement.

Footings should be embedded a minimum of 18 inches below the lowest adjacent finished grade. Continuous and/or individual spread footings should be a minimum of 18 inches in the least dimension. A 2 to 3-inch thick layer of clean crushed aggregate should be placed and seated by mechanical means to help avoid deterioration of the bearing soils if footing excavations are exposed to seepage or wet weather conditions.

Lateral loads can be resisted by passive pressures acting against footings and by frictional resistance between foundation elements and supporting soils. A passive resistance of 250 pounds per square foot per foot of embedment depth and a friction factor of 0.30 may be used for design. Where unusual loading patterns result in large differential loads, combined footings, eccentrically loaded footings, or other special foundation requirements, this office should be consulted.



## **CONCRETE FLOOR AND GRADE SLABS**

Concrete floor slabs or other grade slabs bearing on engineered fill should be at least 5.0 inches in thickness and underlain by a minimum of 8 inches of clean, free-draining, crushed rock compacted to a minimum of 95 percent of the maximum dry density as determined in accordance with ASTM D1557 (modified Proctor).

Interior floor slabs should also be underlain by a suitable moisture barrier covered with a protective layer of clean sand. Alternatively, proprietary moisture barrier systems may be utilized without the protective sand layer if specified by the designers. Actual slab thickness and reinforcing should be determined in accordance with structural considerations.

#### SURFACE AND SUBSURFACE DRAINAGE RECOMMENDATIONS

#### Temporary Construction Drainage

Surface water should be diverted from excavations by means of temporary drainage facilities. Excavations should be dewatered as necessary by pumping or other suitable methods. Ponding of surface water in structural areas should also be prevented to the extent practical utilizing temporary drainage facilities.

#### Permanent Site Drainage

Surface water should be diverted from foundations by grading the ground surface a minimum of 2 percent away from walls and carrying the runoff from roofs to a suitable gravity outlet.

Permanent subsurface drainage of the building perimeter is recommended to prevent potential subjection of foundations and slabs to hydrostatic pressures. Construction of a continuous subdrain system which surrounds the building perimeter and is sloped (minimum 0.5 percent) to a suitable gravity outlet is recommended. A suitable subdrain system would consist of a 4-inch diameter, perforated PVC pipe (typical) embedded below and adjacent to the bottom of footings and backfilled with approved drain rock. The type of PVC pipe to be utilized may depend on building agency requirements and should be verified prior to construction. In addition, to prolong the life of the subdrain system, NGI recommends lining the trench excavation with a geotextile filter such as Mirafi 140N (or equivalent). The subdrain excavation should be constructed in a manner to prevent undermining of any foundation or slab component or disturbance of supporting soils.

In the event that the perimeter subdrains are tied into the rain (roof) drain system, an approved backflow device will be required. If backflow devices are not allowed, these systems should be run independently.

## **Infiltration Facilities**

The field infiltration testing yielded the following measured infiltration rates:

Location	<u>Depth</u>	Measured Infiltration Rate
Boring I-1	6.0 feet	0.1 inches per hour
Boring I-2	10.0 feet	0.2 inches per hour



The above measured infiltration rates do not include a safety factor for loss of efficiency over time due to siltation and biologic growth.

Generally, the minimum infiltration rate for infiltration facilities to be considered feasible is 0.5 inches per hour. Even then the systems can become impractically large.

Accordingly, based on the infiltration test results, the subject site is not considered to be feasible for infiltration as the best management practice for mitigation of stormwater. NGI recommends that other alternate practices, such as detention with metered outfall to existing facilities, be evaluated.

## PAVEMENT THICKNESS DESIGN

Although no specific traffic information has been provided, we have prepared the following pavement section recommendations based on our experience with similar projects.

Cars, Light Trucks, and up to 4 Trucks per Week

- 3.0 Inches of Asphaltic Concrete Pavement
- 8.0 Inches of Crushed Aggregate Base

As discussed in the Surface Improvement section previously in this report, the upper 12 inches of exposed subgrade should be scarified, moisture conditioned, and compacted to at least 90 percent of maximum dry density by ASTM D1557 (Modified Proctor), followed by proof-rolling with a loaded dump truck. A geotextile such as Mirafi 500X (or equivalent) is recommended to be placed between the subgrade and baserock section.

In order to reduce long term pavement performance risk associated with building on the existing fill to more acceptable levels, cement treatment of the existing subgrade soils for a depth of 12 inches is recommended. If the alternative of cement treating is preferred, a 4 inch reduction in the thickness of aggregate base identified above is acceptable. Additional laboratory testing will be necessary to identify the minimum percent of cement amendment by weight prior to developing final plans and specifications. Alternatively, the no-risk option of removing and replacing all existing fill beneath pavements may also be considered.

Aggregate base for paved areas should be compacted to a minimum of 95 percent ASTM D1557. Asphaltic concrete pavements should be compacted to a minimum of 91 percent of the theoretical maximum density per ASTM D2041 (Rice Gravity). Aggregate base and asphaltic concrete materials should meet the requirements as outlined in the current Oregon Department of Transportation Standard Specifications.

