

**Exhibit C: Pre-Application Conference Notes**



Home of the Tualatin River National Wildlife Refuge

## Pre-Application Conference Notes

PAC 2020-008

Meeting Date: April 2, 2020

Planning Staff Contact: Joy L. Chang

503-625-4214 or [changj@sherwoodoregon.gov](mailto:changj@sherwoodoregon.gov)

### Conditional Use Permit / Site Plan Review

**PLEASE NOTE:** The conference and notes cannot cover all Code requirements and aspects related to site planning that should apply to the development of your proposal. Failure of the staff to provide information required by the Code shall not constitute a waiver of the applicable standards or requirements. It is recommended that a prospective applicant either obtain and read the Community Development Code or ask any questions of City staff relative to Code requirements prior to submitting an application.

#### **Proposed project name: Willamette Water Supply Program (WWSP)**

**PROPOSAL DESCRIPTION:** Tualatin Valley Water District, City of Hillsboro, and City of Beaverton have partnered to form the WWSP and to build the Willamette Water Supply System. The applicant is proposing a water state-of-the-art water filtration plant in Sherwood's Tonquin Employment Area as part of the WWSP. The proposed public utility development will be on a development footprint of  $\pm 20$  acres. The proposed water treatment plant is located in the southwest quadrant of the intersection of SW Tualatin-Sherwood Road and SW 124<sup>th</sup> Avenue.

**APPLICANT:** Willamette Water Supply Program  
1850 SW 170<sup>th</sup> Ave, Beaverton OR 97003  
Corianne Burnett, Project Manager, or [Corianne.Burnett@tvwd.org](mailto:Corianne.Burnett@tvwd.org) 503-941-4575

**OWNERS:** Willamette Water Supply System Commission  
1850 SW 170<sup>th</sup> Ave, Beaverton OR 97003

**PROPERTY LOCATION:** 21409 SW 124<sup>th</sup> Avenue, Sherwood OR 97140

**TAX LOT ID:** 2S1 28D 001200

**LAND USE DESIGNATION:** Employment Industrial (EI)

**IDENTIFIED POTENTIAL CONSTRAINTS/ISSUES:** Utilities/Easements and Wetland Delineation (joint permitting coordination)

## APPLICATION TYPE, TIMELINE & FEES

**Full details on application type, noticing, and public hearing procedures listed under §16.72**

### Application Type and Hearing Authority

- **Site Plan Review, Type IV**- Site Plans greater than 40,000 square feet of floor area, parking or seating capacity. The Planning Commission will conduct the hearing and render the final decision. The Type IV Hearing Authority is the Planning Commission and the Appeal Authority is the City Council.
- **Conditional Use Permit, Type III** - Public hearing before the Hearings Officer and any appeals heard by the Planning Commission. Concurrent Site Plan Review is an option.
- **Final Site Plan Review, Type I** (once a preliminary land use decision has been rendered).

### Estimated Approval Timeline

- 30-day completeness review
- 45 - 60 days for public hearing date after application is deemed complete
- 14-day appeal period for all land use decisions

### Land Use Fees

**Fees from July 1, 2019 (subject to change July 1, 2020)**

**CONFIRM FEES WITH STAFF PRIOR TO SUBMITTAL. WE WILL HELP YOU TO CALCULATE THE FEES.**

- Site Plan Review, Type IV - **\$6,577.41 plus additional \$102** for every 10,000 square feet or portion thereof over the first 15,000 square feet of building area
- Publication/distribution of Type IV Notice **\$466**
- Conditional Use Permit with **concurrent** Type III or IV application **\$2,190.04**
- Final Site Plan Review, Type I - **\$699.15** (due at the time of building permit submittal)

## APPLICATION SUBMITTAL REQUIREMENTS

See link below for the following [required forms](#) identified in the Land Use Application, Conditional Use Permit and Site Plan Review Checklist. Please be sure to include a narrative describing how the proposal complies with applicable sections of development code.

Note: Applicants are encouraged to submit **4 full and reduced size paper copies and one electronic copy for completeness review**. The full number of paper copies (15) and one updated electronic copy will be required after the application is deemed complete.

### SUMMARY OF APPLICABLE CODE CRITERIA (SZCDC Title 16)

*These sections **must** be addressed in the narrative submitted with the land use application*

<u>Division II. - LAND USE AND DEVELOPMENT</u>		<u>Division VI. - PUBLIC INFRASTRUCTURE</u>	
Chapter 16.12 - RESIDENTIAL LAND USE DISTRICTS		Chapter 16.104 - GENERAL PROVISIONS	
Chapter 16.22 - COMMERCIAL LAND USE DISTRICTS		Chapter 16.106 - TRANSPORTATION FACILITIES	<b>X</b>
Chapter 16.31 - INDUSTRIAL LAND USE DISTRICTS	<b>X</b>	Chapter 16.108 - IMPROVEMENT PLAN REVIEW	<b>X</b>

Chapter 16.36 - INSTITUTIONAL AND PUBLIC (IP) LAND USE DISTRICT		Chapter 16.110 - SANITARY SEWERS	X
Chapter 16.38 - SPECIAL USES		Chapter 16.112 - WATER SUPPLY	X
Chapter 16.40 - PLANNED UNIT DEVELOPMENT (PUD)		Chapter 16.114 - STORM WATER	X
Chapter 16.42 - HOME OCCUPATIONS		Chapter 16.116 - FIRE PROTECTION	X
Chapter 16.44 - TOWNHOMES		Chapter 16.118 - PUBLIC AND PRIVATE UTILITIES	X
Chapter 16.46 - MANUFACTURED HOMES			
Chapter 16.48 - NON-CONFORMING USES		<b><u>Division VII. - LAND DIVISIONS, SUBDIVISIONS, PARTITIONS, LOT LINE ADJUSTMENTS AND MODIFICATIONS</u></b>	
Chapter 16.50 - ACCESSORY STRUCTURES, ARCHITECTURAL FEATURES AND DECKS		Chapter 16.120 - SUBDIVISIONS	
Chapter 16.52 - ACCESSORY DWELLING UNITS		Chapter 16.122 - LAND PARTITIONS	
Chapter 16.54 - ADULT ENTERTAINMENT		Chapter 16.124 - PROPERTY LINE ADJUSTMENTS AND LOT CONSOLIDATIONS	
Chapter 16.56 - OTHER LAND USE ACTIONS		Chapter 16.126 - REPLATTING, LOT CONSOLIDATIONS AND VACATION OF PLATS	
Chapter 16.58 - CLEAR VISION AND FENCE STANDARDS	X	Chapter 16.128 - LAND DIVISION DESIGN STANDARDS	
Chapter 16.60 - YARD REQUIREMENTS			
Chapter 16.62 - CHIMNEYS, SPIRES, ANTENNAS, AND SIMILAR STRUCTURES		<b><u>Division VIII. - ENVIRONMENTAL RESOURCES</u></b>	
Chapter 16.64 - DUAL USE OF REQUIRED SPACE		Chapter 16.134 - FLOODPLAIN (FP) OVERLAY	
Chapter 16.66 - TRANSPORTATION FACILITIES AND IMPROVEMENTS	X	Chapter 16.136 - PROCEDURES	
Chapter 16.68 - INFILL DEVELOPMENT STANDARDS		Chapter 16.138 - MINERAL RESOURCES	
		Chapter 16.140 - SOLID WASTE	X
<b><u>Division III. - ADMINISTRATIVE PROCEDURES</u></b>		Chapter 16.142 - PARKS, TREES AND OPEN SPACES	X
Chapter 16.70 - GENERAL PROVISIONS		Chapter 16.144 - WETLAND, HABITAT AND NATURAL AREAS	X
Chapter 16.72 - PROCEDURES FOR PROCESSING DEVELOPMENT PERMITS	X	Chapter 16.146 - NOISE	X
Chapter 16.76 - APPEALS		Chapter 16.148 - VIBRATIONS	X
		Chapter 16.150 - AIR QUALITY	X
<b><u>Division IV. - PLANNING PROCEDURES</u></b>		Chapter 16.152 - ODORS	X
Chapter 16.80 - PLAN AMENDMENTS		Chapter 16.154 - HEAT AND GLARE	X
Chapter 16.82 - CONDITIONAL USES	X	Chapter 16.156 - ENERGY CONSERVATION	X
Chapter 16.84 - VARIANCES	?		
Chapter 16.86 - TEMPORARY USES		<b><u>Division IX. - HISTORIC RESOURCES</u></b>	
Chapter 16.88 - INTERPRETATION OF SIMILAR USES		Chapter 16.160 - SPECIAL RESOURCE ZONES	
		Chapter 16.162 - OLD TOWN (OT) OVERLAY DISTRICT	
<b><u>Division V. - COMMUNITY DESIGN</u></b>		Chapter 16.164 - LANDMARK REVIEW	
Chapter 16.90 - SITE PLANNING	X	Chapter 16.166 - LANDMARK DESIGNATION	
Chapter 16.92 - LANDSCAPING	X	Chapter 16.168 - LANDMARK ALTERATION 16.168.010 - PROCEDURES	
Chapter 16.94 - OFF-STREET PARKING AND LOADING	X	16.168.020 - ALTERATION STANDARDS	
Chapter 16.96 - ON-SITE CIRCULATION	X	16.168.030 - VARIANCES TO ALTERATION STANDARDS	
Chapter 16.98 - ON-SITE STORAGE	X		
Chapter 16.100 - PERMANENT SIGNS			
Chapter 16.102 - TEMPORARY, PORTABLE AND BANNER SIGNS			

### STAFF COMMENTS ON APPLICABLE CRITERIA AND GENERAL REQUIREMENTS

*The following comments are based on staff's review of the information provided on the pre-application form and accompanying attachments.*

1. The property is zoned **Employment Industrial**. Allowed uses and dimensional requirements are reflected in Chapter 16.31. Civic Uses are shown on the table below.

