CITY OF OREGON CITY
PLANNING COMMISSION
AGENDA

Commission Chambers, 625 Center Street, Oregon City
Monday, July 27, 2020 at 7:00 PM

This meeting will be held online via Zoom; please contact planning@orcity.org for the meeting link.

CALL TO ORDER

PUBLIC COMMENT

Citizens are allowed up to 3 minutes to present information relevant to the City but not listed as an item on the agenda. Prior to speaking, citizens shall complete a comment form and deliver it to the City Recorder. The Citizen Involvement Committee does not generally engage in dialog with those making comments but may refer the issue to the City Manager. Complaints shall first be addressed at the department level prior to addressing the Citizen Involvement Committee.

PUBLIC HEARING

1. GLUA-20-00016/SP-20-00034/VAR-20-00010/VAR-20-00011/VAR-20-00012: Public Works Fir Street Operations Center

COMMUNICATIONS

2. Overview of the OC2040 Community Conversations Kit

GENERAL BUSINESS

ADJOURNMENT

PUBLIC COMMENT GUIDELINES

Citizens are allowed up to 3 minutes to present information relevant to the City but not listed as an item on the agenda. Prior to speaking, citizens shall complete a comment form and deliver it to the Staff Member. When the Chair calls your name, proceed to the speaker table and state your name and city of residence into the microphone. To assist in tracking your speaking time, refer to the timer on the table.

As a general practice, the Planning Commission does not engage in discussion with those making comments.

Electronic presentations are permitted but shall be delivered to the City Recorder 48 hours in advance of the meeting.

ADA NOTICE

The location is ADA accessible. Hearing devices may be requested from the City Staff Member prior to the meeting. Individuals requiring other assistance must make their request known 48 hours preceding the meeting by contacting the City Recorder's Office at 503 657 0891

Agenda Posted at City Hall, Pioneer Community Center, Library, City Web site.

Video Streaming & Broadcasts: The meeting is streamed live on Internet on the Oregon City's Web site at www.orcity.org and available on demand following the meeting. The meeting can be viewed live on Willamette Falls Television on channel 28 for Oregon City area residents. The meetings are also rebroadcast on WFMC. Please contact WFMC at 503 650 0275 for a programming schedule

625 Center Street
Oregon City, OR 97045
503-657-0891

CITY OF OREGON CITY

Staff Report

To:	Planning Commission	**Agenda Date:**	07/27/2020
From:	Assistant Planner Diliana Vassileva		

SUBJECT:

GLUA-20-00016/SP-20-00034/VAR-20-00010/VAR-20-00011/VAR-20-00012: Public Works Fir Street Operations Center

STAFF RECOMMENDATION:

Staff recommends approval of Planning Files GLUA-20-00016/SP-20-00034/VAR-20-00010/VAR-20-00011/VAR-20-00012 with conditions.

EXECUTIVE SUMMARY:

The applicant is requesting approval of a Site Plan and Design Review application for a building renovation and site improvements for the Fir Street Public Works Operations Center. The application includes variances to site landscaping, parking in front of building and landscaping buffer for industrial uses.

BACKGROUND:

The project includes renovation of the existing building located at 13895 Fir Street, Oregon City to provide an office space and fleet and vehicle maintenance facility for the Oregon City Public Works Department. The proposal includes demolition of part of the building, interior renovation of the building, and reconfiguration of the parking lot and associated landscaping. The applicant has requested variances to the following standards:

1. Parking in front of the building (OCMC 17.62.050.B.1)
   Currently there are 23 parking stalls in front of the building. As a result of demolition of two vestibules in front of the building, the existing building will be further back, and a total of 28 parking stalls will be located in front of the building. Due to the increase of parking in front of the building, a variance is required.

2. Required landscape buffer for industrial uses (OCMC 17.36.040.D)
   Pursuant with OCMC 17.36.040.D, a 20-foot buffer zone with site obscuring landscaping is required if an industrial use abuts a residential or commercial use. The subject site abuts the back of buildings with commercial uses to the north

and to the west. Rather than the required 20-foot buffer, the applicant has proposed a landscape buffer ranging from 5 -7 feet, as well as a site-obscuring fence, requiring a variance to the standard.

3. Minimum site landscaping (OCMC 17.36.040.F)
   15% of the subject site must be landscaped. Due to the required parking and fleet vehicle storage area, the applicant is providing approximately 8% site landscaping requiring a variance to minimum site landscaping requirements.

Staff finds that applicable variance criteria have been met or can be met through the Conditions of Approval and recommends approval of Planning Files GLUA-20-00016/SP-20-00034/VAR-20-00010/VAR-20-00011/VAR-20-00012 with conditions.