#### ADDITIONAL SERVICES Design Review

This geotechnical report pertains to a specific site and development. It is not applicable to adjacent sites nor is it valid for types of developments other than that to which it refers. Any variation from the site or development necessitates a geotechnical review in order to determine the validity of the design concepts evolved herein.



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Additionally, a geotechnical review of final plans and specifications is necessary to determine whether our recommendations have been properly interpreted and incorporated in the design and construction documents.

## **Construction Monitoring**

Because of the judgmental character of soil and foundation engineering, as well as the potential for adverse circumstances arising from construction activity, observations during site preparation, excavation, and construction will need to be carried out by the geotechnical engineer or his representative. These observations then may serve as a basis for confirmation and/or alteration of geotechnical recommendations or design guidelines presented herein to the benefit of the project. Moreover, field engineering observations become increasingly important should earthwork proceed during adverse weather conditions.

## **LIMITATIONS**

Within the limitations of scope, schedule, and budget, our services have been completed in accordance with the General Conditions with our Client and accepted geotechnical practices in this area at the time this report was prepared. One copy of our General Conditions is included in Appendix B of this report. No warranty is expressed or implied. This report was prepared for the exclusive use of NGI's client for the specific project and NGI does not authorize the segmented use of the advice herein nor the reliance upon the report by third parties without written authorization of NGI. The boring logs and related information depict generalized subsurface conditions only at these specific locations and at the particular time the subsurface exploration was completed. Soil and groundwater conditions at other locations may differ from the conditions at these boring locations. Also, the passage of time may result in a change in the soil and groundwater conditions at the site. This report pertains to the subject site only, and is not applicable to adjacent sites nor is it valid for types of development other than that to which it refers. Unless explicitly addressed in this report, slope stability analyses and seismic site hazard evaluation have not been included. If you would like NGI to complete these services, please contact our office.



This opportunity to be of service is sincerely appreciated. Please call if you have any questions.

Respectfully submitted,

NORTHWEST GEOTECH, INC.