16.31.020 - Uses

A. The table below identifies the land uses that are permitted outright (P), permitted conditionally (C) and not permitted (N) in the industrial zoning districts. The specific land use categories are described and defined in Chapter 16.88.

B. Uses listed in other sections of this Code, but not within this specific table are prohibited.

C. Any use not otherwise listed that can be shown to be consistent or associated with the uses permitted outright or conditionally in the industrial zones or contribute to the achievement of the objectives of the industrial zones may be permitted outright or conditionally, utilizing the provisions of Chapter 16.88.

D. Additional limitations for specific uses are identified in the footnotes of this table.

<b>CIVIC USES</b>	<b>EI <sup>1</sup></b>
<ul style="list-style-type: none"> <li>Public and private utility structures, including but not limited to telephone exchanges, electric substations, gas regulator stations, treatment plants, water wells, and public work yards</li> </ul>	C
<b>WIRELESS COMMUNICATION FACILITIES</b>	
<ul style="list-style-type: none"> <li>Radio, television, and similar communication stations, including associated transmitters</li> </ul>	C

<sup>1</sup> See special criteria for the EI zone, 16.31.030 and the Tonquin Employment Area (TEA), 16.31.040.

16.31.030 - Development Standards

A. Generally

No lot area, setback, yard, landscaped area, open space, off-street parking or loading area, or other site dimension or requirement, existing on, or after, the effective date of this Code shall be reduced below the minimum required by this Code. Nor shall the conveyance of any portion of a lot, for other than a public use or right-of-way, leave a lot or structure on the remainder of said lot with less than minimum Code dimensions, area, setbacks or other requirements, except as permitted by Chapter 16.84 (Variances and Adjustments).

B. Development Standards

Except as otherwise provided, required minimum lot areas and dimensions and setbacks shall be:

<i>Development Standards by Zone</i>	<i>EI</i>
<i>Lot area - Industrial Uses:</i>	<i>3 acres <sup>9</sup></i>
<i>Lot area - Commercial Uses (subject to Section 16.31.050):</i>	<i>10,000 SF</i>
<i>Lot width at front property line:</i>	<i>100 feet</i>
<i>Lot width at building line:</i>	<i>100 feet</i>

<i>Front yard setback</i> <sup>11</sup>	<i>20 feet</i>
<i>Side yard setback</i> <sup>10</sup>	<i>None</i>
<i>Rear yard setback</i> <sup>11</sup>	<i>None</i>
<i>Corner lot street side</i> <sup>11</sup>	<i>20 feet</i>
<i>Height</i> <sup>11</sup>	<i>50 feet</i>

<sup>9</sup> *Lots within the EI zone that were legal lots of record prior to October 5, 2010 and smaller than the minimum lot size required in the table below may be developed if found consistent with other applicable requirements of Chapter 16.31 and this Code. Further subdivision of lots smaller than three (3) acres shall be prohibited unless Section 16.31.050 applies.*

<sup>10</sup> *When a yard is abutting a residential zone or public park, there shall be a minimum setback of forty (40) feet provided for properties zoned Employment Industrial and Light Industrial Zones, and a minimum setback of fifty (50) feet provided for properties zoned General Industrial.*

<sup>11</sup> *Structures located within one-hundred (100) feet of a residential zone shall be limited to the height requirements of that residential zone.*

#### *16.31.040 - Employment Industrial (EI) Restrictions*

##### *A. Use Restrictions*

- 1. Retail and professional services that cater to daily customers, such as restaurants and financial, insurance, real estate, legal, medical and dental offices, shall be limited in the EI zone.*
  - a. New buildings for stores, branches, agencies or other retail uses and services shall not occupy more than five thousand (5,000) square feet of sales or service area in a single outlet and no more than twenty thousand (20,000) square feet of sales or service area in multiple outlets in the same development project, and*
  - b. New buildings for stores, branches, agencies or other retail uses and services shall not be located on lots or parcels smaller than five (5) acres in size. A "development project" includes all improvements proposed through a site plan application.*
- 2. Notwithstanding the provisions of Section 16.31.050 "Commercial Nodes Use Restrictions," commercial development permitted under 16.31.050(1)(a) may only be proposed concurrent with or after industrial development on the same parcel. Commercial development may not occur prior to industrial development on the same parcel.*

##### *B. Land Division Restrictions*

- 1. Lots of record prior to October 5, 2010 that are smaller than the minimum lot size required in the EI zone may be developed if found consistent with other applicable requirements of Chapter 16.31 and this code. Further subdivision of lots smaller than three (3) acres shall be prohibited unless Section 16.31.050 applies.*
- 2. Lots or parcels larger than fifty (50) acres may be divided into smaller lots and parcels pursuant to a Planned Unit Development approved by the city so long as the resulting division yields at least one (1) lot or parcel of at least 50 acres in size.*

3. *Lots or parcels fifty (50) acres or larger, including those created pursuant to subsection (2) above, may be divided into any number of smaller lots or parcels pursuant to a Planned Unit Development approved by the city so long as at least forty (40) percent of the area of the lot or parcel has been developed with industrial uses or uses accessory to industrial use.*

**16.31.050 - Tonquin Employment Area (TEA) Commercial Nodes Use Restrictions**

- A. *Within the Tonquin Employment Area (TEA), only commercial uses that directly support industrial uses located within the TEA are permitted as conditional uses.*
- B. *Commercial development, not to exceed a total of five (5) contiguous acres in size, may be permitted.*
- C. *Commercial development may not be located within three hundred (300) feet of SW 124th Avenue or SW Oregon Street, and must be adjacent to the proposed east-west collector street.*

4. **Conditional Use Permit** - The applicant is considering a civic use in the Employment Industrial Designation. The site is zoned Employment Industrial and civic use are permitted with a Conditional Use Permit (CUP). Furthermore, the proposal includes a Radio Tower that requires a CUP. CUP provisions are delineated in Chapter 16.82 of the Sherwood Zoning and Community Development Code (SZCDC).

**16.82.020 - Permit Approval**

**A. Hearing Authority Action**

1. *The Hearings Authority shall conduct a public hearing pursuant to Chapter 16.72 and take action to approve, approve with conditions, or deny the application. Conditions may be imposed by the Hearings Authority if necessary to fulfill the requirements of the adopted Comprehensive Plan, Transportation System Plan, or the Code. The decision shall include appropriate findings of fact as required by this Section, and an effective date.*
2. *Conditional uses may be approved at the hearing for a larger development (i.e. business campus or industrial park), to include future tenants of such development, if the range of uses allowed as conditional uses are considered, and specifically approved, at the time of original application.*

**B. Final Site Plan**

*Upon approval of a conditional use by the Hearing Authority, the applicant shall prepare a final site plan for review and approval pursuant to Section 16.90. The final site plan shall include any revisions or other features or conditions required by the Hearing Authority at the time of the approval of the conditional use.*

**C. Use Criteria**

*No conditional use shall be granted unless each of the following is found:*

1. *All public facilities and services to the proposed use, including but not limited to sanitary sewers, water, transportation facilities, and services, storm drains, electrical distribution, park and open space and public safety are adequate; or that the construction of improvements needed to provide adequate services and facilities is guaranteed by binding agreement between the applicant and the City.*

2. *Proposed use conforms to other standards of the applicable zone and is compatible with abutting land uses in regard to noise generation and public safety.*
3. *The granting of the proposal will provide for a facility or use that meets the overall needs of the community and achievement of the goals and/or policies of the Comprehensive Plan, the adopted City of Sherwood Transportation System Plan and this Code.*
4. *Surrounding property will not be adversely affected by the use, or that the adverse effects of the use on the surrounding uses, the neighborhood, or the City as a whole are sufficiently mitigated by the conditions proposed.*
5. *The impacts of the proposed use of the site can be accommodated considering size, shape, location, topography and natural features.*
6. *The use as proposed does not pose likely significant adverse impacts to sensitive wildlife species or the natural environment.*

...

#### *D. Additional Conditions*

*In permitting a conditional use or modification of an existing conditional use, additional conditions may be applied to protect the best interests of the surrounding properties and neighborhoods, the City as a whole, and the intent of this Chapter. These conditions may include but are not limited to the following:*

1. *Mitigation of air, land, or water degradation, noise, glare, heat, vibration, or other conditions which may be injurious to public health, safety or welfare in accordance with environmental performance standards.*
2. *Provisions for improvement of public facilities including sanitary sewers, storm drainage, water lines, fire hydrants, street improvements, including curb and sidewalks, and other above and underground utilities.*
3. *Increased required lot sizes, yard dimensions, street widths, and off-street parking and loading facilities.*
4. *Requirements for the location, number, type, size or area of vehicular access points, signs, lighting, landscaping, fencing or screening, building height and coverage, and building security.*
5. *Submittal of final site plans, land dedications or money-in-lieu of parks or other improvements, and suitable security guaranteeing conditional use requirements.*
6. *Limiting the number, size, location, height and lighting of signs.*
7. *Requirements for the protection and preservation of existing trees, soils, vegetation, watercourses, habitat areas and drainage areas.*
8. *Requirements for design features which minimize potentially harmful environmental impacts such as noise, vibration, air pollution, glare, odor and dust.*

#### *E. Time Limits*

*Unless approved under Section 16.82.020.A.2 for a larger development to include future tenants of such development, authorization of a conditional use shall be void after two (2) years or such lesser time as the approval may specify unless substantial construction, in the City's determination, has taken place. The Hearing Authority may extend authorization for an additional period, not to exceed one (1) year, upon a written request from the applicant showing adequate cause for such extension, and payment of an extension application fee as per Section 16.74.010.*



## F. Revocation

*Any departure from approved plans not authorized by the Hearing Authority shall be cause for revocation of applicable building and occupancy permits. Furthermore, if, in the City's determination, a condition or conditions of CUP approval are not or cannot be satisfied, the CUP approval, or building and occupancy permits, shall be revoked.*

5. **Site Plan Reviews** are required prior to any substantial change to a site or use. The approval criteria for Site Plan Reviews are delineated in the Sherwood Zoning and Community Development Code (SZCDC) Section 16.90.