OREGON CITY

Community Development – Planning

695 Warner Parrott Road | Oregon City OR 97045
Ph (503) 722-3789 | Fax (503) 722-3880

TYPE III STAFF REPORT AND RECOMMENDATION
July 27, 2020

FILE NUMBER: GLUA-20-00016/SP-20-00034/VAR-20-00010/VAR-20-00011/VAR-20-00012

OWNER: City of Oregon City
PO Box 3040
Oregon City, OR 97045

APPLICANT: Brandon Dole
Scott Edwards Architecture
17404 Wake Robbins Circle
Oregon City, OR 97045

Submitted: April 13, 2020
Complete: June 2, 2020
120 Day Deadline: September 30, 2020
PC Hearing: July 27, 2020

REPRESENTATIVE: Gerald Mulrooney
Plan B Consultancy
696 McVey Avenue, Suite 202
Lake Oswego, OR 97034

REQUEST: The applicant is requesting approval of a Site Plan and Design Review application for a building renovation and site improvements for the Fir Street Public Works Operations Center. The application includes variances to site landscaping, parking in front of building and landscaping buffer for industrial uses.

LOCATION: 13895 Fir Street, Oregon City, OR 97045
Clackamas County Map 3-2E-09B, Tax Lot 1101

REVIEWER: Diliana Vassileva, Assistant Planner
Sang Pau, Development Engineering Associate

DECISION: Approval with Conditions.

PROCESS: Type III decisions involve the greatest amount of discretion and evaluation of subjective approval standards, yet are not required to be heard by the city commission, except upon appeal. Applications evaluated through this process include conditional use permits. The process for these land use decisions is controlled by ORS 197.763. Notice of the application and the planning commission hearing is published and mailed to the applicant, recognized neighborhood association and property owners within three hundred feet of the subject property. Notice must be issued at least twenty days pre-hearing, and the staff report must be available at least seven days pre-hearing. At the evidentiary hearing held before the planning commission, all issues are addressed. The decision is final unless appealed and description of the requirements for perfecting an appeal. The decision of the planning

commission is appealable to the city commission within fourteen days of the issuance of the final decision. The city commission hearing on appeal is on the record and no new evidence shall be allowed. Only those persons or a city-recognized neighborhood association who have participated either orally or in writing have standing to appeal the decision of the planning commission. Grounds for appeal are limited to those issues raised either orally or in writing before the close of the public record. A city-recognized neighborhood association requesting an appeal fee waiver pursuant to OCMC 17.50.290.C must officially approve the request through a vote of its general membership or board at a duly announced meeting prior to the filing of an appeal. The city commission decision on appeal from the planning commission is the city's final decision and is appealable to the Land Use Board of Appeals (LUBA) within twenty-one days of when it becomes final.

Conditions of Approval

Planning File GLUA-20-00016/SP-20-00034/VAR-20-00010/VAR-20-00011/VAR-20-00012

(P) = Verify that condition of approval has been met with the Planning Division.
(DS) = Verify that condition of approval has been met with the Development Services Division.
(B) = Verify that condition of approval has been met with the Building Division.
(F) = Verify that condition of approval has been met with Clackamas Fire Department.

The following conditions of approval shall be met to the satisfaction of the City during the process of design to issuance of public improvement or building permits and construction associated with the proposed land use application.

1. The development shall comply with all current Oregon City Public Works design standards, specifications, codes, and policies. (DS)
2. The applicant shall submit or address all items in section 16.12.014 of the Oregon City Municipal Code based on the timing requirements contained therein and as deemed applicable by the City. (DS)
3. The developer and engineer for the project shall execute a “Developer/Engineer Agreement for Public Works Improvements” and commit to the responsibilities outlined in the agreement prior to receiving a permit for construction. (DS)
4. The development shall provide construction plans, stamped and signed by a professional engineer licensed in the State of Oregon, containing street, grading, stormwater, sanitary sewer and water infrastructure improvements that conforms to all current Oregon City Public Works standards, specifications, codes, and policies for review and approval by the City prior to receiving a permit for construction. (DS)
5. The development’s contractor(s) and engineer(s) shall attend a pre-construction meeting with Oregon City staff prior to beginning all construction work (public and private) associated with the development. (DS)
6. The existing fuel storage and dispensing facility proposed to remain on the development property for future use shall meet all applicable regulatory guidelines set forth by the Oregon Department of Environmental Quality prior to its use. The fuel dispensing facility shall meet requirements of section 6.3 of the Oregon City Public Works Stormwater and Grading Design Standards prior to issuance of building permits. (DS)

7. The developer's engineer shall address comments provided during the city's review of the drainage plan and report and provide a finalized drainage plan and report addressing all city review comments prior to issuance of building permits. (DS)
8. The public improvements shall be constructed according to approved final engineering plans prior to occupancy. (DS)
9. The developer shall submit a traffic control plan for review and approval by the city. The traffic control may either be included on engineering plans or provided as a separate document prior to receiving construction permits. Traffic control measures must be in place and accepted by the city prior to construction commencing. (DS)
10. All driveway approaches, proposed and existing, that intersect with a public sidewalk, shall be made Americans with Disabilities Act (ADA) compliant. An approved driveway approach design will need included on engineering plans following proper engineering technical standards prior to receiving a permit and beginning construction. (DS)
11. The engineering plans shall provide a local benchmark, onsite, using the NAVD88 datum. (DS)
12. A city issued erosion and sediment control permit shall be obtained prior to commencement of any earth disturbing activities. (DS)
13. Erosion and sediment control plans shall be submitted for review and approval by the City prior to issuance of an erosion and sediment control permit. (DS)
14. The developer shall obtain a 1200-C (NPDES) permit from Oregon Department of Environmental Quality (DEQ) for construction activities one acre or greater prior to receiving city permit(s) and beginning construction. (DS)