Wayne R. Olsen, P.E., G.E. Project Engineer

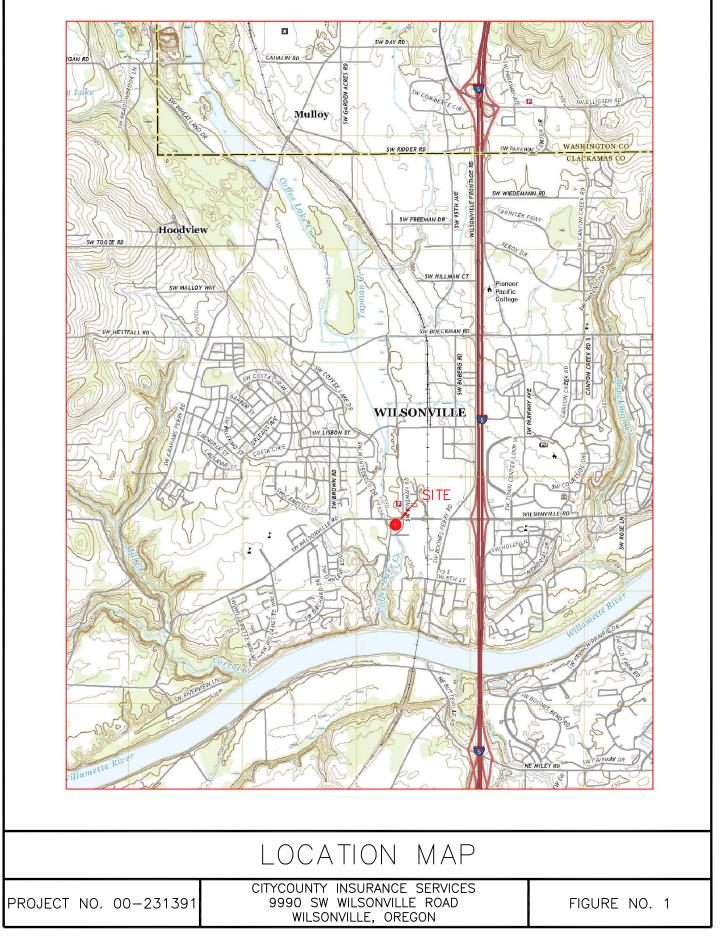
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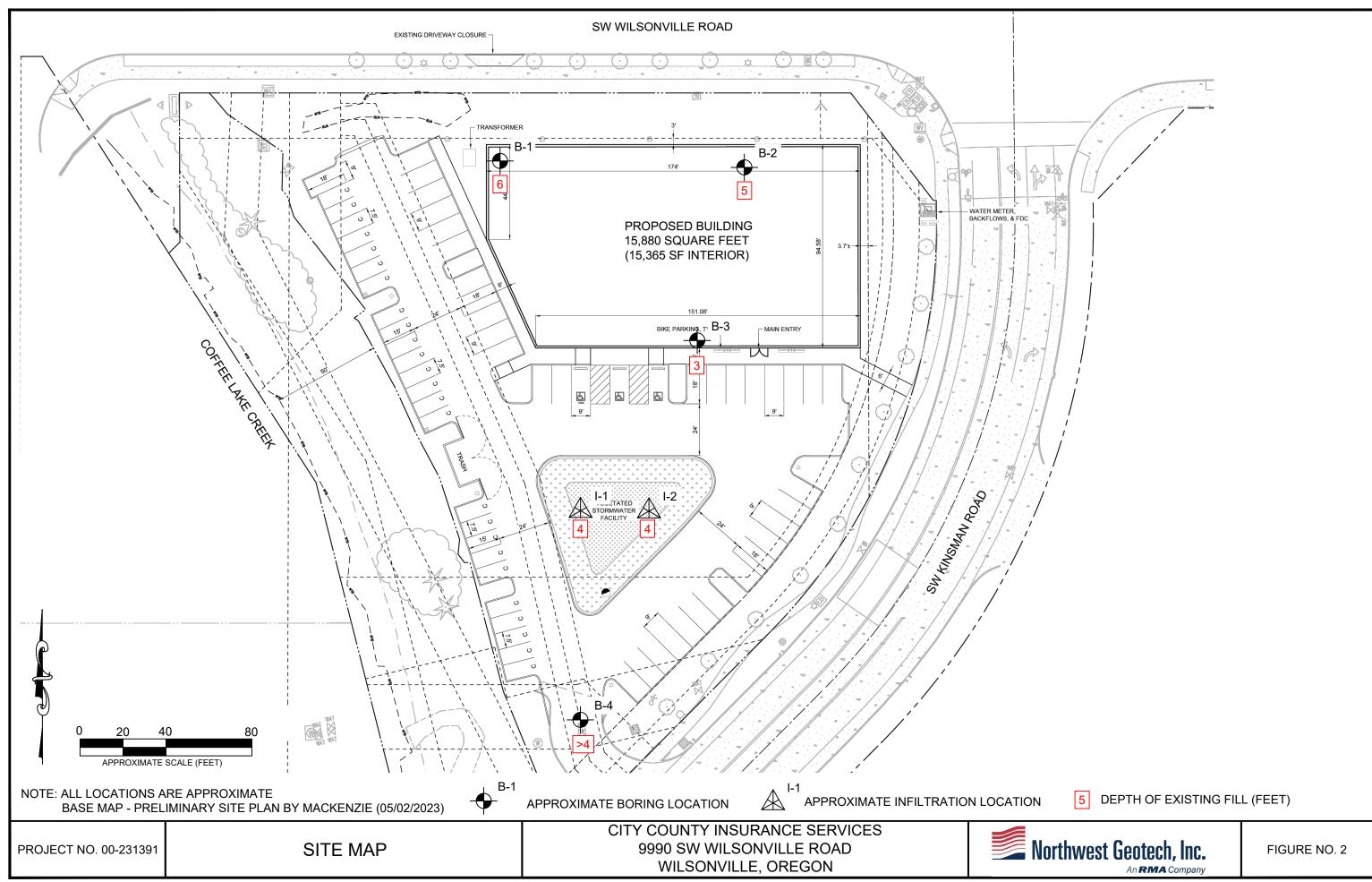
Thomas S. Ginsbach, P.E., G.E. Regional Vice President





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## **APPENDIX A**

DRILLING COMPANY: DAN FISCHER     RIG: LITTLE BEAVER     DATE: 05/24/2023       BORING DIAMETER: 4.0 INCHES HAMMER WEIGHT: 140 LBS     DROP: 30 INCHES     ELEVATION:       Image: Company of the state of the						
Hand       Hand       Hand       Hand       Hand       Solid Description Boring No. B-1         0       -						
4-6 INCHES OF SOD         15       ML         6       PUSH         15       ML         15       ML         16       PUSH         15       ML         16       PUSH         15       ML         16       BROWN WITH GRAY MOTTLING, MOIST, MEDIUM STIFF TO STIFF, LOW PLASTICITY, SLIGHTLY SANDY, CLAYEY SILT (NATIVE)         45       GM         8ROWN, MOIST, DENSE, SUBROUNDED TO SUBANGULAR, SANDY GRAVEL WITH COBBLES TO BOULDERS IN CLAYEY SILT MATRIX (NATIVE)         10       50/5"         11       TOTAL DEPTH: 10.9 FEET PRACTICAL DRILLING REFUSAL NO GROUNDWATER ENCOUNTERED         15       SPT SAMPLER         15       SHELBY SAMPLER						
Image: Single state in the						
Image: Market interview     ML     BROWN WITH GRAY MOTTLING, MOIST, MEDIUM STIFF TO STIFF, LOW PLASTICITY, SLIGHTLY SANDY, CLAYEY SILT (NATIVE)       Image: Market interview     45     GM     BROWN, MOIST, DENSE, SUBROUNDED TO SUBANGULAR, SANDY GRAVEL WITH COBBLES TO BOULDERS IN CLAYEY SILT MATRIX (NATIVE)       Image: Market interview     50/5"     TOTAL DEPTH: 10.9 FEET       Image: Market interview     Formation of the second se						
10						
PRACTICAL DRILLING REFUSAL   NO GROUNDWATER ENCOUNTERED   ISPT SAMPLER   SHELBY SAMPLER						
BORING LOG						
PROJECT NO. 00-231391 CITYCOUNTY INSURANCE SERVICES 9990 SW WILSONVILLE ROAD FIGURE NO. A-1 WILSONVILLE, OREGON						

