



**Engineering Memo for
AR22-0001 Plambeck Gardens
May 25, 2022**

Please incorporate the following conditions of approval and findings within the combined decision.

II. RECOMMENDED CONDITIONS OF APPROVAL

Based on the Findings and Conclusions presented herein, is **approved** subject to the following conditions:

PRIOR TO EROSION CONTROL, PUBLIC WORKS, AND WATER QUALITY PERMIT ISSUANCE:

Submit to the Engineering Division via [eTrakit](#) for review and approval:

1. In accordance with code section TMC 3-2, TDC 74.620, and the Public Works Construction Code the applicant must:
 - a. Submit sanitary sewer system plans that show:
 - i. Location of the lines, grade, materials, and other details.
 - ii. The gravity service lateral releasing to a public manhole at the north end of a public sanitary sewer easement to the south.
 - iii. Construct the public gravity sanitary sewer system as needed to serve this development within public sanitary sewer easements and right-of-way. If Plambeck Gardens sanitary sewer construction is proposed prior to approval of construction of portions of the public sanitary sewer system necessary to serve this development, the applicant must:
 1. Obtain approval from permittee(s) performing extension of the public sanitary sewer system from the north end of the vicinity of future Tract L approved within SB21-00001, Autumn Sunrise Subdivision to connect to approved and constructed mains plus the Clean Water Services' Norwood Road Pump Station approved within AR21-0014 or
 2. Obtain permits to construct all necessary portions of public system yet to be constructed through TLID 2S135D000106, owner Horizon Community Church; TLID 2S135D000401, owner Autumn Sunrise, LLC; TLID 2S135D000100, owner P3 Properties, LLC; within SW Norwood Road right-of-way, and the CWS Norwood pump station as approved within AR21-0014 remaining consistent with the vicinities approved within SB21-00001, Autumn Sunrise Subdivision of future Tract L, SW "H" (Mahogany) Street, SW Vermillion Drive, SW Norwood Road, and the CWS Norwood pump station as approved within SB21-0001, Autumn Sunrise Subdivision.

- b. Comply with the contractor insurance and bond requirements of the City of Tualatin.
 2. In accordance with code section TMC 3-3, TDC 74.610, and the Public Works Construction Code the applicant must submit final water plans that show:
 - a. Construction of the C-Level public water system from the intersection of SW Boones Ferry Road and SW Norwood Road to the south property line of this development with a 12-inch diameter main to meet public water system requirements of the MurraySmith Technical Memorandum dated November 2, 2021.
 - b. A gate valve at the main for domestic and fire service laterals.
 - c. Adjacent to SW Boones Ferry Road right-of-way:
 - i. Reduced pressure backflow prevention and water meter for the domestic lateral,
 - ii. The water meter must be located within the planter strip. If inadequate width of strip is approved, then behind the sidewalk and within and surrounded by five feet of public utility easement,
 - iii. Irrigation after a domestic meter and reduced pressure backflow device, and
 - iv. The fire vault surrounded by five feet of public utility easement.
3. In accordance with TMC 3-5-050 and 3-5-060, TDC 74.640, Public Works Construction Code, and Clean Water Services' Design and Construction Standards Chapters 2 and 6 the applicant must submit final erosion control plans:
 - a. With grading within right-of-way and public easements as approved by the City Engineer.
 - b. Minimizing the impact of stormwater from the development to adjacent properties.
 - c. If the total disturbed area is:
 - i. Up to five acres, then sufficient to obtain a National Pollution Discharge Elimination System (NPDES) 1200-CN Stormwater Discharge Permit from Clean Water Services as an agent of Oregon DEQ, or
 - ii. Five or more acres, then with a copy of the National Pollution Discharge Elimination System (NPDES) 1200-C Construction Erosion Control permit from Oregon DEQ.
4. In accordance with TMC 3-5-200 through 3-5-430, TDC 74.630 and 74.650, Public Works Construction Code (PWCC), and Clean Water Services' (CWS) Design and Construction Standards (D&CS) Chapter 4 the applicant must submit:
 - a. Final stormwater plans and calculations certified by an Oregon registered, professional engineer in accordance with TMC 3-5-390(1) proving proposed systems:
 - i. Engineer to provide a downstream analysis, including but not limited to erosion, and include solutions within final plans for ¼ mile downstream from the release from the private development through the public stormwater system, in accordance with TMC 3-5-210(4).
 - ii. With gravity flow five feet from the outside of the established line of the building to the public stormwater system or as otherwise approved by the City Engineer, in accordance with CWS D&CS 1.03.39 and 5.09.3(a) (1) and (4).
 - iii. Discharge must be to an approved public system.
 - iv. Address runoff from all new and modified private and public impervious areas.

1. Include runoff from constructed driveways within a public access easement located on TLID 2S135D000106, owner Horizon Community Church, and TLID 2S135D000401, owner Autumn Sunrise, LLC's Tract L as approved within SB21-0001, Autumn Sunrise Subdivision.
 2. Runoff from these constructed driveways may be captured and treated within Plambeck Garden's facilities if using CWS D&CS approved Proprietary Treatment Systems or City Engineer approved alternative.
 - v. Treat new and modified impervious areas in accordance with CWS D&CS 4.08.1.d meeting phosphorous removal in accordance with TMC 3-5-350 per the design storm in accordance with TMC 3-5-360 and CWS D&CS 4.08.2.
 1. Stormwater from public impervious areas may be alternatively equivalently treated and detained within Plambeck Gardens' private facilities.
 2. Public water quality facilities may be LIDA street swales within appropriately sized planter strips or can connect runoff from public right-of-way to public water quality facility on the AB21-0001, Autumn Sunrise Subdivision development, if constructed.
 3. Additional dedication of right-of-way may be required to accommodate public stormwater facilities.
 - vi. Detain in accordance with TMC 3-5-220, TMC 3-5-230, and CWS D&CS 4.08.
 - vii. Show onsite facilities accommodating hydromodification including release rates for ½ the 2-year or 5-year storm events for proposed new and modified impervious areas in accordance with CWS D&CS 4.03.5.
 - viii. Submit conveyance calculations that accommodates up to a 25-year storm event within the public stormwater system in accordance with TDC 74.640 and CWS D&CS 5.05.2.d.
 - ix. In accordance with TDC 74.650(2) and CWS D&CS 3.01.2(d), comply with:
 1. The submitted Clean Water Services' Service Provider Letter CWS File Number 21-002248 dated September 7, 2021 conditions to obtain a Stormwater Connection Permit Authorization Letter.
 2. Any new or updated Service Provider Letter required due to final approved plans.
 3. Requirements stated within the Clean Water Services' Memorandum included as Exhibit D.
 - b. Submit financial assurance for construction performance in accordance with TMC 3-390(3), PWCC 102.14.00, and amount per CWS D&CS 2.07 Table 2-1.
 - c. Submit a copy of the recorded private stormwater maintenance agreement in accordance with TMD 3-5-390(4). The agreement must assure the owner as responsible for maintenance of the constructed portions of private stormwater systems within their lot. The identified system must include all conveyance, detention, hydromodification, and treatment.
5. In accordance with code sections TDC 74.120, 74.130, 74.210, 74.330, 74.420, 74.470, 74.485, 74.660, 74.765, 75.020, and 75.040 and Washington County's letter dated May 19, 2022:
 - a. For SW Boones Ferry Road the applicant must submit final plans that show construction to include:
 - i. Dedication of adequate right-of-way required to permit the construction of the public improvements,