<u>The following conditions of approval shall be met to the satisfaction of the City during construction.</u>

15. Pavement cuts or improvements on any public street or alley in the City shall adhere to the City of Oregon City Public Works Pavement Cut Standards. (DS)
16. Permitted hours of construction shall be set forth by the City Engineer in the pre-construction meeting. (DS)

<u>The following conditions of approval shall be met to the satisfaction of the City prior to issuance of building permits associated with the proposed land use application unless otherwise noted.</u>

Landscaping

17. The applicant shall submit a tree mitigation plan which:
    a. Distinguishes mitigation trees from parking lot trees or any other required trees. (P)
    b. Recalculates the required mitigation trees based on the definition of construction area within OCMC 17.04.230 and which complies with tree species and size standards in OCMC 17.41.050.D. If the required mitigation trees cannot be accommodated onsite, the applicant may utilize off-site mitigation or fee-in-lieu of planting as needed. (P)
18. The applicant shall submit a revised landscaping plan prepared by a Registered Landscape Architect, which:
    a. Identifies that proposed plantings will be planted in accordance with American Nurseryman Standards. (P)
    b. Identifies that the landscaping will not include mulch as ground cover except underneath plants at full growth and within two feet of the base of trees. (P)
    c. Includes trees spaced no more than 30 feet apart within the new perimeter parking lot landscaping area. (P)

d. Includes shrubs within the perimeter parking lot landscaping area that are not nearer than two feet from the right-of-way line. (P)
e. Includes a five-foot wide landscaping buffer meeting the perimeter parking lot landscaping standards or a seven-foot sidewalk with shade trees spaced a maximum of 30 feet apart in three-foot by five-foot tree wells between all new parking and the exterior wall of a structure, exclusive of pedestrian entranceways or loading areas in accordance with the parking area/building buffer landscaping requirements in OCMC 17.52.060.D. (P)
f. Includes one tree for every four parking stalls within the interior parking lot landscaping area in accordance with the interior parking lot landscaping requirements in OCMC 17.52.060.E. (P)
g. Includes 1.5 shrubs per parking space planted within the interior parking lot landscaping area in accordance with the interior parking lot landscaping requirements in OCMC 17.52.060.E. (P)
h. Incorporates landscaping into the buffer area identified in Exhibit 5 or the applicant shall provide documentation explaining why landscaping cannot be accommodated in this area in order to demonstrate that the industrial landscape buffer variance being requested is the minimum that would alleviate the hardship. (P)
i. Provides additional landscaping in all areas of the parking lot not used for parking, maneuvering or circulation. Additionally, the revised landscaping plan shall incorporate landscaping within the areas identified in Exhibit 6 or provide documentation explaining why landscaping cannot be accommodated in these areas in order to show that the variance being requested is the minimum that would alleviate the hardship. (P)
j. Includes trees spaced no more than 30 feet apart within the buffer zone where the subject site abuts commercial properties. These trees may not be double counted as mitigation trees. (P)
k. Includes the following elements in all existing and proposed landscaping planters as mitigation for the minimum site landscaping variance: (P)
    - Trees spaced no more than 30 feet apart; and
    - Shrubs spaced no more than 4 feet on center; and
    - Ground cover covering 100% of the landscaped areas within 3 years of planting; and
    - The landscaped areas shall not include mulch as ground cover except underneath plants at full growth and within two feet of the base of trees; and
    - A minimum of 15 newly planted trees shall be 3 inches in caliper at the time of planting as opposed to the required 2 inches; or,
    - A minimum of 15 newly planted trees shall be a tree species which has a canopy width of at least 30 feet at maturity.

Parking

19. The applicant shall submit a revised parking lot layout plan which:
    a. Complies with parking lot dimensional standards in OCMC 17.52.030.D, with the exception of the drive aisle under the covered parking area which can exceed aisle width in order to allow large fleet vehicles to enter and exit the fleet maintenance area, and any existing non-conforming parking stalls and drive aisles which are not proposed to be modified with this development application. (P)
    b. Identifies a minimum of four carpool/vanpool parking stalls that comply with the location and carpool/vanpool signage requirements within OCMC 17.52.030.D. (P)

c. Includes landscaping in all areas within the parking lot not used for parking, maneuvering or circulation. (P)