### *16.90.020.D Required Findings*

*No site plan approval will be granted unless each of the following is found:*

- 1. The proposed development meets applicable zoning district standards and design standards in Division II, and all provisions of Divisions V, VI, VIII and IX.*
- 2. The proposed development can be adequately served by services conforming to the Community Development Plan, including but not limited to water, sanitary facilities, storm water, solid waste, parks and open space, public safety, electric power, and communications.*
- 3. Covenants, agreements, and other specific documents are adequate, in the City's determination, to assure an acceptable method of ownership, management, and maintenance of structures, landscaping, and other on-site features.*
- 4. The proposed development preserves significant natural features to the maximum extent feasible, including but not limited to natural drainage ways, wetlands, trees, vegetation (including but not limited to environmentally sensitive lands), scenic views, and topographical features, and conforms to the applicable provisions of Division VIII of this Code and Chapter 5 of the Community Development Code.*
- 5. For developments that are likely to generate more than 400 average daily trips (ADTs), or at the discretion of the City Engineer, the applicant must provide adequate information, such as a traffic impact analysis (TIA) or traffic counts, to demonstrate the level of impact to the surrounding transportation system. The developer is required to mitigate for impacts attributable to the project, pursuant to TIA requirements in Section 16.106.080 and rough proportionality requirements in Section 16.106.090. The determination of impact or effect and the scope of the impact study must be coordinated with the provider of the affected transportation facility.*
- 6. The proposed commercial, multi-family, institutional or mixed-use development is oriented to the pedestrian and bicycle, and to existing and planned transit facilities. Urban design standards include the following:*
  - a. Primary, front entrances are located and oriented to the street, and have significant articulation and treatment, via facades, porticos, arcades, porches, portal, forecourt, or stoop to identify the entrance for pedestrians. Additional entrance/exit points for buildings, such as a postern, are allowed from secondary streets or parking areas.*
  - b. Buildings are located adjacent to and flush to the street, subject to landscape corridor and setback standards of the underlying zone.*
  - c. The architecture of buildings are oriented to the pedestrian and designed for the long term and be adaptable to other uses. Aluminum, vinyl, and T-111 siding are prohibited. Street facing elevations have windows, transparent fenestration, and divisions to break up the mass of any window. Roll up and sliding doors are acceptable. Awnings that provide a minimum 3 feet of shelter from rain are required unless other architectural elements are provided for similar protection, such as an arcade.*

- d. *As an alternative to the standards in Section 16.90.020.D.6.a—c, the following Commercial Design Review Matrix may be applied to any commercial, multi-family, institutional or mixed use development (this matrix may not be utilized for developments within the Old Town Overlay). A development must propose a minimum of 60 percent of the total possible points to be eligible for exemption from the standards in Section 16.90.020.D.6.a—c. In addition, a development proposing between 15,001 and 40,000 square feet of floor area, parking or seating capacity and proposing a minimum of 80 percent of the total possible points from the matrix below may be reviewed as a Type II administrative review, per the standards of Section 16.72.010.A.2.*
- e. *As an alternative to the standards in Sections 16.90.020.D.6.a—c, the Old Town Design Standards (Chapter [16.162](#)) may be applied to achieve this performance measure.*
- f. *As an alternative to the standards in Sections 16.90.020.D.6.a.—e, an applicant may opt to have a design review hearing before the Planning Commission to demonstrate how the proposed development meets or exceeds the objectives in Section 16.90.010.B of this Code. This design review hearing will be processed as a Type IV review with public notice and a public hearing.*

The Commercial Design Review Matrix is not applicable to this proposal. The applicant must meet the Industrial Design Standards (16.90.030.D.7 a or b) stated below.

- 7. *Industrial developments provide employment opportunities for citizens of Sherwood and the region as a whole. The proposed industrial development is designed to enhance areas visible from arterial and collector streets by reducing the "bulk" appearance of large buildings. Industrial design standards include the following:*
  - a. *Portions of the proposed industrial development within 200 feet of an arterial or collector street and visible to the arterial or collector (i.e. not behind another building) must meet **any four of the following six design criteria**:*
    - (1) *A minimum 15% window glazing for all frontages facing an arterial or collector.*
    - (2) *A minimum of two (2) building materials used to break up vertical facade street facing frontages (no T-111 or aluminum siding).*
    - (3) *Maximum thirty-five (35) foot setback for all parts of the building from the property line separating the site from all arterial or collector streets (required visual corridor falls within this maximum setback area).*
    - (4) *Parking is located to the side or rear of the building when viewed from the arterial or collector.*
    - (5) *Loading areas are located to the side or rear of the building when viewed from the arterial or collector. If a loading area is visible from an arterial or collector, it must be screened with vegetation or a screen made of materials matching the building materials.*
    - (6) *All roof-mounted equipment is screened with materials complimentary to the building design materials.*
  - b. ***As an alternative to Section 16.90.020.D.7.a**, an applicant may opt to have a design review hearing before the Planning Commission to demonstrate how the proposed development meets or exceeds the applicable industrial design objectives below (this design review hearing will be processed as a Type IV review):*
    - (1) *Provide high-value industrial projects that result in benefits to the community, consumers and developers.*
    - (2) *Provide diversified and innovative working environments that take into consideration community needs and activity patterns.*
    - (3) *Support the City's goals of economic development.*

- (4) Complement and enhance projects previously developed under the industrial design standards identified in Section 16.90.020.D.7.*
  - (5) Enhance the appearance of industrial developments visible from arterials and collectors, particularly those considered "entrances" to Sherwood, including but not limited to: Highway 99W, Tualatin-Sherwood Road and Oregon Street.*
  - (6) Reduce the "bulk" appearance of large industrial buildings as viewed from the public street by applying exterior features such as architectural articulation, windows and landscaping.*
  - (7) Protect natural resources and encourage integration of natural resources into site design (including access to natural resources and open space amenities by the employees of the site and the community as a whole).*
8. *Driveways that are more than twenty-four (24) feet in width shall align with existing streets or planned streets as shown in the Local Street Connectivity Map in the adopted Transportation System Plan (Figure 17), except where prevented by topography, rail lines, freeways, pre-existing development, or leases, easements, or covenants.*

#### *E. Approvals*

*The application is reviewed pursuant to Chapter 16.72 and action taken to approve, approve with conditions, or deny the application for site plan review. Conditions may be imposed by the Review Authority if necessary to fulfill the requirements of the adopted Comprehensive Plan, Transportation System Plan or the Zoning and Community Development Code. The action must include appropriate findings of fact as required by Section 16.90.020. The action may be appealed to the Council in accordance with Chapter 16.76.*

#### *F. Time Limits*

*Site plan approvals are void after two (2) years unless construction on the site has begun, as determined by the City. The City may extend site plan approvals for an additional period not to exceed one (1) year, upon written request from the applicant showing adequate cause for such extension, and payment of an extension application fee as per Section 16.74.010. A site plan approval granted on or after January 1, 2007 through December 31, 2009, is extended until December 31, 2013.*

6. **Visual Corridor (Section 16.142.040)** - The subject property is located adjacent to SW 124<sup>th</sup> Avenue and future SW Blake Street. Classified as Arterial (124<sup>th</sup> Avenue) and Collector (Blake Street) rights-of-ways on the City's Street Functional Classification Map. A landscaped visual corridor is required along all collectors and arterials (as designated by the Transportation System Plan [TSP]) as well as Highway 99W. The required width of the corridor for collectors is ten (10) feet, arterials is fifteen (15) feet and Highway 99W is twenty-five (25) feet. **Any new formal development permits will require the developer to provide a landscaped visual corridor.** In all other developments (not residential), the visual corridor shall be on private property adjacent to the right-of-way. The site affects the following visual corridor roadways:

SW 124<sup>th</sup> Avenue is designated as an Arterial roadway on the TSP and a 15-foot landscaped visual corridor will be required along their frontage.

Planned SW Blake Street is designated as a proposed Collector roadway on the TSP and a 10-foot landscaped visual corridor will be required.

If the Visual Corridor standards cannot be fully satisfied, the applicant can request for an Adjustment or a Variance to the standard. Criteria for each are identified in Chapter 16.84 – VARIANCES. Associated Fees are reflected below.

- Adjustment - (Per lot and per standard to be varied) \* \$53.06
  - Class A Variance - (Per lot and per standard to be varied) \* \$4,381.12
  - Class B Variance - (Per lot and per standard to be varied) \* \$1,165.25
7. **Landscaping**, particularly visual corridors, perimeter buffer, and parking area landscaping will be required in accordance with **Chapter 16.92**.
  8. **Off-Street Parking** (Chapter 16.94) and **On Site Circulation** (Chapter 16.96) – the proposed development must comply with the requirements.
  9. **Solid Waste and Recycling Storage** (Section 16.98.020) – The preliminary plans must identify all storage and address the required criteria. Staff recommends early coordination with Pride Disposal regarding their specific requirements/standards that must also be satisfied. See Pride Waste Disposal / Enclosure Requirements handout. *Site plan submitted didn't identify a solid waste and recycling storage.*
  10. The development will need to comply with **Chapter 16.142, Parks, Trees, and Open Space**. New developments are required to achieve minimum canopy requirements, and may be required to inventory any existing trees. **Industrial development has a 30% tree canopy requirement.** Tree inventory standards are identified in Section 16.142.070.C.
  11. The development must comply with **Chapter 16.132, Environmental Resources**. The applicant will need to contact Clean Water Services (CWS) and obtain a Service Provider Letter. Early coordination with CWS is highly suggested.
  12. The development must comply with **Chapter 16.144, Wetlands, Habitat, and Natural Areas**. Our mapping system identified several natural resources on site. The applicant must comply with Chapter 16.144 along with Clean Water Services requirements.

The Code allows flexibility in development standards in exchange for the protection of sensitive lands as outlined in this Chapter. For example, qualifying developments may be allowed to reduce lot sizes up to 10% and reduce setbacks up to 30% (see Section 16.144.030). These provisions can be utilized when an equal amount of inventoried resource above and beyond that already required to be protected is held in a public or private open space tract or otherwise protected from further development.