- ii. Striping,
 - iii. Curbs and gutters,
 - iv. One 4-foot wide planter strip (the curb is not included in this width) on the east side,
 - v. Approvable street trees and planting locations with irrigation,
 - vi. A 12-foot wide multi-use path on the east side,
 - vii. A 6 to-8-foot wide public utility easement adjacent to right-of-way with additional as required to support any Portland General Electric support poles, water meters, and vaults, and
 - viii. With any modification for constructability as approved by the City Engineer.
- b. Access to SW Boones Ferry Road from this site:
- i. Interim access, if permitted by Washington County via Design Exception and/or
 - ii. As proposed, crossing lots to the south then west to SW Boones Ferry Road:
 - 1. Across TLID 2S135D000106, owner Horizon Community Church:
 - a. A blanket public access and utility easement,
 - b. A 5-foot wide sidewalk on the west side,
 - c. Curbs and gutters on both sides, and
 - d. A minimum of 24 feet paved travel surface to accommodate two-way traffic.
 - 2. If all improvements required by Conditions of Approval for SB21-0001, Autumn Sunrise Subdivision have not been constructed and accepted, then:
 - a. An agreement with the owners of developers permitting SB21-0001, Autumn Sunrise Subdivision approved by the City Engineer, or
 - b. Final plans must show all required improvements as determined by the City Engineer and up to and including:
 - i. For Private Tract L as identified within SB21-0001, Autumn Sunrise Subdivision, TLID 2S135D000401, owner Autumn Sunrise, LLC:
 - 1. A blanket public access and utility easement,
 - 2. A 5-foot wide sidewalk on the west side,
 - 3. Curbs and gutters on both sides,
 - 4. A minimum of 24 feet paved travel surface to accommodate two-way traffic, and
 - 5. A concrete approach to SW "H" (Mahogany) Street matching the travel surface width.
 - ii. For SW "H" (Mahogany) Street as identified within SB21-0001, Autumn Sunrise Subdivision, TLID 2S135D000 400 & 401, owner Autumn Sunrise, LLC:
 - 1. If needed, a traffic signal at SW Boones Ferry Road,
 - 2. Crosswalks and receiving ramp on the west side of SW Boones Ferry Road,
 - 3. Street signs with local street name for SW "H" (Mahogany) Street approved by the City Engineer, and
 - 4. Associated water quality and quantity facilities.

PRIOR TO BUILDING PERMIT ISSUANCE:

Submit to the Engineering Division via [eTrakit](#) for review and approval):

6. The applicant must obtain:
 - a. Design Exception and Facility Permits from Washington County,
 - b. If less than five acres are disturbed, a 1200-CN National Pollution Discharge Elimination System (NPDES) Stormwater Discharge Permit from Clean Water Services as an agent of Oregon DEQ, or if over five acres are disturbed, then a National Pollution Discharge Elimination System (NPDES) 1200-C Construction Erosion Control permit from Oregon DEQ, and
 - c. Erosion Control, Public Works, and Water Quality Permits from the City of Tualatin.

7. In accordance with code sections TDC 74.120, 74.210, 74.420, 74.470, 74.485, and 74.765 the applicant must submit a copy of recorded dedication of sufficient right-of-way for SW Boones Ferry Road from the centerline plus any additional to accommodate final accepted public street and stormwater improvements.

8. In accordance with TDC 74.330, the applicant must submit a copy of recorded easements:
 - a. The public utility easement, as approved by City Engineer, adjacent to SW Boones Ferry Road including
 - i. Five feet of public water easement surrounding water meter, backflow protection, and/or fire vaults, and
 - ii. Additional as needed for PGE support poles and guy wires.
 - b. Public access and utility easement for 24 foot-wide driveway plus 5 foot sidewalk on the west side and public sanitary sewer main across:
 - i. TLID 2S135D000106, owner Horizon Community Church,
 - ii. TLID 2S135D000401, owner Autumn Sunrise, LLC's Tract L as approved within SB21-0001, Autumn Sunrise Subdivision, and
 - iii. SW "H" (Mahogany) Street as identified within SB21-0001, Autumn Sunrise Subdivision, TLID 2S135D000 400 & 401, owner Autumn Sunrise, LLC.

PRIOR TO ISSUANCE OF CERTIFICATE OF OCCUPANCY AND/OR CERTIFICATE OF COMPLETION:

Submit to the Engineering Division via [eTrakit](#) for review and approval):

9. The applicant must complete all the private stormwater and public improvements as shown on the approved permit plans. All improvements must also be accepted by the City in accordance with TDC 74.120.

10. The applicant must submit paper and electronic as-builts of the Engineering permits along with maintenance bonds and any final fees for public and water quality improvements.

III. FINDINGS

These findings reference the Tualatin Development Code (TDC), unless otherwise noted.

[ENGINEERING FINDINGS]

Chapter 74 – Public Improvement Requirements

TDC 74.120 Public Improvements.

(1) Except as specially provided, all public improvements must be installed at the expense of the applicant. All public improvements installed by the applicant must be constructed and guaranteed as to workmanship and material as required by the Public Works Construction Code prior to acceptance by the City. Work must not be undertaken on any public improvement until after the construction plans have been approved by the City Manager and a Public Works Permit issued and the required fees paid.

TDC 74.130 Private Improvements.

All private improvements must be installed at the expense of the applicant. The property owner must retain maintenance responsibilities over all private improvements.

TDC 74.140 Construction Timing.

(1) All the public improvements required under this chapter must be completed and accepted by the City prior to the issuance of a Certificate of Occupancy; or, for subdivision and partition applications, in accordance with the requirements of the Subdivision regulations.

(2) All private improvements required under this Chapter must be approved by the City prior to the issuance of a Certificate of Occupancy; or for subdivision and partition applications, in accordance with the requirements of the Subdivision regulations.

Finding:

Private improvements must be installed and maintained at the expense of the applicant. All public and private improvements proposed and modified by conditions of approval must be completed prior to receiving a Certificate of Occupancy.

With recommended Conditions of Approval, these criteria are met.

Water

TDC 74.610 Water Service.

(1) Water lines must be installed to serve each property in accordance with the Public Works Construction Code. Water line construction plans must be submitted to the City Manager for review and approval prior to construction.