Site Layout

20. The applicant shall submit a revised site plan which includes the bicycle repair station, electric bike charging station, community information/bulletin board and public art display in the increased setback area located between the building and the front property line. Additionally, the applicant shall provide four additional pedestrian amenities from the list below for a total of fourteen pedestrian amenities: (P)
    - A minimum of two concrete planters or planter boxes within the plaza area between the building and bollards
    - A minimum of two tree wells within the plaza area between the building and bollards
    - Clock tower
    - Drinking water fountain
    - Garbage/recycling area for plaza visitors
    - Public USPS drop-off mailbox
    - Water feature
    - Outdoor speakers for music within the plaza
21. The applicant shall submit details on the bicycle rack design demonstrating that it is a minimum of 30 inches tall and provides a minimum of 18 inches between the two points of contact. (P)
22. The applicant shall submit a revised bicycle parking layout which provides an area of six feet by two feet per bicycle. (P)
23. The applicant shall submit a revised photometric plan which demonstrates that lighting is provided within all staff and visitor parking areas. (P)
24. Prior to issuance of any mechanical permits for installation or alteration of a mechanical unit associated with the proposed development, the applicant shall submit documentation demonstrating that the mechanical unit will comply with screening requirements in OCMC 17.62.050.G. (P)

<u>The following conditions of approval shall be met to the satisfaction of the City prior to issuance of an occupancy permit unless otherwise noted.</u>

25. The public improvements shall be constructed according to approved final engineering plans prior to occupancy. (DS)
26. The development shall provide a 10-foot-wide public utility easement (PUE) along all property lines fronting the existing right-of-way. (DS)
27. Improvements shall be constructed under the inspection and approval of the City. Expenses incurred thereby shall be borne by the applicant and paid prior to final approval. The developer's project engineer also shall inspect construction. A certificate of completion is required prior to providing a punchlist for the contractor. The punchlist must be completed prior to occupancy. (DS)
28. The workmanship and materials for any work performed under permits issued by Oregon City Public Works shall be in accordance with the edition of the "Oregon Standard Specifications for Construction" as prepared by the Oregon Department of Transportation (ODOT) and the Oregon Chapter of American Public Works Association (APWA) and as modified and adopted by the city. (DS)
29. The property owner shall sign a Restrictive Covenant Non-Remonstrance Agreement for the purpose of making storm sewer, sanitary sewer, water or street improvements in the future that benefit the property. The applicant shall pay all fees associated with processing and recording the Non-Remonstrance Agreement. (DS)

30. The property owner(s) shall execute an agreement providing access to and maintenance of privately-owned stormwater management facilities and pay associated recording fees. The agreement shall include a site plan identifying all privately-owned stormwater management facilities and an operation and maintenance plan for each type of stormwater facility in accordance with the Public Works Stormwater and Grading Design Standards. The agreement shall run with the land and be applicable to subsequent property owners. The Maintenance Covenant and Access Easement shall be reviewed and accepted by the City prior to recording. (DS)
31. As-built construction plans and digital copies of as-built drawings shall be filed with the City Engineer within 90 days of completing improvements. (DS)
32. The applicant shall pay a proportional share towards the funding of improvements of the intersection of Highway 213 and Beavercreek Road. Based on previously established methodology, the contribution for each peak hour trip is calculated to be $6,752. Based on the preliminary PM peak hour trip generation from the proposed development, the development's share of the project is $6,752.

I. BACKGROUND:

1. Existing Conditions

The subject site is approximately five acres in size and is zoned General Industrial (GI). The property is developed with an existing industrial building and a parking lot with three access drives and associated landscaping. The building includes an approximately 16,000 SF office area in the front of the building and an approximately 47,000 SF warehouse area in the back of the building. Surrounding properties are also industrial in nature and zoned GI with the exception of the Wilco retail store which is located at the corner of Molalla Avenue and Fir Street and is zoned General Commercial.