13. PGE power lines cross the site and the plans must clearly identify them. Any PGE power line easement restrictions/requirement must be identified.
14. A separate permit is required for all permanent signs per SZCDC **Chapter 16.102- SIGNS**. Sign permits may be applied for through the Sherwood Building Department. Temporary sign permits are issued through the Sherwood Planning Department.

## AGENCY COMMENTS

### City of Sherwood Engineering Comments

Please refer to the engineering comments dated March 24, 2020 amended April 10, 2020

### City of Sherwood Building Division

Please contact Scott McKie, Building Official, with questions at 503-625-4217 or [mckies@sherwoodoregon.gov](mailto:mckies@sherwoodoregon.gov)

## Tualatin Valley Fire & Rescue Comments

Please refer to comments from Tom Mooney, Deputy Fire Marshall II, dated April 3, 2020.

## Washington County Land Use & Transportation

SW 124<sup>th</sup> Avenue is owned and maintained by Washington County. Please contact Naomi Vogel, Associate Planner, with questions at 503-846-7639 or [naomi\\_vogel@co.washington.or.us](mailto:naomi_vogel@co.washington.or.us)

### APPLICANT QUESTIONS

#### Land Use/Planning

1. Applications – Please confirm required applications and criteria that are anticipated.
  - *See above for answers.*
2. Service Provider Letters (SPLs) – We understand that a Clean Water Services (CWS) SPL must be submitted with the land use application package. Is there any other service provider related documentation needed, e.g., from Tualatin Valley Fire & Rescue (TVF&R)?
  - *TVF&R does not currently require a SPL.*
  - *Copy of a Wetland Delineation application or approval from Division of State Lands should be included with the submittal.*
3. Storage building – What code requirements would apply to a storage building on a concrete slab that may be placed in the southwest part of the site for construction and then permanently retained for storage purposes after construction? What impacts and requirements should project be aware of if this is an impervious area? If fencing is planned around this building, what code requirements would apply?
  - *Typically, a Temporary Use Permit would be required for any temporary use. However, if the storage building could potentially become permanent, the structure can be reviewed and approved through the preliminary Site Plan Review process.*
  - *Stormwater must be addressed for the impervious area; SDC would also apply depending on classifications.*
4. Fences and walls – Please confirm regulations (maximum height, etc.) for fences and retaining walls on the site.
  - *Fence standards for Non-Residential zones can be found in Section 16.58.020.E*
  - *Retaining walls do not have a maximum height requirement*
5. Radio tower – What regulations (e.g., regarding maximum height and/or design) would apply to a radio tower located on the site, which would be necessary for communication with other WWSS facilities?
  - *CUP is required for the radio tower.*
  - *If the tower is 20-feet or taller, a building permit would be required for structural review.*
6. Tree canopy
  - a. We are analyzing tree canopy on a “woodland” basis, led by certified ecologists and environmental specialists. Please confirm that these are acceptable as qualified professionals to do this work.
    - *Yes, these are acceptable*

- b. Consistent with tree canopy requirements and calculation methods in Sherwood Zoning and Community Development Code (SZCDC) Section 16.142.070, we will preserve and plant trees that will meet and exceed the minimum 30% canopy coverage required. Given that those requirements address canopy only on the “net developable site” (which does not include roadway rights-of-way and the primary Kolk Pond and surrounding vegetated corridor), we would like to emphasize that we will be providing a good deal more trees – and contribute that much more to the overall experience of a green and vegetated site – when street trees and trees in and around the Kolk Pond are accounted for.
  - *The applicant must provide justification on why the standard cannot be satisfied but can be met by taking the pond and surrounding vegetated corridor.*
7. Overlook – As described earlier in this memo, a public platform is envisioned overlooking the forest surrounding the Kolk Pond and wetland. We believe this site element constitutes a very significant community benefit. Please provide any initial feedback regarding the concept.
  - *Staff considers the public platform as a community benefit. Pedestrian connectivity and CWS standards must be satisfied.*
8. Buildings – Designs of plant buildings have been inspired by regional character and examples and by ideas of breaking up longer and larger building forms and bringing in natural light. Please provide any initial feedback regarding building designs.
  - *As noted above, Building Design must meet Industrial development standards in Section 16.90.020.D.7.*
9. Roadways and access
  - a. SW Blake Street and SW 124th Avenue right-of-way (ROW) – Given that dedications are not made until development, please confirm that the surveyed lot that came out of the partition process still has ROW to be dedicated for SW Blake Street and SW 124th Avenue (Note: A 12’ ROW dedication for SW 124th Avenue was noted on the partition plat.)
    - *See Engineering Comments*
    - *SW 124<sup>th</sup> is under Washington County jurisdiction.*
  - b. Location of the gate off SW Blake Street for the secondary entrance (north entrance) to the WWSS WTP – We plan to install this gate in a way that does not let people pull in from SW Blake Street in front of the gate. It is meant to be an exit from the site primarily. However, it could serve as an entrance if the main entrance was blocked or inaccessible.
    - *The location of the secondary entrance is acceptable by the Engineering Department and TVF&R.*
  - c. Traffic Impact Analysis (TIA) scoping and requirements
    - *See Engineering Comments*
10. Door/building identification – Are there any identification requirements of the City’s or TVF&R’s that we should be aware of?
  - *Nothing above the typical standard that includes addresses must be visible from the traveling public.*
11. Fees – What are the estimated land use permit costs? (Recognizing that fees are updated annually in July)
  - *See Planning comments above.*

12. Schedule – A general land use application timeline was provided in the January 10, 2019 pre-app notes. Please confirm that that general timeline still holds or any variation in that timeline.
- *See Planning comments above.*
13. Procedures required for making development modifications after development is approved.
- *Major or Minor Modification to Approved Site Plan (Type IV or Type I)*
  - *Criteria are identified in Section 16.90.030 - Site Plan Modifications and Revocation*
  - *Fees- Major \$2,563.55 plus \$466 publication, Minor \$291.31*

### **Building**

- A. Fees – What are the estimated building permit costs? (Recognizing that fees are updated annually in July)
- *More information is needed (e.g. valuations). Attached is the current Building fee schedule for your reference. Please note there will also be associated SDC and CET fees that would also apply.*

### **Engineering- Please see the City of Sherwood Engineering comments attached.**

- A. SW Blake Street
- o How should we plan to end SW Blake Street at the west property line? (E.g., a gate, cul-de-sac, etc.?)
  - o Where would the City like the barricade at the southwest end of SW Blake Street (i.e., does the City want this just past the WTP entrance or at the end of the paved section of Blake Street)? There are concerns about parking and other nuisances if the barricade is at the end of the street pavement.
- B. Utility easement – Confirm location of easement is acceptable based on updated utility design concepts included in Attachment I. The utilities will be designed to avoid impacts from the proposed retaining wall to be constructed by Trammell Crow Company.
- C. Blasting requirements – What are TVF&R permit requirements and any other requirements for blasting?
- D. Temporary power – What is the method of agreement to allow for temporary overhead power from SW Tualatin-Sherwood Road to the site during construction?
- *Please work directly with PGE.*
- E. Stormwater – Do you know when the upgrades to the stormwater system at the intersection of SW Tualatin-Sherwood Road and SW 124th Avenue will be designed and constructed?
- F. Fees – What are the estimated engineering-related permit costs? (Recognizing that fees are updated annually in July)

## **ADDITIONAL QUESTIONS April 9, 2020**

1. During the pre-app, APG clarified that the project will exceed the 30% tree canopy requirement and our preliminary calculations show the tree canopy at nearly 40%. The figure shown in Attachment CC of the pre-application submittal shows the impacted areas and the associated calculation. We would like the City to verify that we have incorporated the net developable site (excluding the natural resources and the road right of way) and total canopy after construction correctly. If needed, we would be happy to arrange for a separate meeting to review the calculations with the City.
- *The definition for Net Development Site is stated below. Attachment CC and associated calculations seem to meet the definition below.*
  - **Net Developable Site:** *Remaining area of a parent parcel after excluding present and future rights-of-way, environmentally constrained areas, public parks and other public uses but not including preserved areas for tree stands which are not associated with wetlands, streams or vegetated corridors.*



2. Please confirm that the correct name for the new street is “SW Blake Street” as it is referred to as “Blake Road” in several locations in the provided engineering comments.
  - *The correct name for Blake is SW Blake Street. Engineering comments have been modified to reflect this. See attached.*
  
3. As indicated in other email correspondence, please confirm that Washington County and the City of Sherwood will not require frontage improvements along SW 124th Ave. Also, Washington County indicated that a 49-foot dedication will be required from center of SW 124th Ave to the west. Separately, the City of Sherwood indicated that a 51-foot dedication is typical. What is the dedication width that is required for the west side of SW 124th Ave.?
  - *City conditions will reflect WACO requirements for the ROW width along both SW Tualatin-Sherwood Road and SW 124th Avenue.*
  - *Please work directly with Washington County on this matter. Contact Naomi Vogel, Associate Planner, at 503-846-7639 or Naomi\_Vogel@co.washington.or.us*
  
4. Please define what is considered “public improvements” with respect to calculating the City’s engineering plan review fees.
  - *Engineering plan review and construction fees are based on cost of constructing the public improvements. Public improvements include:*
    - a. *Street Improvements include: all items of the permanent pavement section (AC pavement, geotextile, rock), curbs and gutter, concrete sidewalk, street lighting (excluding signals), street trees, irrigation system, and striping and signage.*
    - b. *Stormwater system (off-site) includes: CB’s, manholes, CB lateral piping, mainline piping, service lateral piping up to the ROW line, stormwater quality treatment and detention system needed to treat and detain stormwater runoff from area within the public ROW.*
    - c. *Stormwater system (on-site) includes: Stormwater quality treatment and detention systems only (regional facilities or single lot LIDA).*
    - d. *Sanitary sewer system include: Manholes, mainline pipes, service lateral piping up to the ROW line.*
    - e. *Water system: Fittings, mainline pipe, service lateral piping up to the meter set, backflow preventer vaults, large meter vaults, pressure reducing vaults.*
    - f. *Environmental: Wetland mitigation areas, vegetated corridor mitigation areas.*
  
5. Please confirm the tie-in point to existing Sherwood Broadband. Is Broadband required to be extended through SW Cipole Road or through SW 124th Ave. Has Trammel-Crowe been require to extend Sherwood Broadband to their south property line (through SW Cipole Road and the easement south of Cipole or along SW 124th Ave)?
  - *Location of City Broadband connection to be coordinated with Brad Crawford, IT Director. Request for this information being forwarded. You can reach Brad at (503) 625-4203 or CrawfordB@SherwoodOregon.gov*
  
6. The response to our pre-app submittal indicates that Trammel-Crowe is required to extend the public sanitary line via the Cipole Road extension. Please confirm that Trammel-Crowe is also required to extend the public sanitary line through the easement on the TCC property south of Cipole to their south property line.