(2) If there are undeveloped properties adjacent to the subject site, public water lines must be extended by the applicant to the common boundary line of these properties. The lines must be sized to provide service to future development, in accordance with the City's Water System Master Plan, TDC Chapter 12.

(3) As set forth is TDC Chapter 12, Water Service, the City has three water service levels. All development applicants must be required to connect the proposed development site to the service level in which the development site is located. If the development site is located on a boundary line between two service levels the applicant must be required to connect to the service level with the higher reservoir elevation. The applicant may also be required to install or provide pressure reducing valves to supply appropriate water pressure to the properties in the proposed development site.

[...]

TMC Chapter 03-03 – Water Service.

TMC 3-3-040 Separate Services Required.

(1) Except as authorized by the City Engineer, a separate service and meter to supply regular water service or fire protection service shall be required for each building, residential unit or structure served. For the purposes of this section, trailer parks and multi-family residences of more than four dwelling units shall constitute a single unit unless the City Engineer determines that separate services are required.

[...]

TMC 3-3-110 Construction Standards.

All water line construction and installation of services and equipment shall be in conformance with the City of Tualatin Public Works Construction Code. In addition, whenever a property owner extends a water line, which upon completion, is intended to be dedicated to the City as part of the public water system, said extension shall be carried to the opposite property line or to such other point as determined by the City Engineer. Water line size shall be determined by the City Engineer in accordance with the City's Development Code or implementing ordinances and the Public Works Construction Code.

TMC 3-3-120 Backflow Prevention Devices and Cross Connections.

(1) Except where this ordinance provides more stringent requirements, the definitions, standards, requirements and regulations set forth in the Oregon Administrative Rules pertaining to public water supply systems and specifically OAR 333 Division 61 in effect on the date this ordinance becomes effective are hereby adopted and incorporated by reference.

(2) The owner of property to which City water is furnished for human consumption shall install in accordance with City standards an appropriate backflow prevention device on the premises where any of the following circumstances exist:

(a) Those circumstances identified in regulations adopted under subsection (1) of this section;

(b) Where there is a fire protection service, an irrigation service or a nonresidential service connection which is two inches (2") or larger in size;

(c) Where the potable water supply provided inside a structure is 32 feet or more, higher than the elevation of the water main at the point of service connection;

(4) Except as otherwise provided in this subsection, all irrigation systems shall be installed with a double check valve assembly. Irrigation system backflow prevention device assemblies installed before the effective date of this ordinance, which were approved at the time they were installed but are not on the current list of approved device assemblies maintained by the Oregon State Health Division, shall be permitted to remain in service provided they are properly maintained, are commensurate with the degree of hazard, are tested at least annually, and perform satisfactorily. When devices of this type are moved, or require more than minimum maintenance, they shall be replaced by device assemblies which are on the Health Division list of approved device assemblies.

TMC 3-3-130 Control Valves.

The customer shall install a suitable valve, as close to the meter location as practical, the operation of which will control the entire water supply from the service. The operation by the customer of the curb stop in the meter box is prohibited.

[...]

Finding:

Murrysmith's Water System Capacity Analysis dated November 2, 2021 indicates the need for extension of the public C-Level water system from the intersection of SW Boones Ferry Road and SW Norwood Road south to serve this development. The public system must extend to the south property line.

The proposed domestic and fire service laterals with gate valves near the main must be connected to the proposed extension of the public water system. Vaults, the domestic meter, and backflow devices must be within the planter strip or located past the multi-use path surrounded by five feet of public utility easement.

With recommended Conditions of Approval, these criteria are met.

[...]

Sanitary Sewer

TDC 74.620 Sanitary Sewer Service.

(1) Sanitary sewer lines must be installed to serve each property in accordance with the Public Works Construction Code. Sanitary sewer construction plans and calculations must be submitted to the City Manager for review and approval prior to construction.

(2) If there are undeveloped properties adjacent to the proposed development site which can be served by the gravity sewer system on the proposed development site, the applicant must extend public sanitary sewer lines to the common boundary line with these properties. The lines must be sized to convey flows to include all future development from all up stream areas that can be expected to drain through the lines on the site, in accordance with the City's Sanitary Sewer System Master Plan, TDC Chapter 13.

[...]

Finding:

The applicant's proposal is to connect via a private gravity lateral to future public sanitary sewer system approved within SB21-0001, Autumn Sunrise Subdivision then to a future Clean Water Services' sanitary sewer pump station approved within AR21-0014, Norwood Road Pump Station. The extension of public sanitary sewer lines and Clean Water Services' pump station could provide access to the public sanitary sewer main for all lots surrounding this development.

If any portion of the public system or pump station required to serve this development is not permitted at the time applicant requests issuance of construction permits, the applicant must include construction of those portions within their public works permit. Associated public sanitary sewer easements and access must be recorded. If any portion of the public system or pump station required to serve this development is permitted but not constructed and approved at the time applicant requests issuance of construction permits, the applicant must submit approval from the permittee(s) to connect to their unapproved sanitary sewer system.

Final sanitary sewer permit plans must be submitted that show cleanouts at the edge of public easements.

With recommended Conditions of Approval, these criteria are met.

[...]

Stormwater

TDC 74.630 Storm Drainage System.

(1) Storm drainage lines must be installed to serve each property in accordance with City standards. Storm drainage construction plans and calculations must be submitted to the City Manager for review and approval prior to construction.

(2) The storm drainage calculations must confirm that adequate capacity exists to serve the site. The discharge from the development must be analyzed in accordance with the City's Storm and Surface Water Regulations.

(3) If there are undeveloped properties adjacent to the proposed development site which can be served by the storm drainage system on the proposed development site, the applicant must extend storm drainage lines to the common boundary line with these properties. The lines must be sized to convey expected flows to include all future development from all up stream areas that will drain through the lines on the site, in accordance with the Tualatin Drainage Plan in TDC Chapter 14.

[...]

TDC 74.650 Water Quality, Storm Water Detention and Erosion Control.

The applicant must comply with the water quality, storm water detention and erosion control requirements in the Surface Water Management Ordinance. If required:

(2) On all other development applications, prior to issuance of any building permit, the applicant must arrange to construct a permanent on-site water quality facility and storm water detention facility and submit a design and calculations indicating that the requirements of the Surface Water Management Ordinance will be met and obtain a Stormwater Connection Permit from Clean Water Services.

(3) For on-site private and regional non-residential public facilities, the applicant must submit a stormwater facility agreement, which will include an operation and maintenance plan provided by the City, for the water quality facility for the City's review and approval. The applicant must submit an erosion control plan prior to issuance of a Public Works Permit. No construction or disturbing of the site must occur until the erosion control plan is approved by the City and the required measures are in place and approved by the City.

[...]

TMC Additional Surface Water Management Standards.

TMC 3-5-200 Downstream Protection Requirement.