Figure 1. Vicinity Map

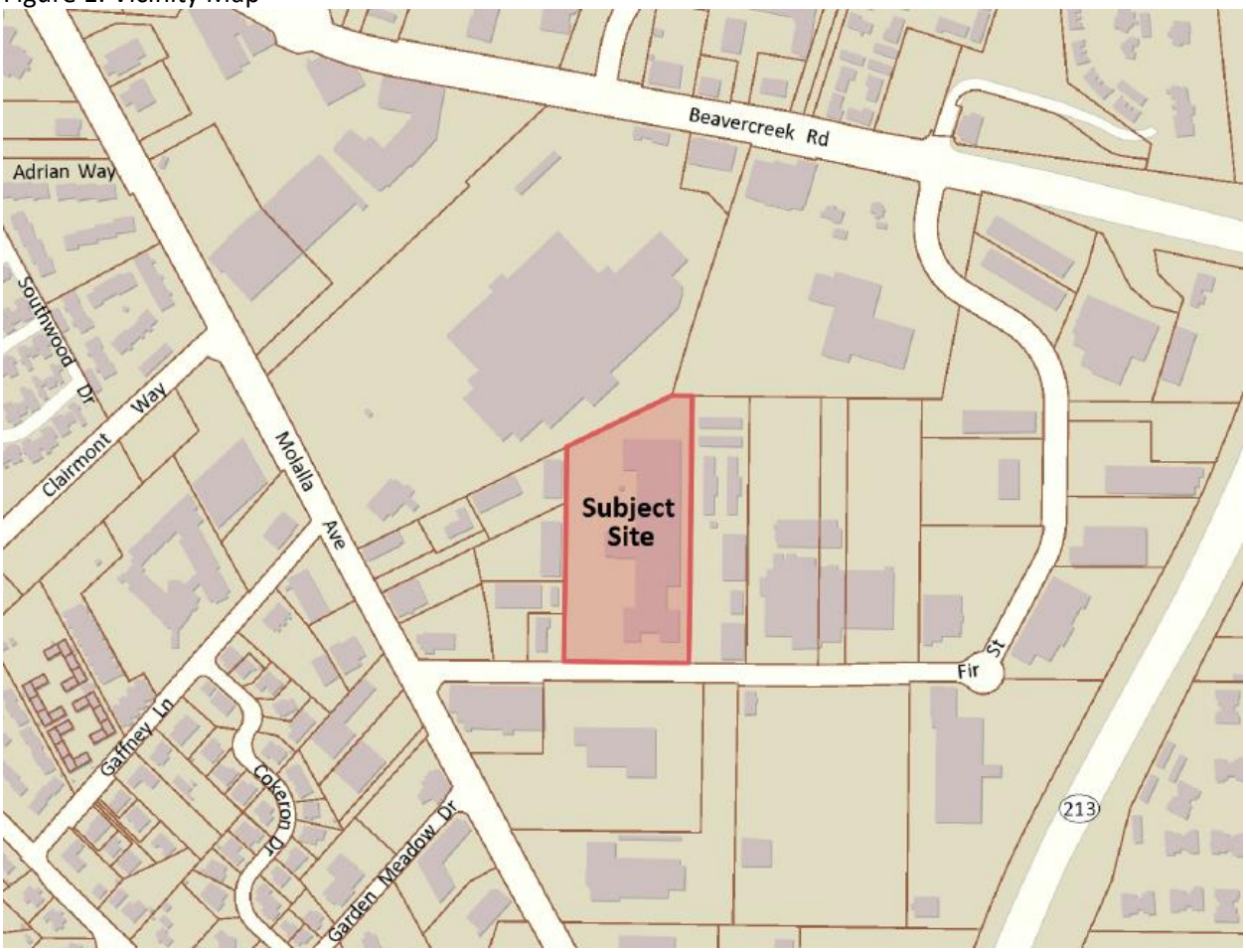


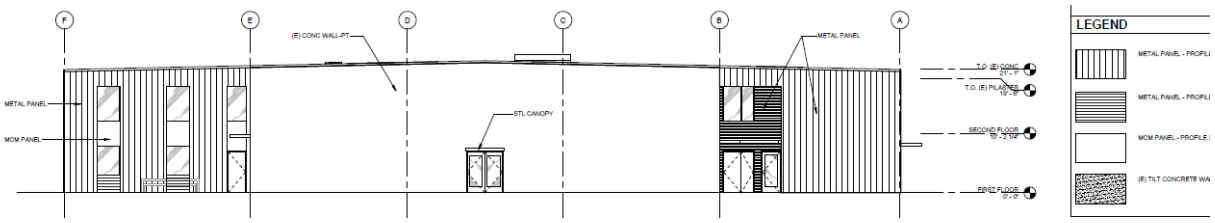
Figure 2: Existing Conditions – Aerial Image

2. Project Description

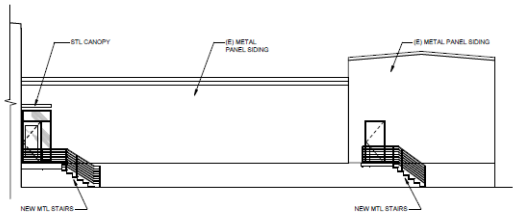
The applicant has proposed to renovate the existing building to provide an office space and fleet and vehicle maintenance facility for the Oregon City Public Works Department. The proposal includes demolition of part of the office building, interior renovation of the building, reconfiguration of the parking lot and associated landscaping. The applicant's proposal includes a large drive-through opening which will provide a covered staff parking area and provide separation between the office portion of the building which is up front and the warehouse/fleet maintenance portion of the building which is in the back.