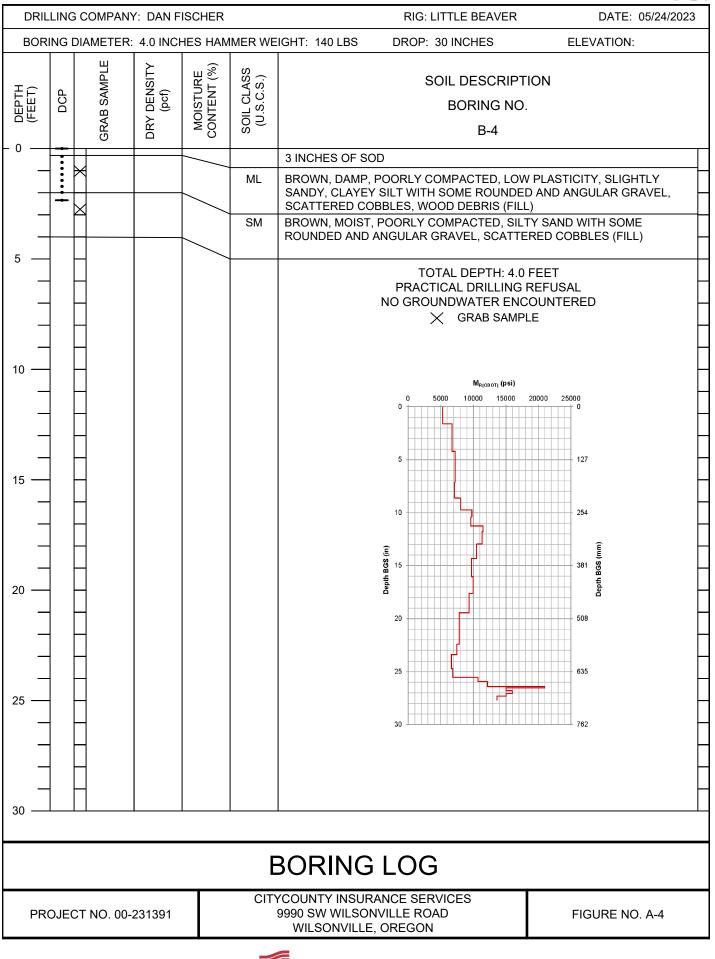


DRILLING COMPANY: DAN FIS	CHER	RIG: LITTLE BEAVER DATE: 05/24/2023				
BORING DIAMETER: 4.0 INCHE						
	MOISTURE (%) A CONTENT (%) A C	SOIL DESCRIPTION BORING NO. B-2				
		6 INCHES OF SOD				
	ML	DARK BROWN, MOIST, POORLY COMPACTED, LOW PLASTICITY, SLIGHTLY SANDY, CLAYEY SILT (FILL)				
	ML	BROWN WITH GRAY MOTTLING, MOIST, MEDIUM STIFF TO STIFF, CLAYEY SILT (NATIVE) BECOMES SLIGHTLY SANDY				
	GM	BROWN, MOIST, DENSE, SUBROUNDED TO SUBANGULAR, SANDY GRAVEL WITH COBBLES AND BOULDERS IN CLAYEY SILT MATRIX (NATIVE)				
		TOTAL DEPTH: 11.5 FEET PRACTICAL DRILLING REFUSAL NO GROUNDWATER ENCOUNTERED SPT SAMPLER SHELBY SAMPLER				
<sup>30</sup> BORING LOG						
PROJECT NO. 00-231391		COUNTY INSURANCE SERVICES9990 SW WILSONVILLE ROADWILSONVILLE, OREGON				