Each new development is responsible for mitigating the impacts of that development upon the public storm water quantity system. The development may satisfy this requirement through the use of any of the following techniques, subject to the limitations and requirements in TMC 3-5-210:

- (1) Construction of permanent on-site stormwater quantity detention facilities designed in accordance with this title;**
- (2) Enlargement of the downstream conveyance system in accordance with this title and the Public Works Construction Code;**
- (3) The payment of a Storm and Surface Water Management System Development Charge, which includes a water quantity component designated to meet these requirements.**

TMC 3-5-210 Review of Downstream System.

For new development other than the construction of a single family house or duplex, plans shall document review by the design engineer of the downstream capacity of any existing storm drainage facilities impacted by the proposed development. That review shall extend downstream to a point where the impacts to the water surface elevation from the development will be insignificant, or to a point where the conveyance system has adequate capacity, as determined by the City Engineer. To determine the point at which the downstream impacts are insignificant or the drainage system has adequate capacity, the design engineer shall submit an analysis using the following guidelines:

- (1) Evaluate the downstream drainage system for at least ¼ mile;**
- (2) Evaluate the downstream drainage system to a point at which the runoff from the development in a build out condition is less than 10 percent of the total runoff of the basin in its current development status. Developments in the basin that have been approved may be**

considered in place and their conditions of approval to exist if the work has started on those projects;

(3) Evaluate the downstream drainage system throughout the following range of storms: 2, 5, 10, 25 year;

(4) The City Engineer may modify items 1, 2, 3 to require additional information to determine the impacts of the development or to delete the provision of unnecessary information.

TMC 3-5-220 Criteria for Requiring On-Site Detention to be Constructed.

The City shall determine whether the onsite facility shall be constructed. If the onsite facility is constructed, the development shall be eligible for a credit against Storm and Surface Water System Development Charges, as provided in City ordinance.

On-site facilities shall be constructed when any of the following conditions exist:

(1) There is an identified downstream deficiency, as defined in TMC 3-5-210, and detention rather than conveyance system enlargement is determined to be the more effective solution.

(2) There is an identified regional detention site within the boundary of the development.

(3) There is a site within the boundary of the development which would qualify as a regional detention site under criteria or capital plan adopted by the Unified Sewerage Agency.

(4) The site is located in the Hedges Creek Subbasin as identified in the Tualatin Drainage Plan and surface water runoff from the site flows directly or indirectly into the Wetland Protected Area (WPA) as defined in TDC 71.020. Properties located within the Wetland Protection District as described in TDC 71.010, or within the portion of the subbasin east of SW Tualatin Road are excepted from the on-site detention facility requirement.

TMC 3-5-230 On-Site Detention Design Criteria.

(1) Unless designed to meet the requirements of an identified downstream deficiency as defined in TMC 3-5.210, stormwater quantity onsite detention facilities shall be designed to capture run-off so the run-off rates from the site after development do not exceed predevelopment conditions, based upon a 25-year, 24-hour return storm.

(2) When designed to meet the requirements of an identified downstream deficiency as defined in TMC 3-5.210, stormwater quantity on-site detention facilities shall be designed such that the peak runoff rates will not exceed predevelopment rates for the 2 through 100 year storms, as required by the determined downstream deficiency.

(3) Construction of on-site detention shall not be allowed as an option if such a detention facility would have an adverse effect upon receiving waters in the basin or subbasin in the event of flooding, or would increase the likelihood or severity of flooding problems downstream of the site.

TMC 3-5-240 On-Site Detention Design Method.

(1) The procedure for determining the detention quantities is set forth in Section 4.4 Retention/Retention Facility Analysis and Design, King County, Washington, Surface Water Design Manual, January, 1990, except subchapters 4.4.5 Tanks, 4.4.6 Vaults and Figure 4.4.4G Permanent Surface Water Control Pond Sign. This reference shall be used for procedure only. The design criteria shall be as noted herein. Engineers desiring to utilize a procedure other than that set forth herein shall obtain City approval prior to submitting calculations utilizing the proposed procedure.

(3) All developments other than single family and duplex, whether residential, multi-family, commercial, industrial, or other uses, the sizing of stormwater quantity detention facilities shall be based on the impervious area to be created by the development, including structures and all roads and impervious areas which are assessed a surface water management monthly fee under Unified Sewerage Agency rules. Impervious surfaces shall be determined based upon building permits, construction plans, site visits or other appropriate methods deemed reliable by City.

[...]

TMC 3-5-280 Placement of Water Quality Facilities.

Title III specifies that certain properties shall install water quality facilities for the purpose of removing phosphorous. No such water quality facilities shall be constructed within the defined area of existing or created wetlands unless a mitigation action, approved by the City, is constructed to replace the area used for the water quality facility.

[...]

TMC 3-5-330 Permit Required.

Except as provided in TMC 3-5-310, no person shall cause any change to improved or unimproved real property that will, or is likely to, increase the rate or quantity of run-off or pollution from the site without first obtaining a permit from the City and following the conditions of the permit.

[...]

TMC 3-5-350 Phosphorous Removal Standard.

The stormwater quality control facilities shall be designed to remove 65 percent of the phosphorous from the runoff from 100 percent of the newly constructed impervious surfaces. Impervious surfaces shall include pavement, buildings, public and private roadways, and all other surfaces with similar runoff characteristics.

TMC 3-5-360 Design Storm.

The stormwater quality control facilities shall be designed to meet the removal efficiency of TMC 3-5-350 for a mean summertime storm event totaling 0.36 inches of precipitation falling in four hours with an average return period of 96 hours.

[...]

TMC 3-5-390 Facility Permit Approval.

A stormwater quality control facility permit shall be approved only if the following are met:

(1) The plat, site plan, or permit application includes plans and a certification prepared by an Oregon registered, professional engineer that the proposed stormwater quality control facilities have been designed in accordance with criteria expected to achieve removal efficiencies for total phosphorous required by this Title III. Clean Water Services Design and Construction Standards shall be used in preparing the plan for the water quality facility; and

(2) The plat, site plan, or permit application shall be consistent with the areas used to determine the removal required in TMC 3-5-350; and

(3) A financial assurance, or equivalent security acceptable to the City, is provided by the applicant which assures that the stormwater quality control facilities are constructed according to the plans established in the plat, site plan, or permit approval. The financial assurance may be combined with our financial assurance requirements imposed by the City; and

(4) A stormwater facility agreement identifies who will be responsible for assuring the long term compliance with the operation and maintenance plan.

[...]

Finding:

Two private extended dry detention basins serving as a stormwater quality and quantity control are shown on the site adjacent to SW Boones Ferry Road. These facilities are planned to serve equivalent public runoff required by the development. A Preliminary Drainage Report was prepared by Vega Civil Engineering revised May 2, 2022. The proposed facilities and conveyance must be sized to meet the current City of Tualatin and Clean Water Service requirements for stormwater quality and quantity. Final plans and stormwater calculations must prove gravity flow of stormwater from within 5 feet of buildings to the public main.