Figure 3: Proposed Site Plan

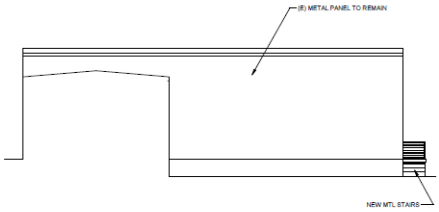
Figure 4: Proposed Building Elevations



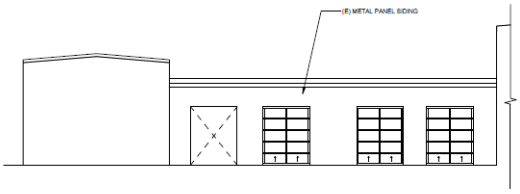
1 NORTH ELEVATION - OFFICE
1/8" = 1'-0"



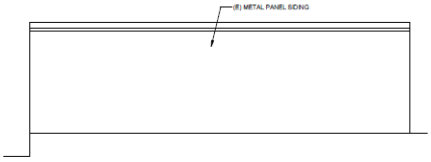
2 LOADING DOCK NORTH ELEVATION
1/8" = 1'-0"



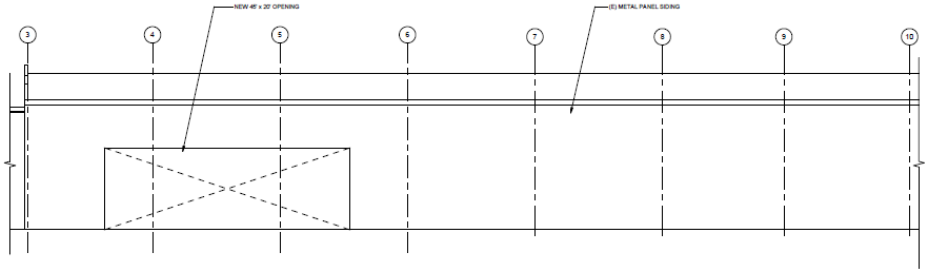
3 SIGN SHOP EAST ELEVATION
1/8" = 1'-0"



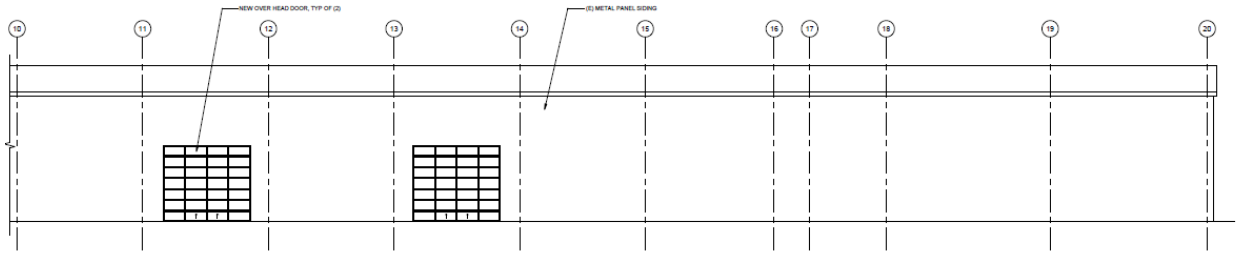
4 LOADING DOCK SOUTH ELEVATION
1/8" = 1'-0"



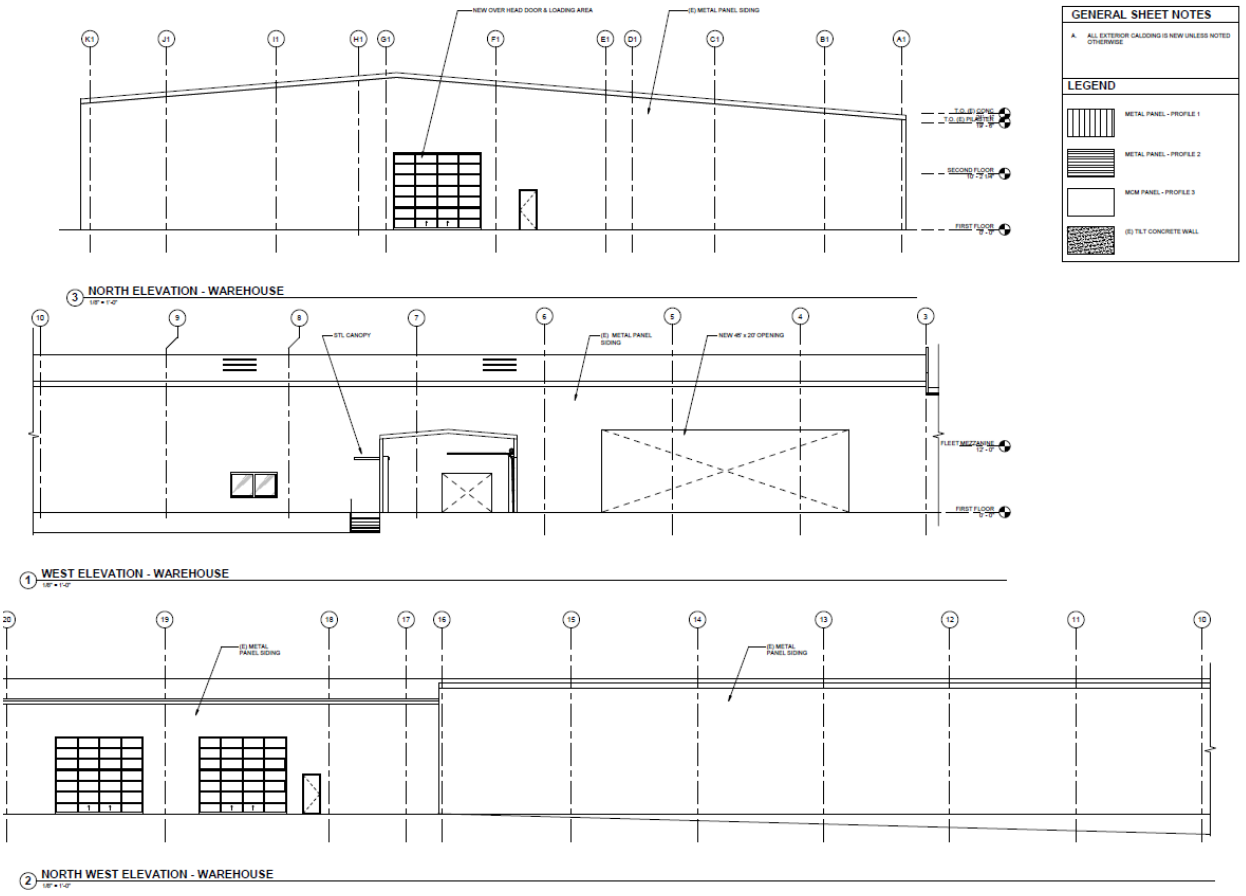
5 SIGN SHOP WEST ELEVATION
1/8" = 1'-0"