- *TC shall be conditioned to extend the SS system to the south property line abutting the Blake Street ROW. However, the ending of this line is not at a manhole under this condition. In the interim, a cleanout will be needed at the stubbed end of line.*
7. Please confirm whether Trammel-Crowe is required to extend stormwater piping through their property to their south property line.
    - *The design of the stormwater system serving the area south of Blake Street is dependent on how the WWSP sees the site developing and the ability to discharge SD runoff to a downstream conveyance system. Concept grades of Blake Street indicate that a SD line running up through the Cipole Road extension to the north ROW line of the propose Blake Street us necessary for the conveyance of SD runoff from Blake Street to the nearest downstream discharge point. The T-C project will be conditioned to provide this line.*
  8. WWSS would like to request that the City of Sherwood reconsider the need for a pipe loop around the TCC parcel (running east from SW Cipole Road along SW Tualatin-Sherwood Road and down SW 124th Ave). We feel that this pipe will be stagnant and water will flow primarily through the pipe that extends south through the TCC parcel. We would also like to understand why the size of this pipe has been upsized from a 10-inch pipe (based on our January 2019 meeting notes) to a 16-inch pipe.
    - *Public Works comments provided the requirements for the waterline alignments and sizing. Rationale is the 16-inch trunk line alignment and sizing is what is required to provide fire service for the WWSP development site. A single 12-inch main running from the Cipole Road extension is not adequate to provide that level of service. In addition, a single waterline does not provide any redundancy should a break occur in the main. Not having the redundant access from Cipole Road extension for such a large site development is not rational. The condition will remain.*
  9. If the public water pipe along SW 124th Ave is required, please confirm Trammel-Crowe will be required to provide this piping along SW 124th Ave to the SW Blake Street right of way, as described in the pre-application engineering notes.
    - *The T-C is being conditioned to include the 16-inch water trunk line extension along SW 124th Avenue up to the intersection of the future Blake Street.*

## **ADDITIONAL QUESTIONS April 10, 2020**

1. We confirm that we will be submitting a concurrent/consolidated set of Site Plan Review and Conditional Use Permit applications.
  - *So noted.*
2. The pre-app comments state that pedestrian connectivity standards must be met for the overlook. Are those the standards in Section 16.96.010?
  - *Yes*
3. Please provide comments from Tom Mooney, dated April 2, 2020. They were not included in the initial response.
  - *Attached*

4. The costs for the Site Plan Review are based on “square footage of building area”. The water treatment plant has several types of areas on the site including occupied spaces (such as the Administration Building), process areas that are intermittently occupied by operations and maintenance staff, and process basins. How is “building area” defined for the purposes of calculating the Site Plan Review costs?
- §16.10 Definitions defines “Building Area” as “That portion of a property that can be occupied by the principal use, thus excluding the front, side and rear yards.”

## Contact Information and Helpful Links

### PLANNING DEPARTMENT INFORMATION

<b>Colleen Resch</b> , Planning Technician <b>Eric Rutledge</b> , Associate Planner <b>Joy Chang</b> , Senior Planner	<a href="mailto:reschc@sherwoodoregon.gov">reschc@sherwoodoregon.gov</a> / 503-625-4223 <a href="mailto:rutledgee@sherwoodoregon.gov">rutledgee@sherwoodoregon.gov</a> / 503-625-4242 <a href="mailto:changj@sherwoodoregon.gov">changj@sherwoodoregon.gov</a> / 503-625-4214
<b>Current Project Page:</b> <a href="https://www.sherwoodoregon.gov/projects">https://www.sherwoodoregon.gov/projects</a>	
<b>Planning Applications and Checklists:</b> <a href="https://www.sherwoodoregon.gov/planning/page/land-use-applications-and-checklists">https://www.sherwoodoregon.gov/planning/page/land-use-applications-and-checklists</a>	

### ENGINEERING DEPARTMENT INFORMATION

<b>Jo Guediri</b> , Engineering Program Associate <b>Craig Christensen</b> , Civil Engineer P.E. <b>Bob Galati</b> , City Engineer P.E.	<a href="mailto:guedirij@sherwoodoregon.gov">guedirij@sherwoodoregon.gov</a> / 503-925-2309 <a href="mailto:christensenc@sherwoodoregon.gov">christensenc@sherwoodoregon.gov</a> / 503-925-2301 <a href="mailto:galatib@sherwoodoregon.gov">galatib@sherwoodoregon.gov</a> / 503-925-2303
<b>Engineering Department Home Page:</b> <a href="https://www.sherwoodoregon.gov/engineering">https://www.sherwoodoregon.gov/engineering</a>	
<b>Permit Process Packet:</b> <a href="http://www.sherwoodoregon.gov/engineering/page/eng-permit-process-packet-forms">www.sherwoodoregon.gov/engineering/page/eng-permit-process-packet-forms</a>	
<b>System Development Charges (SDC) Information:</b> <a href="https://www.sherwoodoregon.gov/engineering/page/system-development-charges-sdc">https://www.sherwoodoregon.gov/engineering/page/system-development-charges-sdc</a>	

### BUILDING DEPARTMENT INFORMATION

<b>Karen Abdill</b> , Lead Building Permit Specialist <b>Scott McKie</b> , Building Official	<a href="mailto:abdillk@sherwoodoreong.gov">abdillk@sherwoodoreong.gov</a> / 503-625-4226 <a href="mailto:mckies@sherwoodoregon.gov">mckies@sherwoodoregon.gov</a> / 503-625-4217
<b>Building Department Home Page:</b> <a href="https://www.sherwoodoregon.gov/building">https://www.sherwoodoregon.gov/building</a>	
<b>Building Permit Forms:</b> <a href="https://www.sherwoodoregon.gov/building/page/permit-forms">https://www.sherwoodoregon.gov/building/page/permit-forms</a>	

# Engineering Department Pre-Application Comments

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To: Joy Chang, Senior Planner  
From: Bob Galati P.E., City Engineer  
Project: Willamette Water Supply Program (WWSP) Site Development  
Date: April 10, 2020

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Engineering staff have reviewed the proposed site development submittal information. All final approved construction plans will need to conform to the design and construction standards established by the City of Sherwood's Engineering and Public Works Departments, Washington County Department of Land Use and Transportation (WACO), Clean Water Services (CWS), Tualatin Valley Fire and Rescue (TVF&R), in addition to other jurisdictional agencies which may provide land use comments. The City of Sherwood Engineering Department review comments are as follows:

## **General Observations**

The proposed project is located in the northeast portion of the Tonquin Employment Area (TL#2S128D001200), adjacent to SW 124<sup>th</sup> Avenue and approximately 1,113-feet south of the intersection with Tualatin-Sherwood Road. The site occupies the southern 46 acres of the 100 acre original parcel. The original parcel was split into two separate parcels via WACO land use action. Each individual parcel is then required to annex into the City and undergo City land use planning under separate actions.

## **Transportation Comments**

As part of an existing agreement with the Trammel-Crowe, the WWSP site development has agreed to dedicate the necessary right-of-way and construct a collector status road (Blake Street) meeting City standards. The City Transportation System Plan (TSP) and the Tonquin Employment Area (TEA) Concept Plan indicate that a 3-lane without on-street parking collector cross section, with an overall right-of-way width of between 72-feet and 76-feet is preferred.

The City standard 72-foot wide collector classification road section includes the following components:

- 1) Two 11-foot wide travel lanes
- 2) One 14-foot wide median/turn lane
- 3) Two 6-foot wide bicycle lanes
- 4) Two 5-foot wide planter strips (two 7-foot planter strips shown by applicant)
- 5) Two 6-foot wide sidewalks
- 6) Two 1-foot clear zone at back of sidewalks

Contours surrounding Blake Street indicate that there will be cut/fill sections that will require respective easements outside the ROW.

The intersection of Blake Street with SW 124<sup>th</sup> will fall under the jurisdictional requirements of WACO. ROW dedication requirements along SW 124<sup>th</sup> Avenue shall at a minimum comply with WACO requirements, although frontage improvements along SW 124<sup>th</sup> Avenue shall comply with City of Sherwood requirements.

A Traffic Impact Analysis (TIA) will be required for the build-out conditions of the facility. Applicant's transportation engineer will coordinate with the City's transportation engineering consultant and WACO transportation engineer on scoping of the TIA requirements. A finalized TIA report will be required as part of the Land Use approval submittal process. The TIA shall identify any mitigation requirements for intersections and roadways impacted by the additional traffic generated by the operating site.

The end of Blake Street relative to this project will conform to City standards noted in the City's Engineering Design and Standard Details Manual. Specifically Detail RD-51 gives specific information on end of road treatment (based on future extension). Since Blake Street is planned on not allowing any on-street parking, illegal on-street parking will result in fines and towing of vehicles.