DR		G COMPAN	Y: DAN F	ISCHER		RIG: LITTLE BEAVER DATE: 05/24/2023
					IMER WE	IGHT: 140 LBS DROP: 30 INCHES ELEVATION:
DEPTH (FEET)	DCP	DRIVE SAMPLE BLOWS/FOOT	DRY DENSITY (pcf)	MOISTURE CONTENT (%)	SOIL CLASS (U.S.C.S.)	SOIL DESCRIPTION BORING NO. B-3
-0-						6 INCHES OF SOD
					ML	DARK BROWN, MOIST, POORLY COMPACTED, LOW PLASTICITY, SLIGHTLY SANDY, CLAYEY SILT WITH TRACE ROUNDED GRAVEL (FILL)
		9			ML	BROWN WITH GRAY MOTTLING, MOIST, MEDIUM STIFF TO STIFF, CLAYEY SILT (NATIVE)
5 —		PUSH				BECOMES SLIGHTLY SANDY
·		12				
10 —		49			GM	BROWN, MOIST, DENSE, SUBROUNDED TO SUBANGULAR, SANDY GRAVEL WITH COBBLES TO BOULDERS IN CLAYEY SILT MATRIX (NATIVE)
-	_					TOTAL DEPTH: 10.0 FEET PRACTICAL DRILLING REFUSAL NO GROUNDWATER ENCOUNTERED SPT SAMPLER Mercoon (psi)
15 —	_					
20 —	_					
25 —						
30 —						
					E	BORING LOG
P	ROJE	CT NO. 00-	231391			YCOUNTY INSURANCE SERVICES 9990 SW WILSONVILLE ROAD FIGURE NO. A-3 WILSONVILLE, OREGON
						Northwoot Cootool Inc







DRILLING COMPANY: DAN FISCHER RIG: LITTLE BEAVER DATE: 05/24						RIG: LITTLE BEAVER DATE: 05/24/2023		
BOR	ING [		8.0 INCI	HES HAM	MER WE	IGHT: 140 LBS DROP: 30 INCHES ELEVATION:		
DEPTH (FEET)	DCP	DRIVE SAMPLE BLOWS/FOOT	DRY DENSITY (pcf)	MOISTURE CONTENT (%)	SOIL CLASS (U.S.C.S.)	SOIL DESCRIPTION BORING NO. I-1		
- 0						6 INCHES OF SOD		
					ML	DARK BROWN, MOIST, POORLY COMPACTED, LOW PLASTICITY, SLIGHTLY SANDY, CLAYEY SILT WITH TRACE ROUNDED GRAVEL (FILL)		
						CONCRETE, BRICK AND GLASS DEBRIS AT 2.5' TO 4.0'		
5 —	-	10			ML	BROWN WITH GRAY MOTTLING, MOIST, MEDIUM STIFF TO STIFF, LOW PLASTICITY, SLIGHTLY SANDY, CLAYEY SILT (NATIVE)		
_		_				-		
 10						TOTAL DEPTH: 6.5 FEET NO GROUNDWATER ENCOUNTERED		
_	-	_				SHELBY SAMPLER		
		_						
15 —								
		_						
_		_				-		
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20 —		_						
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		-				+		
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 30						<u> </u>		
	BORING LOG							
PR	OJEC	CT NO. 00-	231391			(COUNTY INSURANCE SERVICES         9990 SW WILSONVILLE ROAD       FIGURE NO. A-5         WILSONVILLE, OREGON		



DRILLING COMPANY: DAN FISCHER RIG: LITTLE BEAVER DATE: 05/24/						
BORING DIAMETER: 8.0 INCHES HAMMER WEIGHT: 140 LBS DROP: 30 INCHES ELEVATION:						
<ul> <li>DEPTH</li> <li>(FEET)</li> </ul>	DCP	DRIVE SAMPLE BLOWS/FOOT	DRY DENSITY (pcf)	MOISTURE CONTENT (%)	SOIL CLASS (U.S.C.S.)	SOIL DESCRIPTION BORING NO. I-2
- 0						6 INCHES OF SOD
					ML	DARK BROWN, MOIST, POORLY COMPACTED, LOW PLASTICITY, SLIGHTLY SANDY, CLAYEY SILT (FILL)
						CONCRETE DEBRIS AT 2.5-4.0 FEET
5 —		_			ML	BROWN WITH GRAY MOTTLING, MOIST, MEDIUM STIFF TO STIFF, LOW PLASTICITY, SLIGHTLY SANDY, CLAYEY SILT (NATIVE)
10 —		79			GM	BROWN, MOIST, DENSE, SUBROUNDED TO SUBANGULAR, SANDY GRAVEL WITH COBBLES TO BOULDERS IN CLAYEY SILT MATRIX (NATIVE)
						TOTAL DEPTH: 10.0 FEET PRACTICAL DRILLING REFUSAL NO GROUNDWATER ENCOUNTERED SPT SAMPLER SHELBY SAMPLER D/M SAMPLER
BORING LOG						
PROJECT NO. 00-231391 PROJECT NO. 00-231391 CITYCOUNTY INSURANCE SERVICES 9990 SW WILSONVILLE ROAD WILSONVILLE, OREGON FIGURE NO. A-6						9990 SW WILSONVILLE ROAD FIGURE NO. A-6