This site is within Basalt Creek Subbasin. TMC 3-5-220 states that sites without specified detention requirements must evaluate downstream requirements for conveyance and additional specified requirements The City has identified that erosion is a concern for the release of stormwater west of SW Boones Ferry Road to Basalt Creek. The applicant must include evaluation for ¼ mile from their site's release to the public system for the potential of erosion within their final stormwater report and include approved solutions within their final plans.

The final drainage report and plans must include hydromodification release rates for ½ the 2-year or 5-year storm events and detention as required by downstream analysis.

Final plans must show any stormwater laterals perpendicular to the public stormwater system within right-of-way and include a cleanout at right-of-way.

The applicant must provide financial assurance and obtain a Water Quality Permit for stormwater calculation evaluation and construction of new facilities prior to issuance of construction permits. The

final water quality facility plans and calculations must be certified by an Oregon registered, professional engineer.

The applicant's plans show no water quality facilities in created or existing wetlands. The public stormwater system extends within SW Boones Ferry Road to properties to the north and south.

The applicant has submitted a Clean Water Services' (CWS) Service Provider Letter File Number 21-002248 dated September 7, 2021. This indicates that no Sensitive Areas exist on the site that would be permanently impacted by the proposed improvements. Mitigation of Vegetated Corridor impacts must be met through purchase of Wetland Mitigation Bank Credit. A CWS Memorandum was received for development on this site and is included as Exhibit D. After land use decision issuance, final plans are provided by the City to Clean Water Services for final review. Upon approval by Clean Water Services they will provide the City authorization to issue construction permits. The applicant must submit final plans complying with the submitted CWS' Service Provider Letter conditions plus any new and/or revised letters and CWS Memorandum that are sufficient to obtain a Stormwater Connection Permit Authorization Letter from Clean Water Services in accordance with TDC 74.650(2) and CWS D&CS 3.01.2(d).

With recommended Conditions of Approval, these criteria are met.

[...]

TDC 74.640 Grading.

(1) Development sites must be graded to minimize the impact of storm water runoff onto adjacent properties and to allow adjacent properties to drain as they did before the new development.

(2) A development applicant must submit a grading plan showing that all lots in all portions of the development will be served by gravity drainage from the building crawl spaces; and that this development will not affect the drainage on adjacent properties. The City Manager may require the applicant to remove all excess material from the development site.

TMC Chapter 03-05 – Erosion Control, Surface Water Management, Water Quality Facilities, and Building and Sewers.

TMC 3-5-050 Erosion Control Permits.

(1) Except as noted in subsection (3) of this section, no person shall cause any change to improved or unimproved real property that causes, will cause, or is likely to cause a temporary or permanent increase in the rate of soil erosion from the site without first obtaining a permit from the City and paying prescribed fees. Such changes to land shall include, but are not limited to, grading, excavating, filling, working of land, or stripping of soil or vegetation from land.

(2) No construction, land development, grading, excavation, fill, or the clearing of land is allowed until the City has issued an Erosion Control Permit covering such work, or the City has determined that no such permit is required. No public agency or body shall undertake any public works project without first obtaining from the City an Erosion Control Permit covering such work, or receiving a determination from the City that none is required.

[...]

Finding:

The plans indicate disturbance of approximately 4.66 acres. Final plans may include over 5 acres of disturbance based on conditions of approval. Erosion and sediment control plans and permit applications conforming to the requirements of the City of Tualatin, CWS, and Oregon Department of Environmental Quality must be provided with the construction permit submittal documents. The applicant must obtain:

- *An erosion control permit from the City of Tualatin for disturbance greater than 500 square feet plus*
- *A National Pollution Discharge Elimination System (NPDES) 1200-CN Construction Erosion Control permit from Clean Water Service for over 1 acre up to 5 acres of disturbance or A National Pollution Discharge Elimination System (NPDES) 1200-C Construction Erosion Control permit from Oregon DEQ for over 5 acres.*

The development site must be graded to minimize the impact of stormwater runoff onto adjacent properties and to allow adjacent properties to drain as they did before the new development. A development applicant must submit a grading plan showing that all lots in all portions of the development will be served by gravity drainage from the building crawl spaces; and that this development will not affect the drainage on adjacent properties. There will be no crawl spaces under the proposed building. The proposed grading plan is shown to minimize the impact of stormwater runoff to adjacent properties and allows adjacent properties to drain as they did before the development.

The entire site is within and drains into the Basalt Creek Subbasin. Stormwater from all impervious areas are conveyed to private treatment and detention facilities then released to the public stormwater system which discharges into Basalt Creek. Prior to issuance of permits for construction activities, the applicant must submit final plans:

1. *Minimizing impact from stormwater runoff to adjacent properties,*
2. *Allowing adjacent properties to drain as they did before the new development, and*
3. *Providing gravity drainage from this development to an approved public system.*

With recommended Conditions of Approval, these criteria are met.

[...]

Streets

TDC 74.210 Minimum Street Right-of-Way Widths.

The width of streets in feet shall not be less than the width required to accommodate a street improvement needed to mitigate the impact of a proposed development. In cases where a street is required to be improved according to the standards of the TDC, the width of the right-of-way shall not be less than the minimums indicated in TDC Chapter 74, Public Improvement Requirements, Figures 74-2A through 74-2G.

[...]

(2) For development applications other than subdivisions and partitions, wherever existing or future streets adjacent to property proposed for development are of inadequate right-of-way

width, the additional right-of-way necessary to comply with TDC Chapter 74, Public Improvement Requirements, Figures 74-2A through 74-2G of the Tualatin Community Plan must be dedicated to the City for use by the public prior to issuance of any building permit for the proposed development. This right-of-way dedication must be for the full width of the property abutting the roadway and, if required by the City Manager, additional dedications must be provided for slope and utility easements if deemed necessary.

TDC 74.330. - Utility Easements.

(1) Utility easements for water, sanitary sewer and storm drainage facilities, telephone, television cable, gas, electric lines and other public utilities must be granted to the City.

(4) For development applications other than subdivisions and partitions, and for both on-site and off-site easement areas, a utility easement must be granted to the City; building permits must not be issued for the development prior to acceptance of the easement by the City. The City may elect to exercise eminent domain and condemn necessary off-site public utility easements at the applicant's request and expense. The City Council must determine when condemnation proceedings are to be used.

(5) The width of the public utility easement must meet the requirements of the Public Works Construction Code. All subdivisions and partitions must have a 6-foot public utility easement adjacent to the street and a 5-foot public utility easement adjacent to all side and rear lot lines. Other easements may be required as determined by the City Manager.

[...]

TDC 74.420 Street Improvements.