The submittal shows two access drives to the site (south drive is main access, north drive is secondary access). The applicant has indicated that the north access drive will be gated to prevent non-authorized access entering the site from this location. However, the north access drive may be used as an exit point onto Blake Street for WWSP operations vehicles. The spacing of the gate location will need to be coordinated to meet TVF&R spacing standards. The applicant has expressed a desire to keep the gate as close to Blake Street to prevent non-authorized persons from entering the site from this point, and to reserve the ability to use this point as an emergency backup access point should the main access drive be rendered impassible for some reason.

### **Sanitary Sewer System Comments**

The proposed site development shall have access to public sanitary sewer mains that have been extended through the adjacent site development (Trammel-Crowe) via the Cipole Road extension. These public facilities shall be extended west along the Blake Street alignment to provide service to upstream developments (in compliance with CWS and City "to and through" requirements) if possible. Sizing of the sanitary lines shall meet City and CWS standards. Extension of the sanitary system east along Blake Street will not be required as there are no upstream development potential east of the proposed site development.

Public sanitary sewer manholes shall be located in the paved surface (mid-lane, or grease strip) of Blake Street. Manholes shall not be located in planter strips, median island, sidewalks, or the adjacent PUEs.

### **Water System Comments**

The City has two water mainline located within Tualatin-Sherwood Road available to provide service to the site.

As part of the adjacent site development (Trammel-Crowe site) the 16-inch diameter public water line within SW Cipole Road north of SW Tualatin-Sherwood Road shall be extended southward along the proposed SW Cipole Road extension and/or public utility easement, being capped at the site developments southern property line. Another 16-inch diameter line will also be run east along SW Tualatin-Sherwood Road to SW 124th Avenue, then south along SW 124th Avenue to the future intersection with SW Blake Street, then westward and being capped at the west right-of-way line of SW 124th Avenue.

The proposed development will extend the existing 16-inch line in SW 124<sup>th</sup> Avenue down Blake Street, connect to the 12-inch line from Cipole Road, and extend the 16-inch line down Blake Street ending at the west end of the Blake Street extension. This system will create a looped system and allow for future extension of adjacent development sites.

Public water system valves shall be located in the paved surface (mid-lane, or grease strip) of Blake Street. Water system valves shall not be located in planter strips, median island, sidewalks, or the adjacent PUEs.

### **Stormwater System Comments**

The site will need to provide for collection, treatment, and conveyance to an approved discharge point for all on-site stormwater runoff. The Blake Street extension shall be collected and treated in a separate public treatment & detention system per CWS standards.

If the public stormwater system is to be constructed along the SW 124<sup>th</sup> Avenue alignment, applicant will need to work with WACO to coordinate location an specific conditions for its placement.

Public stormwater manholes shall be located in the paved surface (mid-lane, or grease strip) of Blake Street. Manholes shall not be located in planter strips, median island, sidewalks, or the adjacent PUEs.

If the existing SW 124<sup>th</sup> Avenue stormwater treatment system, located in the southwest corner of the SW 124<sup>th</sup> Avenue & Tualatin-Sherwood Road intersection, is to be utilized for treatment of Blake Street runoff, then coordination between the applicant, WACO and the City will need to occur.

As of April 2019, new criteria for hydromodification will be required for the public and site stormwater system. Please note that meeting hydro-modification standards does not qualify the project for SDC credits for detention. You'll need to provide calculations for meeting the detention standards in the CWS design standards in order to qualify for detention SDC credits.

### **Other Engineering Miscellaneous Comments**

- A. An "As-Built Request" form is available on the City of Sherwood website for obtaining as-built information and documents. A fee is associated with the As-Built Request.
- B. City of Sherwood MC standards require an 8-foot wide Public Utility Easement (PUE) along all dedicated right-of-way.
- C. Site developments which create a surface area impact of 5 or more acres will require obtaining an NPDES 1200-C permit from CWS. For surface are impacts of between 1 and 5 acres, an NPDES 1200-CN permit will need to be obtained through the City of Sherwood. Surface area impacts of less than 1 acre will only require a site grading and erosion control permit issued from the City of Sherwood Building Department.
- D. As part of the Land Use submittal requirements, the applicant must submit a Site Pre-Screening Assessment request to CWS, and provide the City with a copy of the Service Provider Letter (SPL) issued by CWS for the site development. Final site development approval will require a Stormwater Connection Permit being issued from CWS for the proposed site development.
- E. Permits for demolition of any existing structures located on the proposed site development, will be obtained from the City of Sherwood Building Department. Permit fees for the demolition permit will be apply.
- F. Blasting Permits shall be obtained from TVF&R and the City.
- G. Engineering plan review fees are 4% of the engineer's estimated **public** improvements construction costs. Engineering inspection fees are 5% of the engineer's estimated **public** improvements construction costs. If the actual construction cost is higher than the

engineer's estimate, additional fees will be owed by the applicant. If the actual construction cost is lower than the engineer's estimate, fees will be refunded to the applicant.

- H. City of Sherwood Broadband utilities shall be installed (if not in existence) along the proposed site development frontage along all public street right-of-way, as per requirements set forth in City Ordinances 2005-017 and City Resolution 2005-074.
- I. A draft estimate of City SDCs, CWS SDCs and WACO TDT, has been provided as part of this review, if the application has provided sufficient development information to conduct such estimate. If provided, the estimate will list the assumptions made in the calculations. If certain SDCs have been left undefined it is because there is not sufficient information to provide said estimate amount. NOTE: SDC/TDT estimate amounts are based on assumptions and SDC/TDT rates current at the time the estimate was created. Final authorized SDC/TDT fee amounts will be calculated at the time building permits are issued, and may vary significantly from the estimate amount provided with these review comments.
- J. SDC/TDT Credits may be eligible to the project based on the following items:
  - a. Dedication of ROW in excess of City local street standard.
  - b. Construction of Blake Street street section in excess of local street standard.
  - c. Construction of public utility facilities (water, sanitary, storm) that are in excess of nominal required standards.
  - d. Construction of stormwater treatment/detention facilities if such facilities provide additional capacity on a regional scale.

## **End of Comments**

### **Disclaimer**

The comments provided above are initial in nature and are in no way binding as to what the conditions may or may not be imposed on the development due to the City of Sherwood Land Use approval process. Engineering have applied standard efforts to provide applicant with accurate public infrastructure information and engineering development standards related to the level and completeness of the applicants submittal. Note that in lacking certain applicant development information engineering has made best reasonable assumptions in development of the comments. However, the comments provided may not be complete and may not accurately reflect the site developments end product.



April 3, 2020

Joy Chang  
Senior Planner  
City of Sherwood  
22560 SW Pine Street  
Sherwood, Oregon 97140

**Re: Willamette Water Treatment Plant  
Tax Lot I.D: 2S128D001200**

Dear Joy,

Thank you for the opportunity to review the proposed site plan surrounding the above-named development project. These notes are provided regarding the pre-application meeting held on April 2, 2020 and are based on the current New Construction Guide version 4.2C. There may be more or less requirements needed based upon the final project design, however, Tualatin Valley Fire & Rescue will endorse this proposal predicated on the following criteria and conditions of approval.

### **FIRE APPARATUS ACCESS:**

1. **FIRE APPARATUS ACCESS ROADS:** Access roads shall be provided for every facility, building, or portion of a building hereafter constructed or moved into or within the jurisdiction. **Exception:** Approved agricultural and equine structures complying with ORS 455.315 are not required to have fire apparatus access roads (see New Construction Guide Appendix C). Access roads are not required to be modified for commercial buildings that undergo a change in occupancy, change in use, or conversion from agricultural or equine exempt to non-exempt unless there is a change to the structure's square footage or building footprint. (OFC 503.1.1)
2. **FIRE ACCESS ROAD DISTANCE FROM BUILDINGS:** The access shall extend to within 150 feet of all portions of the exterior wall of the first story of the building as measured by an approved route around the exterior of the building or facility. (OFC 503.1.1)
3. **DEAD ENDS AND ROADS IN EXCESS OF 150 FEET (TURNAROUNDS):** Dead end fire apparatus access roads or roads in excess of 150 feet in length shall be provided with an approved turnaround. Diagrams of approved turnarounds can be found in the corresponding guide that is located at <http://www.tvfr.com/DocumentCenter/View/1296>. (OFC 503.2.5 & Figure D103.1)

### **Indicate length of Road C.**

4. **ADDITIONAL ACCESS ROADS – COMMERCIAL/INDUSTRIAL HEIGHT:** Buildings exceeding 30 feet in height or three stories in height shall have at least two separate means of fire apparatus access. (D104.1)

**Two access points are proposed.**

5. **AERIAL FIRE APPARATUS ROADS:** Buildings with a vertical distance between the grade plane and the highest roof surface that exceeds 30 feet in height shall be provided with a fire apparatus access road constructed for use by aerial apparatus with an unobstructed driving surface width of not less than 26 feet. For the purposes of this section, the highest roof surface shall be determined by measurement to the eave of a pitched roof, the intersection of the roof to the exterior wall, or the top of the parapet walls, whichever is greater. Any portion of the building may be used for this measurement, provided that it is accessible to firefighters and is capable of supporting ground ladder placement. (OFC D105.1, D105.2)

**Adequate aerial access is currently proposed.**

6. **AERIAL APPARATUS OPERATIONS:** At least one of the required aerial access routes shall be located within a minimum of 15 feet and a maximum of 30 feet from the building and shall be positioned parallel to one entire side of the building. The side of the building on which the aerial access road is positioned shall be approved by the Fire Marshal. Overhead utility and power lines shall not be located over the aerial access road or between the aerial access road and the building. (D105.3, D105.4)
7. **MULTIPLE ACCESS ROADS SEPARATION:** Where two access roads are required, they shall be placed a distance apart equal to not less than one half of the length of the maximum overall diagonal dimension of the area to be served (as identified by the Fire Marshal), measured in a straight line between accesses. (OFC D104.3)
8. **FIRE APPARATUS ACCESS ROAD WIDTH AND VERTICAL CLEARANCE:** Fire apparatus access roads shall have an unobstructed driving surface width of not less than 20 feet (26 feet adjacent to fire hydrants (OFC D103.1)) and an unobstructed vertical clearance of not less than 13 feet 6 inches. (OFC 503.2.1 & D103.1)
9. **NO PARKING SIGNS:** Where fire apparatus roadways are not of sufficient width to accommodate parked vehicles and 20 feet of unobstructed driving surface, "No Parking" signs shall be installed on one or both sides of the roadway and in turnarounds as needed. Signs shall read "NO PARKING - FIRE LANE" and shall be installed with a clear space above grade level of 7 feet. Signs shall be 12 inches wide by 18 inches high and shall have red letters on a white reflective background. (OFC D103.6)

**May be required.**

10. **NO PARKING:** Parking on emergency access roads shall be as follows (OFC D103.6.1-2):
1. 20-26 feet road width – no parking on either side of roadway
  2. 26-32 feet road width – parking is allowed on one side
  3. Greater than 32 feet road width – parking is not restricted
- Note:** For specific widths and parking allowances, contact the local municipality.