1 EAST ELEVATION - WAREHOUSE
1/8" = 1'-0"



2 NORTH EAST ELEVATION - WAREHOUSE
1/8" = 1'-0"



3. **Permits and Approvals:** The applicant is responsible for obtaining approval and permits from each applicable governmental agency and department at Oregon City including but not limited to the Engineering and Building Divisions.

4. **Public Comment**
   Public comments submitted include (Exhibit 3):

   - A comment from the Oregon City School District identifying the proposal does not conflict with the School District's interests.

   Comments from the Oregon City Development Services Division are incorporated within this staff report. None of the comments provided indicate that an approval criterion has not been met or cannot be met through the Conditions of Approval attached to this Staff Report.

II. ANALYSIS AND FINDINGS:

Municipal Code Standards and Requirements: The following sections of the Oregon City Municipal Code are applicable to this land use approval:

CHAPTER

CHAPTER 12.04 STREETS, SIDEWALKS, AND PUBLIC PLACES

CHAPTER 12.08 - PUBLIC AND STREET TREES

CHAPTER 13.12 STORMWATER MANAGEMENT

CHAPTER 15.48 - GRADING, FILLING AND EXCAVATING

CHAPTER 16.12 MINIMUM PUBLIC IMPROVEMENTS AND DESIGN STANDARDS FOR DEVELOPMENT

CHAPTER 17.36 GI GENERAL INDUSTRIAL DISTRICT

CHAPTER 17.41 TREE PROTECTION, PRESERVATION, REMOVAL AND REPLANTING STANDARDS

CHAPTER 17.50 ADMINISTRATION AND PROCEDURES

CHAPTER 17.52 OFF-STREET PARKING AND LOADING

CHAPTER 17.54 SUPPLEMENTAL ZONING REGULATIONS AND EXCEPTIONS

CHAPTER 17.58 LAWFUL NONCONFORMING USES, LOTS, STRUCTURES, AND SITES

CHAPTER 17.60 VARIANCES

CHAPTER 17.62 SITE PLAN AND DESIGN REVIEW

CHAPTER 12.04 – STREETS SIDEWALKS AND PUBLIC SPACES

12.04.005 - Jurisdiction and management of the public rights-of-way.

A. The City has jurisdiction and exercises regulatory management over all public rights-of-way within the City under authority of the City Charter and state law by issuing separate public works right-of-way permits or permits as part of issued public infrastructure construction plans. No work in the public right-of-way shall be done without the proper permit. Some public rights-of-way within the city are regulated by the State of Oregon Department of Transportation (ODOT) or Clackamas County and as such, any work in these streets shall conform to their respective permitting requirements.

C. The City has jurisdiction and exercises regulatory management over each public right-of-way whether the City has a fee, easement, or other legal interest in the right-of-way. The City has jurisdiction and regulatory management of each right-of-way whether the legal interest in the right-of-way was obtained by grant, dedication, prescription, reservation, condemnation, annexation, foreclosure or other means.

D. No person may occupy or encroach on a public right-of-way without the permission of the City. The City grants permission to use rights-of-way by franchises, licenses and permits.

E. The exercise of jurisdiction and regulatory management of a public right-of-way by the City is not official acceptance of the right-of-way, and does not obligate the City to maintain or repair any part of the right-of-way.

Finding: Applicable. The City of Oregon City has jurisdiction over Fir Street.

12.04.025 - Driveways.