When an applicant proposes to develop land adjacent to an existing or proposed street, including land which has been excluded under TDC 74.220, the applicant should be responsible for the improvements to the adjacent existing or proposed street that will bring the improvement of the street into conformance with the Transportation Plan (TDC Chapter 11), TDC 74.425 (Street Design Standards), and the City's Public Works Construction Code, subject to the following provisions:

(1) For any development proposed within the City, roadway facilities within the right-of-way described in TDC 74.210 must be improved to standards as set out in the Public Works Construction Code.

(2) The required improvements may include the rebuilding or the reconstruction of any existing facilities located within the right-of-way adjacent to the proposed development to bring the facilities into compliance with the Public Works Construction Code.

(3) The required improvements may include the construction or rebuilding of off-site improvements which are identified to mitigate the impact of the development.

[...]

(6) All required street improvements must include curbs, sidewalks with appropriate buffering, storm drainage, street lights, street signs, street trees, and, where designated, bikeways and transit facilities.

[...]

(8) For development applications other than subdivisions and partitions, all street improvements required by this section must be completed and accepted by the City prior to the issuance of a Certificate of Occupancy.

[...]

(11) Existing streets which abut the proposed development site must be graded, constructed, reconstructed, surfaced or repaired as necessary in accordance with the Public Works Construction Code and TDC Chapter 11, Transportation Plan, and TDC 74.425 (Street Design Standards).

(12) Sidewalks with appropriate buffering must be constructed along both sides of each internal street and at a minimum along the development side of each external street in accordance with the Public Works Construction Code.

(13) The applicant must comply with the requirements of the Oregon Department of Transportation (ODOT), Tri-Met, Washington County and Clackamas County when a proposed development site is adjacent to a roadway under any of their jurisdictions, in addition to the requirements of this chapter.

(14) The applicant must construct any required street improvements adjacent to parcels excluded from development, as set forth in TDC 74.220 of this chapter.

(15) Except as provided in TDC 74.430, whenever an applicant proposes to develop land with frontage on certain arterial streets and, due to the access management provisions of TDC Chapter 75, is not allowed direct access onto the arterial, but instead must take access from another existing or future public street thereby providing an alternate to direct arterial access, the applicant must be required to construct and place at a minimum street signage, a sidewalk, street trees and street lights along that portion of the arterial street adjacent to the applicant's property. The three certain arterial streets are S.W. Tualatin-Sherwood Road, S.W. Pacific Highway (99W) and S.W. 124th Avenue. In addition, the applicant may be required to construct and place on the arterial at the intersection of the arterial and an existing or future public non-arterial street warranted traffic control devices (in accordance with the Manual on Uniform Traffic Control Devices, latest edition), pavement markings, street tapers and turning lanes, in accordance with the Public Works Construction Code.

[...]

(17) Intersections should be improved to operate at a level of service of at least D and E for signalized and unsignalized intersections, respectively.

[...]

TDC 74.470 Street Lights.

(1) Street light poles and luminaries must be installed in accordance with the Public Works Construction Code.

(2) The applicant must submit a street lighting plan for all interior and exterior streets on the proposed development site prior to issuance of a Public Works Permit.

[...]

TDC 74.485. - Street Trees.

(1) Prior to approval of a residential subdivision or partition final plat, the applicant must pay the City a non-refundable fee equal to the cost of the purchase and installation of street trees. The location, placement, and cost of the trees must be determined by the City. This sum must be calculated on the interior and exterior streets as indicated on the final subdivision or partition plat.

(2) In nonresidential subdivisions and partitions street trees must be planted by the owners of the individual lots as development occurs.

(3) The Street Tree Ordinance specifies the species of tree which is to be planted and the spacing between trees.

[...]

TDC 74.660 Underground.

(1) All utility lines including, but not limited to, those required for gas, electric, communication, lighting and cable television services and related facilities must be placed underground. Surface-mounted transformers, surface-mounted connection boxes and meter cabinets may be placed above ground. Temporary utility service facilities, high capacity electric and communication feeder lines, and utility transmission lines operating at 50,000 volts or above may be placed above ground. The applicant must make all necessary arrangements with all utility companies to provide the underground services. The City reserves the right to approve the location of all surface-mounted transformers.

(2) Any existing overhead utilities may not be upgraded to serve any proposed development. If existing overhead utilities are not adequate to serve the proposed development, the applicant must, at their own expense, provide an underground system. The applicant must be responsible for obtaining any off-site deeds and/or easements necessary to provide utility service to this site; the deeds and/or easements must be submitted to the City Manager for acceptance by the City prior to issuance of the Public Works Permit.

[...]

TDC 74.765. - Street Tree Species and Planting Locations.

All trees, plants or shrubs planted in the right-of-way of the City must conform in species and location and in accordance with the street tree plan and City standards, including Table 74-1. If the City Manager determines that none of the species in City standards, including Table 74-1

is appropriate or finds appropriate a species not listed, the City Manager may substitute an unlisted species.

Table 74-1 Street Tree Species					
Species Common Names	Planting Strip Width (feet)			Power line compatible	Spacing on center (feet)
	4	5	6+		
Amur Maackia	•	•	•	•	30
Amur Maple	•	•	•	•	30
Armstrong Maple	•	•	•		30
Autumn Applause Ash		•	•		30
Black Tupelo	•	•	•		30
Capital Flowering Pear	•	•	•		30
Cascara	•	•	•	•	30
Crimson King Maple		•	•		30
Crimson Sentry Maple	•	•	•	•	30
Eastern Redbud	•	•	•		30
European Hornbeam	•	•	•	•	30
Frontier Elm			•		60
Ginko		•	•		30
Globe Sugar Maple			•		60
Golden Desert Ash	•	•	•	•	30
Goldenrain	•	•	•		30
Greenspire Linden		•	•		30
Ivory Japanese Lilac	•	•	•	•	30
Leprechaun Ash	•	•	•		30
Persain Parrotia	•	•	•		30
Purple Beech	•	•	•		30
Raywood Ash		•	•	•	30
Katsura	•	•	•		30
Red Oak			•		60
Red Sunset Maple			•		60
Scanlon/Bowhall Maple	•	•	•		30
Scarlet Oak			•		60
Shademaster Honey Locust		•	•		30
Skyrocket English Oak	•	•	•		30
Japanese snowbell	•	•	•	•	30
Sourwood	•	•	•	•	30
Tall Stewartia	•	•	•	•	30
Chinese Fringetree	•	•	•	•	30
Tri-Color Beech			•		60
Trident Maple	•	•	•	•	30
Urbanite Ash		•	•		30
Yellowwood	•	•	•		30
Zelkova Musashino	•	•	•		30

[...]

Chapter 75 Access Management

[...]