**May be required.**

11. **PAINTED CURBS:** Where required, fire apparatus access roadway curbs shall be painted red (or as approved) and marked "NO PARKING FIRE LANE" at 25 foot intervals. Lettering shall have a stroke of not less than one inch wide by six inches high. Lettering shall be white on red background (or as approved). (OFC 503.3)

**May be required.**

12. **FIRE APPARATUS ACCESS ROADS WITH FIRE HYDRANTS:** Where a fire hydrant is located on a fire apparatus access road, the minimum road width shall be 26 feet and shall extend 20 feet before and after the point of the hydrant. (OFC D103.1)
13. **SURFACE AND LOAD CAPACITIES:** Fire apparatus access roads shall be of an all-weather surface that is easily distinguishable from the surrounding area and is capable of supporting not less than 12,500 pounds point load (wheel load) and 75,000 pounds live load (gross vehicle weight). Documentation from a registered engineer that the final



construction is in accordance with approved plans or the requirements of the Fire Code may be requested. (OFC 503.2.3)

14. **TURNING RADIUS:** The inside turning radius and outside turning radius shall not be less than 28 feet and 48 feet respectively, measured from the same center point. (OFC 503.2.4 & D103.3)

**Indicate on plans the turning radius. Auto-Turn is allowed to be used.**

15. **ACCESS ROAD GRADE:** Fire apparatus access roadway grades shall not exceed 15%. Alternate methods and materials may be available at the discretion of the Fire Marshal (for grade exceeding 15%).

**Indicate road grade for access roads.**

16. **ANGLE OF APPROACH/GRADE FOR TURNAROUNDS:** Turnarounds shall be as flat as possible and have a maximum of 5% grade with the exception of crowning for water run-off. (OFC 503.2.7 & D103.2)

17. **ANGLE OF APPROACH/GRADE FOR INTERSECTIONS:** Intersections shall be level (maximum 5%) with the exception of crowning for water run-off. (OFC 503.2.7 & D103.2)

18. **AERIAL APPARATUS OPERATING GRADES:** Portions of aerial apparatus roads that will be used for aerial operations shall be as flat as possible. Front to rear and side to side maximum slope shall not exceed 10%.

19. **GATES:** Gates securing fire apparatus roads shall comply with all of the following (OFC D103.5, and 503.6):

1. Minimum unobstructed width shall be not less than 20 feet (or the required roadway surface width).
2. Gates shall be set back at minimum of 30 feet from the intersecting roadway or as approved.
3. Electric gates shall be equipped with a means for operation by fire department personnel
4. Electric automatic gates shall comply with ASTM F 2200 and UL 325.

**All gates shall be provided with a means for operation by fire department personnel. The approved method for fire department access is with a red access box with a built-in micro switch and a Knox padlock.**

20. **ACCESS DURING CONSTRUCTION:** Approved fire apparatus access roadways shall be installed and operational prior to any combustible construction or storage of combustible materials on the site. Temporary address signage shall also be provided during construction. (OFC 3309 and 3310.1)

21. **TRAFFIC CALMING DEVICES:** Shall be prohibited on fire access routes unless approved by the Fire Marshal. (OFC 503.4.1). Traffic calming measures linked here: <http://www.tvfr.com/DocumentCenter/View/1578>

## **FIREFIGHTING WATER SUPPLIES:**

22. **COMMERCIAL BUILDINGS – REQUIRED FIRE FLOW:** The minimum fire flow and flow duration shall be determined in accordance with OFC Table B105.2. The required fire flow for a building shall not exceed the available GPM in the water delivery system at 20 psi residual. (OFC B105.3)

**Note:** OFC B106, Limiting Fire-Flow is also enforced, except for the following:

- The maximum needed fire flow shall be 3,000 GPM, measured at 20 psi residual pressure.
- Tualatin Valley Fire & Rescue does not adopt Occupancy Hazards Modifiers in section B105.4-B105.4.1

**Provide construction type and fire flow can be determined. Fire sprinkler demand is required to be added to required fire flow.**

23. **FIRE FLOW WATER AVAILABILITY:** Applicants shall provide documentation of a fire hydrant flow test or flow test modeling of water availability from the local water purveyor if the project includes a new structure or increase in the floor area of an existing structure. Tests shall be conducted from a fire hydrant within 400 feet for commercial projects, or 600 feet for residential development. Flow tests will be accepted if they were performed within 5 years as long as no adverse modifications have been made to the supply system. Water availability information may not be required to be submitted for every project. (OFC Appendix B)

**Provide documentation of a fire hydrant flow test or modeling.**

24. **WATER SUPPLY DURING CONSTRUCTION:** Approved firefighting water supplies shall be installed and operational prior to any combustible construction or storage of combustible materials on the site. (OFC 3312.1)

## **FIRE HYDRANTS:**

25. **FIRE HYDRANTS – COMMERCIAL BUILDINGS:** Where a portion of the building is more than 400 feet from a hydrant on a fire apparatus access road, as measured in an approved route around the exterior of the building, on-site fire hydrants and mains shall be provided. (OFC 507.5.1)

- This distance may be increased to 600 feet for buildings equipped throughout with an approved automatic sprinkler system.
- The number and distribution of fire hydrants required for commercial structure(s) is based on Table C105.1, following any fire-flow reductions allowed by section B105.3.1. Additional fire hydrants may be required due to spacing and/or section 507.5 of the Oregon Fire Code.

26. **FIRE HYDRANT(S) PLACEMENT:** (OFC C104)

- Existing hydrants in the area may be used to meet the required number of hydrants as approved. Hydrants that are up to 600 feet away from the nearest point of a subject building that is protected with fire sprinklers may contribute to the required number of hydrants. (OFC 507.5.1)
- Hydrants that are separated from the subject building by railroad tracks shall not contribute to the required number of hydrants unless approved by the Fire Marshal.
- Hydrants that are separated from the subject building by divided highways or freeways shall not contribute to the required number of hydrants. Heavily traveled collector streets may be considered when approved by the Fire Marshal.
- Hydrants that are accessible only by a bridge shall be acceptable to contribute to the required number of hydrants only if approved by the Fire Marshal.

**Indicate location of proposed fire hydrants.**

27. **PRIVATE FIRE HYDRANT IDENTIFICATION:** Private fire hydrants shall be painted red in color. Exception: Private fire hydrants within the City of Tualatin shall be yellow in color. (OFC 507)

**If onsite fire hydrants will be private, then they will be required to be red in color. TVFR will review the private underground fire line and conduct onsite inspection.**

28. **FIRE HYDRANT DISTANCE FROM AN ACCESS ROAD:** Fire hydrants shall be located not more than 15 feet from an approved fire apparatus access roadway unless approved by the Fire Marshal. (OFC C102.1)

29. **REFLECTIVE HYDRANT MARKERS:** Fire hydrant locations shall be identified by the installation of blue reflective markers. They shall be located adjacent and to the side of the center line of the access roadway that the fire hydrant is located on. In the case that there is no center line, then assume a center line and place the reflectors accordingly. (OFC 507)

30. **PHYSICAL PROTECTION:** Where fire hydrants are subject to impact by a motor vehicle, guard posts, bollards or other approved means of protection shall be provided. (OFC 507.5.6 & OFC 312)

31. **CLEAR SPACE AROUND FIRE HYDRANTS:** A 3 foot clear space shall be provided around the circumference of fire hydrants. (OFC 507.5.5)
32. **FIRE DEPARTMENT CONNECTION (FDC) LOCATIONS:** FDCs shall be located within 100 feet of a fire hydrant (or as approved). Hydrants and FDC's shall be located on the same side of the fire apparatus access roadway or drive aisle, fully visible, and recognizable from the street or nearest point of the fire department vehicle access or as otherwise approved. (OFC 912.2.1 & NFPA 13)
- Fire department connections (FDCs) shall normally be located remotely and outside of the fall-line of the building when required. FDCs may be mounted on the building they serve, when approved.
  - FDCs shall be plumbed on the system side of the check valve when sprinklers are served by underground lines also serving private fire hydrants.

**Indicate on plans the location of the fire department connection.**

## **BUILDING ACCESS AND FIRE SERVICE FEATURES**

33. **EMERGENCY RESPONDER RADIO COVERAGE:** In new buildings where the design reduces the level of radio coverage for public safety communications systems below minimum performance levels, a distributed antenna system, signal booster, or other method approved by TVF&R and Washington County Consolidated Communications Agency shall be provided. (OFC 510, Appendix F, and OSSC 915) <http://www.tvfr.com/DocumentCenter/View/1296>.
- Emergency responder radio system testing and/or system installation is required for this building. Please contact me (using my contact info below) for further information including an alternate means of compliance that is available. If the alternate method is preferred, it must be requested from TVF&R prior to issuance of building permit.
  - Testing shall take place after the installation of all roofing systems; exterior walls, glazing and siding/cladding; and all permanent interior walls, partitions, ceilings, and glazing.