## **APPENDIX B**

1. PARTIES AND SCOPE OF WORK: Northwest Geotech, Inc., an RMA Group Company (NGI) shall include said company, its engineers, employees, insurers, or authorized representatives. "Work" means the service(s) performed by NGI for Client or at Client's direction. This "Agreement" consists of NGI's proposal, NGI's Schedule of Fees and Services, Client's written acceptance, NGI's signed acceptance, and these General Conditions. "Client" refers to the individual or business entity executing this Agreement. The individual executing this Agreement represents and warrants that he/she is the duly authorized agent of the Client. Client may choose representatives for the purpose of ordering and directing the Work and in such case the term "Client" also includes the principal for whom the Work is being performed and the Client's representatives. Prices quoted and charged by NGI for its Work are predicated upon the conditions and the allocations of risks and obligations expressed in this Agreement. Unless this Agreement specifically provides that NGI is to perform its Work pursuant to specified Federal, State, or local regulations, Client assumes sole responsibility for determining whether the quantity and the nature of the Work ordered by Client is adequate and sufficient for Client's intended purpose. Client shall communicate this Agreement including these General Conditions to each and every third party to whom Client transmits any part of NGI's Work or to whom Client sells, transfers, or assigns an interest in the site or project. NGI shall have no duty or obligation to any third party greater than that set forth in this Agreement. Executing this Agreement or ordering Work from NGI shall constitute acceptance of the terms of these General Conditions. NGI shall be under no obligation to inform other parties of its activities or discoveries, but shall not be negligent if it does so.

PAYMENT FOR SERVICES: Invoices will be submitted monthly for 2. services and Client agrees that the invoice amount is due when received unless otherwise agreed. A service charge of one and one-half percent (1-1/2%) per month (but not exceeding the maximum allowable by law) will be added to any account not paid within 30 days after billing. In the event that any portion of the account remains unpaid 30 days after billing, NGI may immediately discontinue services on any and all projects for Client and/or demand prepayment of fees at NGI's option. Client shall pay all costs incurred by NGI in collecting any delinquent amount, including staff time, court costs and attorney fees at trial and appeal. In the event that NGI obtains a judgment against Client and must execute upon that judgment, Client agrees to pay all attorney fees and costs associated with the execution. If Client objects to all or any portion of any invoice, Client shall notify NGI in writing of the same within ten (10) days from the date of receipt of said invoice and shall pay that portion of the invoice not in dispute, and the parties shall immediately make every effort to settle the disputed portion of the invoice. Failure to make payment within sixty (60) days of invoice shall constitute a release of NGI from any and all claims which Client may have, either in tort or contract, and whether known or unknown at the time. These General Conditions are notice that a construction lien may be claimed for all material. labor and services furnished.

3. SITE CONDITIONS: Client will grant or obtain free access to the site for all personnel and equipment required for NGI to perform the Work. NGI shall take reasonable measures and precautions to minimize damage to each site and any improvements located thereon as the result of its Work and the use of its equipment; however, NGI has not included in its fee the cost of restoration of damage which may occur. If Client or the possessor of any interest in any site desires or requires NGI to restore site to its former conditions, upon written request, NGI will perform such additional work as is necessary and Client agrees to pay to NGI the cost thereof. While NGI will take reasonable precautions to minimize damage to site, Client is responsible for identifying underground structures and agrees to defend, indemnify and hold NGI harmless from all loss, liability, costs (including attorney fees at trial and on appeal), and damage resulting from underground structures not properly located and marked, and from all third party suits for trespass.

4. DISCLOSURE: Client agrees to provide NGI all information in its possession that may be pertinent to the scope of Work, including any information concerning actual or possible presence of hazardous materials. Client agrees that the discovery of unanticipated hazardous materials constitutes a changed condition mandating a re-negotiation of the scope of Work or termination of services. Client agrees to compensate NGI for all costs incident to the discovery of unanticipated hazardous materials. NGI will

immediately inform Client of the detection of unanticipated hazardous materials. Client will defend, indemnify, and hold NGI harmless from any claim, liability, costs (including attorney fees at trial and on appeal), or injury, including delay of the project associated with the discovery of unanticipated hazardous materials or any disclosure of these conditions as required by governing law or regulation. All hazardous materials, including samples taken for testing will remain the property and responsibility of Client.

**5. ENVIRONMENTAL INDEMNITY:** To the fullest extent permitted by law Client agrees to defend, indemnify, and hold harmless NGI from any loss, costs, damage, expense (including attorney fees and costs at trial and appeal), or any theory of liability arising out of or in connection with NGI's exacerbation of existing environmental pollution or contamination or any newly caused pollution or contamination.

6. THIRD PARTY INDEMNITY: To the fullest extent permitted by law Client agrees to defend, indemnify and hold NGI harmless from any claims, demands, suits, charges, expense (including attorney fees and costs at trial and appeal), and/or allegations of responsibility by any and all third parties including but not limited to contractors, subcontractors, agents, employees, assignees, transferees, successors, invitees, neighbors, and the public relating to conditions on or about the project, except to the extent that a claim is the result of negligence of NGI. Client shall notify any third party who may perform work on the project or to whom Client sells, transfers, or assigns an interest in the site or project of the standard of care being undertaken by NGI pursuant hereto and of the limitations of liability contained herein. Client shall require as a condition to the performance of any such third party a like indemnity and limitation of liability on their part against NGI.