TDC 75.020. - Permit for New Driveway Approach

- (1) Applicability.** A driveway approach permit must be obtained prior to constructing, relocating, reconstructing, enlarging, or altering any driveway approach.
- (3) Procedure Type.** A Driveway Approach Permit is processed as a Type II procedure under TDC 32.220 (Type II).
- (4) Submittal Requirements.** In addition to the application materials required by TDC 32.140 (Application Submittal), the following application materials are also required:
 - a. A site plan, of a size and form and in the number of copies meeting the standards established by the City Manager, containing the following information:
 - (i)The location and dimensions of the proposed driveway approach;
 - (ii)The relationship to nearest street intersection and adjacent driveway approaches;
 - (iii)Topographic conditions;
 - (iv)The location of all utilities;
 - (v)The location of any existing or proposed buildings, structures, or vehicular use areas;
 - (vi)The location of any trees and vegetation adjacent to the location of the proposed driveway approach that are required to be protected pursuant to TDC Chapter 73B or 73C; and
 - (vii)The location of any street trees adjacent to the location of the proposed driveway approach.
 - b. Identification of the uses or activities served, or proposed to be served, by the driveway approach; and
 - c. Any other information, as determined by the City Manager, which may be required to adequately review and analyze the proposed driveway approach for conformance with the applicable criteria.
- (5) Criteria.** A Driveway Approach Permit must be granted if:
 - a. The proposed driveway approach meets the standards of this Chapter and the Public Works Construction Code;
 - b. No site conditions prevent placing the driveway approach in the required location;
 - c. The number of driveway approaches onto an arterial are minimized;
 - d. The proposed driveway approach, where possible:
 - (i)Is shared with an adjacent property; or
 - (ii)Takes access from the lowest classification of street abutting the property;
 - e. The proposed driveway approach meets vision clearance standards;
 - f. The proposed driveway approach does not create traffic hazards and provides for safe turning movements and access;
 - g. The proposed driveway approach does not result in significant adverse impacts to the vicinity;
 - h. The proposed driveway approach minimizes impact to the functionality of adjacent streets and intersections; and
 - (i)The proposed driveway approach balances the adverse impacts to residentially zoned property and the functionality of adjacent streets.

TDC 75.030. - Driveway Approach Closure

- (1) The City Manager may require the closure of a driveway approach where:**
 - (a) The driveway approach is not constructed in conformance with this Chapter and the Public Works Construction Code;**
 - (b) The driveway approach is not maintained in a safe manner;**

- (c) A public street improvement project is being constructed, and closure of the driveway approach will more closely conform to the current driveway approach standards;
- (d) A new building or driveway is constructed on the property;
- (e) A plan text amendment or zone change is proposed for the property served by the driveway;
- (f) A change of use or activity in an existing building increases the amount of required parking;
- (g) The driveway approach has been abandoned; or
- (h) There is a demonstrated safety issue.

TDC 75.040. - Driveway Approach Requirements

(2) Owners of two or more uses, structures, or parcels of land may agree to utilize jointly the same driveway approach when the combined driveway approach of both uses, structures, or parcels of land satisfies their combined requirements as designated in this code; provided that satisfactory legal evidence is presented to the City Attorney in the form of deeds, easements, leases or contracts to establish joint use. Copies of said deeds, easements, leases or contracts must be placed on permanent file with the City Recorder.

(3) Joint and Cross Access.

(a) Adjacent commercial uses may be required to provide cross access drive and pedestrian access to allow circulation between sites.

(b) A system of joint use driveways and cross access easements may be required and may incorporate the following:

(i) A continuous service drive or cross access corridor extending the entire length of each block served to provide for driveway separation consistent with the access management classification system and standards;

(ii) A design speed of ten mph and a maximum width of 24 feet to accommodate two-way travel aisles designated to accommodate automobiles, service vehicles, and loading vehicles;

(iii) Stub-outs and other design features to make it visually obvious that the abutting properties may be tied in to provide cross access via a service drive; and

(iv) An unified access and circulation system plan for coordinated or shared parking areas.

(c) Pursuant to this section, property owners may be required to:

(i) Record an easement with the deed allowing cross access to and from other properties served by the joint use driveways and cross access or service drive;

(ii) Record an agreement with the deed that remaining access rights along the roadway will be dedicated to the city and pre-existing driveways will be closed and eliminated after construction of the joint-use driveway;

(iii) Record a joint maintenance agreement with the deed defining maintenance responsibilities of property owners; and (iv) If subsection (i) through (iii) above involve access to the state highway system or county road system, ODOT or the county must be contacted and must approve changes to subsection (i) through (iii) above prior to any changes.

(4) Requirements for Development on Less than the Entire Site.

(a) To promote unified access and circulation systems, lots and parcels under the same ownership or consolidated for the purposes of development and comprised of more than one building site must be reviewed as one unit in relation to the access standards. The number of access points permitted must be the minimum number necessary to provide reasonable access to these properties, not the maximum available for that frontage. All necessary easements, agreements, and stipulations must be met. This must also apply to phased development plans. The owner and all lessees within the affected area must comply with the access requirements.

(b) All access must be internalized using the shared circulation system of the principal commercial development or retail center. Driveways should be designed to avoid queuing across surrounding parking and driving aisles.

(5) Lots that front on more than one street may be required to locate motor vehicle accesses on the street with the lower functional classification as determined by the City Manager.

(6) Except as provided in TDC 53.100, all driveway approach must connect directly with public streets.

(7) To afford safe pedestrian access and egress for properties within the City, a sidewalk must be constructed along all street frontage, prior to use or occupancy of the building or structure proposed for said property. The sidewalks required by this section must be constructed to City standards, except in the case of streets with inadequate right-of-way width or where the final street design and grade have not been established, in which case the sidewalks must be constructed to a design and in a manner approved by the City Manager. Sidewalks approved by the City Manager may include temporary sidewalks and sidewalks constructed on private property; provided, however, that such sidewalks must provide continuity with sidewalks of adjoining commercial developments existing or proposed. When a sidewalk is to adjoin a future street improvement, the sidewalk construction must include construction of the curb and gutter section to grades and alignment established by the City Manager.

(8) The standards set forth in this Code are minimum standards for driveway approaches, and may be increased through the Architectural Review process in any particular instance where the standards provided herein are deemed insufficient to protect the public health, safety, and general welfare.

(9) Minimum driveway approach width for uses are as provided in Table 75-1 (Driveway Approach Width):

TABLE 75-1 Driveway Approach Width		
Use	Minimum Driveway Approach Width	Maximum Driveway Approach Width
Single-Family Residential, townhouses, and duplexes	10 feet	26 feet for one or two care garages 37 feet for three or more garages
Multi-family	2 Units = 16 feet 3-49 Units = 24 feet 50-499 = 32 feet Over 500 = as required by the City Manager	May provide two 16 foot one-way driveways instead of one 24-foot driveway May provide two 24-foot one-way driveways instead of one 32-foot driveway
Commercial	1-99 Parking Spaces = 32 feet 100-249 Parking Spaces = two approaches each 32 feet	Over 250 Parking Spaces = As Required by the City Manager, but not exceeding 40 feet
Industrial	36 feet	Over 250 Parking Spaces = As Required by the City Manager, but not exceeding 40 feet
Institutional	1-99 Parking Spaces = 32 feet 100-249 Parking Spaces = two approaches each 32 feet	Over 250 Parking Spaces = As Required by the City Manager, but not exceeding 40 feet

[...]