**During the pre-app conference it was indicated that the main building will be 73,079 sq ft. If this is correct, then this section will apply. TVFR does offer a fee in lieu to meet this requirement, the application is attached.**

34. **KNOX BOX:** A Knox Box for building access may be required for structures and gates. See Appendix B for further information and detail on required installations. Order via [www.tvfr.com](http://www.tvfr.com) or contact TVF&R for assistance and instructions regarding installation and placement. (OFC 506.1)

**A Knox box will be required.**

35. **FIRE PROTECTION EQUIPMENT IDENTIFICATION:** Rooms containing controls to fire suppression and detection equipment shall be identified as "Fire Control Room." Signage shall have letters with a minimum of 4 inches high with a minimum stroke width of 1/2 inch, and be plainly legible, and contrast with its background. (OFC 509.1)

**Label doors as above.**

36. **PREMISES IDENTIFICATION:** New and existing buildings shall have approved address numbers; building numbers or approved building identification placed in a position that is plainly legible and visible from the street or road fronting the property, including monument signs. These numbers shall contrast with their background. Numbers shall be a minimum of 4 inches high with a minimum stroke width of 1/2 inch. (OFC 505.1)

37. **FIRE EXTINGUISHERS:** Portable fire extinguishers shall be selected, installed and maintained in accordance with OFC 906.2 and NFPA 10.

**Indicate location of portable fire extinguishers on plans. Indicate size and type.**

38. **BLASTING OPERATIONS:** Blasting operations shall be conducted only by approved, competent operators familiar with the required safety precautions and the hazards involved and in accordance with the provisions of NFPA 495. (OFC 5607.1)

**If conducting blasting operations, a permit from TVFR will be required. Permit form is attached.**

If you have questions or need further clarification, please feel free to contact me at 503-259-1419.

Sincerely,

*Tom Mooney*

Tom Mooney  
Deputy Fire Marshal II

Thomas.mooney@tvfr.com

Cc: File  
City of Sherwood

A full copy of the New Construction Fire Code Applications Guide for Commercial and Multi-Family Development is available at <http://www.tvfr.com/DocumentCenter/View/1296>

**TUALATIN VALLEY FIRE & RESCUE  
MOBILE EMERGENCY RESPONDER RADIO COVERAGE (MERRC) APPLICATION**

*This application is to be used when requesting approval for participation in the TVF&R MERRC program in lieu of providing an in-building OFC 510 emergency responder radio coverage system*

**North Division**

11945 SW 70<sup>th</sup> Avenue  
Tigard, OR 97223  
Phone: 503-649-8577

**South Division**

8445 SW Elligsen Road  
Wilsonville, OR 97070  
Phone: 503-259-1500

**Building Information**

*(Separate Application Required for Each Building)*

Business/ Building Name: \_\_\_\_\_

Proposed Use of Building: \_\_\_\_\_

Address: \_\_\_\_\_

City/County: \_\_\_\_\_

Building Permit # \_\_\_\_\_

**Applicant Contact Information**

Contact Person: \_\_\_\_\_

Phone: \_\_\_\_\_

Email: \_\_\_\_\_

**MERRC FEE:**

**Approved Fee Schedule** (as of 11/2015)

First 0 - 50,000 sq.ft. = \$0.50 per sq.ft.

Additional sq.ft. from 50,001 - 100,001 = \$0.30 per sq.ft.

For each sq.ft. over 100,000 = \$0.10 per sq.ft.

**Example fee for 300,000 sf building:**

First 50,000 sq.ft. x \$0.50 = \$25,000 +

50,001 to 100,001 sq.ft. x \$0.30 = \$15,000 +

100,002 to 300,000 sq.ft. x \$ 0.10 = \$19,999

TOTAL = \$59,999

Total Square Footage: \_\_\_\_\_

\_\_\_\_\_ SF x \$0.50 =

\_\_\_\_\_ SF x \$0.30 =

\_\_\_\_\_ SF x \$0.10 =

TOTAL MERRC FEE: \$ \_\_\_\_\_

As an authorized representative for the above referenced building, I hereby request the building be permanently approved under the TVF&R Mobile Emergency Responder Radio Coverage program as having an approved method of compliance with Oregon Fire Code Section 510 and TVF&R Resolution 2015-09. If the application is accepted, I understand that full payment of the calculated MERRC fee is required prior to completing the approval process. For construction projects under a building permit, payment must be received prior to plan review completion, unless otherwise approved by the Fire Marshal.

\_\_\_\_\_  
Name & Title of Authorized Representative

\_\_\_\_\_  
Signature

\_\_\_\_\_  
Date

**For Fire Marshal's Office Use Only**

**This section is for APPLICATION APPROVAL ONLY.**

Application Approved by Fire Marshal: YES or NO

Reviewer Name: \_\_\_\_\_

Reviewer Signature \_\_\_\_\_

Date: \_\_\_\_\_

Comments:

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

**This section is for FINAL APPROVAL ONLY.**

Payment Total: \_\_\_\_\_

Received By: \_\_\_\_\_

Date: \_\_\_\_\_

Comments:

\_\_\_\_\_  
\_\_\_\_\_

*Provide a signed, approved final copy to applicant.*



## Tualatin Valley Fire & Rescue Explosive Blasting Permits

### North Operating Center

11945 SW 70<sup>th</sup> Avenue  
Tigard, OR 97223  
Phone: 503-649-8577  
Fax: 503-642-4814

### South Operating Center

8445 SW Elligsen Road  
Wilsonville, OR 97070  
Phone: 503-259-1500  
Fax: 503-259-1520

Tualatin Valley Fire & Rescue requires a permit to be issued for any type of explosive blasting conducted within District boundaries. **In order to receive a permit, a complete packet must be submitted at least 14 days prior to blasting.**

The packet must include the following:

1. **Oregon State Fire Marshal (OSFM) Certificate to Possess Explosives** in the State of Oregon.
2. **Blasting Plan** prepared in accordance with 2018 NFPA 495 and industry standards. It must include:
  - a. Explosives delivery information
  - b. Explosives storage information (magazine, location and responsible person)
  - c. Drilling information
  - d. Explosives products and loading information
  - e. Safety procedures
  - f. Directions for pre-blast notification and proper posting in area of work (350' minimum).
  - g. Verification of contact with city (if applicable), county, and local police or sheriff agency where work is being performed to determine if additional requirements apply.
  - h. Pre-blast survey of any structures, within 300' of the blast site unless the Blaster-in-Charge determines a greater distance is necessary.
  - i. A monitoring plan to identify how seismic monitoring will be conducted to ensure ground vibration does not exceed the maximum limit in 2018 NFPA 495 Figure 11.2.1 at the nearest structures or buildings.
  - j. Where seismic monitoring is not provided, explosive use shall be limited to the "scaled distance factors" at the nearest structure as identified in 2018 NFPA 495 Table 11.2.2.
  - k. Post blast monitoring and seismic report. Provide a copy to TVFR when requested.
3. **Bond or insurance certificate** for the project in an amount not less than \$1,000,000. The Fire Marshal may determine that more coverage is necessary for certain projects.
4. **TVF&R Permit Application** obtained by:
  - a. Visiting our website at [www.tvfr.com](http://www.tvfr.com) (click on Online Resources)
  - b. Contacting the nearest Operating Center

*Note: Blasting operations shall be overseen by a Blaster-in-Charge qualified to perform such work.*

For more information, contact TVF&R Fire Marshal's Office at 503-259-1500.

**FIRE CODE / LAND USE / BUILDING REVIEW  
APPLICATION**



**North Operating Center**  
11945 SW 70<sup>th</sup> Avenue  
Tigard, OR 97223  
Phone: 503-649-8577

**South Operating Center**  
8445 SW Elligsen Rd  
Wilsonville, OR 97070  
Phone: 503-259-1500

REV 12-12-2019

**Project Information**

Applicant Name: \_\_\_\_\_  
Address: \_\_\_\_\_  
Phone: \_\_\_\_\_  
Email: \_\_\_\_\_  
Site Address: \_\_\_\_\_  
City: \_\_\_\_\_  
Map & Tax Lot #: \_\_\_\_\_  
Business Name: \_\_\_\_\_  
Land Use/Building Jurisdiction: \_\_\_\_\_  
Land Use/ Building Permit # \_\_\_\_\_

Choose from: Beaverton, Tigard, Newberg, Tualatin, North Plains, West Linn, Wilsonville, Sherwood, Rivergrove, Durham, King City, Washington County, Clackamas County, Multnomah County, Yamhill County

**Project Description**

**Permit/Review Type (check one):**

- Land Use / Building Review - Service Provider Permit
- Emergency Radio Responder Coverage Install/Test
- LPG Tank (Greater than 2,000 gallons)
- Flammable or Combustible Liquid Tank Installation (Greater than 1,000 gallons)
- Explosives Blasting (Blasting plan is required)
- Exterior Toxic, Pyrophoric or Corrosive Gas Installation (in excess of 810 cu.ft.)
- Tents or Temporary Membrane Structures (in excess of 10,000 square feet)
- Temporary Haunted House or similar
- OLCC Cannabis Extraction License Review
- Ceremonial Fire or Bonfire (For gathering, ceremony or other assembly)

**For Fire Marshal's Office Use Only**

TVFR Permit # \_\_\_\_\_  
Permit Type: \_\_\_\_\_  
Submittal Date: \_\_\_\_\_  
Assigned To: \_\_\_\_\_  
Due Date: \_\_\_\_\_  
Fees Due: \_\_\_\_\_  
Fees Paid: \_\_\_\_\_

**Approval/Inspection Conditions**

(For Fire Marshal's Office Use Only)

**This section is for application approval only**

Fire Marshal or Designee \_\_\_\_\_ Date \_\_\_\_\_

Conditions:

**See Attached Conditions:**    Yes    No

**Site Inspection Required:**    Yes    No

**This section used when site inspection is required**

Inspection Comments:

\_\_\_\_\_  
Final TVFR Approval Signature & Emp ID                      Date