7. CONTRACTOR'S RESPONSIBILITY: Our duties do not include supervising the Client's contractors or overseeing, or providing the means and methods of their work. NGI shall have no authority to control any contractor or other entity regarding their work or their safety practices. The purpose of NGI's Work shall be to provide our Client with a greater degree of confidence that the work will meet specifications, not to control or guarantee the work of the contractor. NGI has no duty to inspect or correct health and safety deficiencies of the Client, contractors, or other entities except for NGI personnel. We will not be responsible for the failure of the Client's contractors to perform in accordance with their undertakings and the providing of our services shall not relieve others of their responsibilities to the Client or to others. NGI reserves the right to report to the Client any unsafe condition observed at the project without altering the foregoing.

8. FEE SCHEDULE: Where NGI's services are quoted or estimated on the basis of the current fee schedule, should the project extend beyond the end of the calendar year, the fee schedule then in use shall apply unless otherwise negotiated in advance.

**9. LIMITATIONS OF PROCEDURES:** Information obtained from inspections, analysis and testing of sample materials shall be accurately reported in reports. However, variations between inspected or tested discrete locations may occur and the risk of such occurrence is understood and accepted by Client. If conditions different than are indicated in our report come to your attention after you receive the report, it is recommended that you contact NGI immediately to authorize appropriate further investigation and to inform NGI completely on what you have discovered. If NGI completes borings or test pits in the performance of its Work there is the possibility that settlement of the backfill will occur. Client agrees to accept all responsibility for conditions related to backfill settlement. Unless explicitly addressed in NGI's proposals or reports our services do not include seismic or slope stability evaluation.

**10. SCHEDULES AND DELAYS:** All promises of services time are approximations by NGI and are subject to the Client and contractor's schedules, weather conditions, traffic conditions, disputes with workmen or parties, accidents, strikes, natural disasters or other causes. In no event shall NGI be responsible for any damage or expense due to delays from any cause, other than to the extent the damage or expense is caused by NGI's own negligence after having been warned in writing by the Client of the damage or expense which may result from the delay.



**11. USE OF CONSULTING ADVICE:** NGI's reports, notes, calculations, and other documents are instruments of our service to the Client and are only applicable for immediate use on this project. Such documents remain the property of NGI. We agree to provide our reports for the Client's use only for the purposes disclosed to us. The Client agrees not to transfer our reports to others or to use them for a purpose for which they were not prepared without our prior written approval. On the Client's written request, NGI may provide endorsements to others of our reports or letters of reliance, but only if those others agree in writing to be bound by the conditions of our Agreement including these General Conditions in full and only if we are paid an additional fee which will be quoted upon request. Client may not assign this Agreement or any portion thereof to any other person or entity without the express written consent of NGI.

**12. SAMPLES:** All samples of soil and rock may be disposed after 30 days from the date of submission of our report unless otherwise directed by the Client. On request, we will deliver samples to the Client. Shipping charges shall be collect on delivery, or we will store samples for an agreed charge.

**13. CONTINUITY OF SERVICES:** It is customary for the consultant that provides construction recommendations to be retained to provide observation and confirmation of design parameters during construction. To the fullest extent permitted by law if NGI is not retained to confirm that the construction is in substantial compliance with our conclusions and recommendations, the Client agrees to defend, indemnify, and hold NGI harmless from all claims, losses, and expenses, including attorney fees and costs at trial and on appeal, arising out of NGI's Work including any interpretations, clarifications, substitutions, or modifications of NGI's Work provided by the Client or others.

**14. TERMINATION AND SURVIVAL:** This Agreement may be terminated by either party on written notice. In the event of termination, NGI shall be compensated by Client for all services performed up to and including the termination date, including reimbursable expenses, and for the completion of such services as are necessary to place NGI's files in order and/or protect its professional reputation. The Payment for Services, Environmental Indemnity, Third Party Indemnity, Limitations of Procedures, Use of Consulting Advice, Continuity of Services, Mutual Waiver, Witness Fees, State Law/Venue, Standard of Care, and Limitation of Liability provisions of this Agreement shall survive any termination or completion of this Agreement.

**15. WITNESS FEES:** NGI's employees shall not be retained as expert witnesses except by separate written agreement. Client agrees to pay NGI's legal expenses, administrative costs, staff time, and fees pursuant to NGI's current fee schedule for NGI to respond to any subpoena.

**16. STATE LAW/VENUE:** This Agreement shall be interpreted and construed in accordance with the laws of the State of Oregon. Exclusive of lien claims, any action or proceeding brought to enforce or otherwise arising out of or relating to this Agreement shall be brought in the Circuit Court of Clackamas County, Oregon.