(11) Distance between Driveways and Intersections. Except for single-family dwellings, the minimum distance between driveways and intersections must be as provided below. Distances listed must be measured from the stop bar at the intersection.

- (a) At the intersection of collector or arterial streets, driveways must be located a minimum of 150 feet from the intersection.
- (b) At the intersection of two local streets, driveways must be located a minimum of 30 feet from the intersection.
- (c) If the subject property is not of sufficient width to allow for the separation between driveway and intersection as provided, the driveway must be constructed as far from the intersection as possible, while still maintaining the 5-foot setback between the driveway and property line.
- (d) When considering a driveway approach permit, the City Manager may approve the location of a driveway closer than 150 feet from the intersection of collector or arterial streets, based on written findings of fact in support of the decision.

(12) Vision Clearance Area.

(a) Local Streets. A vision clearance area for all local street intersections, local street and driveway intersections, and local street or driveway and railroad intersections must be that triangular area formed by the right-of-way lines along such lots and a straight line joining the right-of-way lines at points which are ten feet from the intersection point of the right-of-way lines, as measured along such lines (see Figure 73-2 for illustration).

(b) Collector Streets. A vision clearance area for all collector/arterial street intersections, collector/arterial street and local street intersections, and collector/arterial street and railroad intersections must be that triangular area formed by the right-of-way lines along such lots and a straight line joining the right-of-way lines at points which are 25 feet from the intersection point of the right-of-way lines, as measured along such lines. Where a driveway intersects with a collector/arterial street, the distance measured along the driveway line for the triangular area must be ten feet (see Figure 73-2 for illustration).

(c) Vertical Height Restriction. Except for items associated with utilities or publicly owned structures such as poles and signs and existing street trees, no vehicular parking, hedge, planting, fence, wall structure, or temporary or permanent physical obstruction must be permitted between 30 inches and eight feet above the established height of the curb in the clear vision area (see Figure 73-2 for illustration).

TDC 75.050. - Access Limited Roadways

(2) The following Freeways and Arterials are access limited roadways: ...

(h) Boones Ferry Road at all points located within the City of Tualatin Planning Area; ...

[...]

TDC 75.070. - Existing Driveways and Street Intersections.

(1) Existing driveways with access onto arterials on the date this chapter was originally adopted are allowed to remain. If additional development occurs on properties with existing driveways with access onto arterials then this Chapter applies and the entire site must be made to conform with the requirements of this chapter.

(2) The City Manager may restrict existing driveways and street intersections to right-in and right-out by construction of raised median barriers or other means.

[...]

TDC 75.100. - Spacing Standards for New Intersections.

Except as shown in TDC Chapter 11, Transportation, (Figures 11-1 and 11-3), all new intersections with arterials must have a minimum spacing of one-half mile between intersections.

TDC 75.110. - Joint Access Standards.

When the City Manager determines that joint accesses are required by properties undergoing development or redevelopment, an overall access plan shall be prescribed by the City Manager and all properties shall adhere to this. Interim accesses may be allowed in

accordance with TDC 75.060 of this chapter to provide for the eventual implementation of the overall access plan.

TDC 75.130. - New Streets Access Standards.

(1) New streets designed to serve as alternatives to direct, parcel by parcel, access onto arterials are shown in TDC Chapter 11, Transportation, (Figures 11-1 and 11-3). These streets are shown as corridors with the exact location determined through the partition, subdivision, public works permit or Architectural Review process. Unless modified by the City Council by the procedure set out below, these streets will be the only new intersections with arterials in the City. See map for changes.

(2) Specific alignment of a new street may be altered by the City Manager upon finding that the street, in the proposed alignment, will carry out the objectives of this chapter to the same, or a greater degree as the described alignment, that access to adjacent and nearby properties is as adequately maintained and that the revised alignment will result in a segment of the Tualatin road system which is reasonable and logical.

(3) The City Council may include additional streets in TDC Chapter 11, Transportation, (Figures 11-1 and 11-3), through the plan amendment procedure. In addition to other required findings, the City Council must find that the addition is necessary to implement the objectives of this chapter.

[...]

Finding:

A Traffic Study by Charbonneau Engineering dated February 2022 was submitted. Plans show removal of existing driveway, addition of an emergency vehicle access to SW Boones Ferry Road restricted by bollards, and construction of a public access within a public access easement south then west to SW Boones Ferry road across adjacent and nearby lots. The location for the public access easement and right-of-way dedication was approved within SB21-0001, Autumn Sunrise Subdivision with the proposed public access easement serving this development and the adjacent lot. Washington County submitted a letter dated May 19, 2022 stating conditions of approval for the proposed site development and those for obtaining interim access approval if requested.

The applicant must provide proof of recorded public access easements, right-of-way dedication with associated construction permits, and Washington County permitted approval to construct the proposed connections. The applicant may obtain interim approved access direct to SW Boones Ferry Road from Washington County that meets City of Tualatin code standards.

In order to enable the proposed permanent access to SW Boones Ferry Road via the proposed public access to the south over private lots must be within recorded public access and utility easements. Construction within the public easements must include 24 feet wide two-way travel, with curbs and gutters, and a 5-foot wide sidewalk on the west side. Additionally, SW "H" (Mahogany) Street as approved within SB21-0001, Autumn Sunrise Subdivision must be dedicated, constructed, and signalized as needed prior to occupancy.

Final plans must include a half-street improvement for SW Boones Ferry Road meeting the requirements of Washington County and the City of Tualatin. The preferred cross-section of a Tualatin Major Arterial must be modified as directed by the City Engineer. Street lights and Portland General Electric support

poles in SW Boones Ferry Road right-of-way must be relocated as required. The applicant must obtain permits and construct a half street for SW Boones Ferry Road as indicated below or as otherwise approved by the City Engineer and Washington County including:

- *A 12-foot wide multi-use path,*
- *A 4-foot wide planter (not including curb width),*
- *Relocation of street lights and PGE poles as required,*
- *Approvable street trees and planting locations with irrigation, and*
- *A 6 to 8-foot wide public utility easement adjacent to right-of-way for water, sanitary sewer, and storm drainage facilities, telephone, television cable, gas, electric lines, and other public utilities must be granted to the City. Additional width of the public utility easement must be recorded to accommodate infrastructure approved within the final plans.*

Maintenance easements must be provided as required to access public infrastructure.

With recommended Conditions of Approval, these criteria are met.