**17. STANDARD OF CARE:** NGI will perform the contracted services in a manner consistent with the skill and care ordinarily exercised under similar circumstances by members of our profession practicing in the same locality, at the same time, and performing similar services. No warranty, expressed or implied, is made or intended in our proposals, reports or contracts. No action or claim, whether in tort, contract, or otherwise, may be brought against NGI, arising from or related to NGI's Work, more than two years after the cessation of NGI's Work hereunder. NGI will not be liable to Client unless Client has notified us in writing of the discovery of the claimed negligent act, error, or omission within 30 days of the date of its discovery and unless Client has given us an opportunity to investigate and to recommend ways of mitigating Client's damages.

**18. PROVISIONS SEVERABLE**: Any provision or part of the Agreement held to be void or unenforceable under any laws or regulations shall be deemed stricken, and all remaining provisions shall continue to be valid and binding upon Client and NGI, who agree that the Agreement shall be reformed to replace such stricken provision or part thereof with a valid and enforceable provision that comes as close as possible to expressing the intention of the stricken provision.

**19. MUTUAL WAIVER**: To the fullest extent permitted by law, Client and NGI waive against each other any and all claims for or entitlement to special, incidental, indirect, consequential, delay, punitive, or similar losses or damages arising out of, resulting from, or in any way related to the project.

**20. ENTIRE AGREEMENT:** This Agreement comprises the final and complete understanding between Client and NGI. It supersedes all prior or contemporaneous communications, representations, or agreements, whether oral or written, relating to the subject matter of this Agreement. Execution of this Agreement signifies that each party has read the document thoroughly, has had any questions explained by independent counsel, and is satisfied. Any additional provisions contained in any Client purchase order, acknowledgment, or other form previously or subsequently submitted by Client shall not operate to modify this Agreement. Amendments to these General Conditions shall not be binding unless made in writing and signed by both Client and NGI. This Agreement may be executed in several counterparts, each of which shall be deemed an original having identical legal effect.

**21. LIMITATION OF LIABILITY:** In recognition of the fees charged by NGI, the relative risks and benefits of this project to both Client and NGI, Client, all parties claiming through Client, and all parties claiming to have in any way relied on NGI's Work, agree that to the fullest extent permitted by law, NGI's total liability arising out of or in any way related to NGI's Work, the project or this Agreement, from any cause or causes, including but not limited to NGI's employees or agents negligent acts, errors, omissions, design defect, breach of contract or any other theory of liability shall be limited to Fifty Thousand Dollars (\$50,000.00) or NGI's fees, whichever is more. NGI agrees to waive the limit of liability provided for in this provision up to Two Hundred Fifty Thousand Dollars (\$250,000.00), provided that Client agrees to pay an additional amount equal to four percent (4%) of the services fee, or \$200.00, whichever is greater.

#### PLEASE INITIAL YOUR PREFERENCE:

Client agrees to limit NGI's liability to NGI's fee or \$50,000.00, whichever is greater, as stated above and understands that this limitation applies to all causes of actions under any legal theory Client may have against NGI.

OR

Client does not agree to limit NGI's liability to NGI's fee or \$50,000.00, whichever is greater. Client agrees to pay an additional amount equal to four percent (4%) of the services fee, or \$200.00, whichever is greater, in order to extend NGI's liability to \$250,000.00. This increased fee is not the purchase of insurance. It is agreed that NGI's maximum liability for any cause or causes of action, including any cause of action arising from design defect, error, omission, professional negligence, breach of contract or any other theory of liability shall be no more than \$250,000.00. Only one such amount shall apply to any project.

CLIENT: Citycounty Insurance Services c/o Cumming Group 6000 Meadows Road, Suite 410 Lake Oswego, Oregon 97035

CLIENT SIGNATURE:

Jatik

DATE: May 5, 2023

PROJECT: Geotechnical Services Proposed Building and Site Improvements Citycounty Insurance Services 9990 SW Wilsonville Road Wilsonville, Oregon





0295 South vest Ridde: Roup Mitsonville, OR 07078 -503 570 0636 1 503 532 9367 republickervices.com

December 14, 2023

Adam Goldberg Mackenzie Architecture

Re: CIS Collaboration Center 30125 SW Kinsman Rd. Wilsonville, OR 97070

Dear Adam,

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.

The property ingress/egress and circular driveway, with a counterclockwise traffic pattern and direct approach to the trash/recycle enclosure, will allow our trucks full access to safely service this site. The enclosure dimensions of 20'Ft. wide x 12'Ft. deep, with a roof line that is flush with the service gates and 12'Ft. overhead clearance, will be sufficient to house trash/recycle receptacles of adequate size to accommodate the needs of this facility. The enclosure gates with a swing radius of 180 degrees and, equipped with wind-pins to secure the gates in the open and closed position is sufficient.

Thanks Adam, for your help and concerns for our services prior to this project being developed.

Sincerely,

Kelly Herrod Operations Supervisor Republic Services Inc.