Driveways shall be reviewed in accordance with OCMC 16.12.035. Driveway requirements may be modified through the procedures in OCMC 16.12.013.

Finding: Applicable. See 16.12.035 for more information.

12.04.030 - Maintenance and repair.

The owner of land abutting the street where a sidewalk has been constructed shall be responsible for maintaining said sidewalk and abutting curb, if any, in good repair.

Finding: Not Applicable. Sidewalk along Fir Street has not been identified to be in disrepair.

12.04.032 - Required sidewalk repair.

A. When the Public Works Director determines that repair of a sidewalk is necessary, written notice shall be provided to the owner of property adjacent to the defective sidewalk.

B. The notice shall require the owner of the property adjacent to the defective sidewalk to complete the repair of the sidewalk within ninety days after the service of notice. The notice shall also state that if the repair is not made by the owner, the City may do the work and the cost of the work shall be assessed against the property adjacent to the sidewalk.

1. All sidewalks hereafter constructed in the City on improved streets shall be constructed to city standards and widths required in the Oregon City Transportation System Plan and OCMC 16.12. Sidewalks and curbs are to be constructed according to plans and specifications provided by the City Engineer.

2. Sidewalks constructed on unimproved streets shall be constructed of concrete according to lines and grades established by the City Engineer. On unimproved streets, curbs do not have to be constructed.

C. The Public Works Director shall cause a copy of the notice to be served personally upon the owner of the property adjacent to the defective sidewalk, or the notice may be served by registered or certified mail, return receipt requested. If after diligent search the owner is not discovered, the Public Works Director shall cause a copy of the notice to be posted in a conspicuous place on the property, and such posting shall have the same effect as service of notice by mail or by personal service upon the owner of the property.

D. The person serving the notice shall file with the City recorder a statement stating the time, place and manner of service or notice.

Finding: Not Applicable. Sidewalk along Fir Street has not been identified to be in disrepair.

12.04.050 - Retaining walls—Required.

Every owner of a lot within the City, abutting upon an improved street, where the surface of the lot or tract of land is above the surface of the improved street and where the soil or earth from the lot, or tract of land is liable to, or does slide or fall into the street or upon the sidewalk, or both, shall build a retaining wall, the outer side of which shall be on the line separating the lot, or tract of land from the improved street, and the wall shall be so constructed as to prevent the soil or earth from the lot or tract of land from falling or sliding into the street or upon the sidewalk, or both, and the owner of any such property shall keep the wall in good repair.

Finding: Not Applicable. No retaining walls exist or are proposed on this project adjacent to the public sidewalk.

12.04.100 - Excavations—Restoration of pavement.

Whenever any excavation shall have been made in any pavement or other street improvement on any street or alley in the City for any purpose whatsoever under the permit granted by the engineer, it shall be the duty of the person making the excavation to restore the pavement in accordance with the City of Oregon City Public Works Pavement Cut Standard in effect at the time a right-of-way permit is granted. The City Commission may adopt and modify the City of Oregon City Public Works Pavement Cut Standards by resolution as necessary to implement the requirements of this chapter.

Finding: Complies with Condition. Reconstruction of driveway approaches connecting to Fir Street is proposed. Pavement cuts or improvements on any public street or alley in the City shall adhere to the City of Oregon City Public Works Pavement Cut Standards. (Also written in the findings for 16.12.029) **Staff has determined that it is possible, likely and reasonable that the applicant can meet this standard through the Conditions of Approval.**

12.04.120 - Obstructions—Permit required.

A. Permanent Obstructions. It is unlawful for any person to place, put or maintain any obstruction, other than a temporary obstruction, as defined in subsection B. of this section, in any public street or alley in the City, without obtaining approval for a right-of-way permit from the City Commission by passage of a resolution.

1. The City Engineer shall provide applicants with an application form outlining the minimum submittal requirements.

2. The applicant shall submit at least the following information in the permitting process in order to allow the City Commission to adequately consider whether to allow the placement of an obstruction and whether any conditions may be attached:

a. Site plan showing right-of-way, utilities, driveways as directed by staff;

b. Sight distance per OCMC 10.32, Traffic Sight Obstructions;

c. Traffic control plan including parking per Manual on Uniform Traffic Control Devices (MUTCD);

d. Alternative routes if necessary;

e. Minimizing obstruction area; and

f. Hold harmless/maintenance agreement.

3. If the City Commission adopts a resolution allowing the placement of a permanent obstruction in the right-of-way, the City Engineer shall issue a right-of-way permit with any conditions deemed necessary by the City Commission.

B. Temporary Obstructions.

1. A "temporary obstruction" is defined as an object placed in a public street, road or alley for a period of not more than sixty consecutive days. A "temporary obstruction" includes, but is not limited to, moving containers and debris dumpsters.

2. The City Engineer, or designee, is authorized to grant a permit for a temporary obstruction.

3. The City Engineer shall provide applicants with an application form outlining the minimum submittal requirements.

4. The applicant shall submit, and the City Engineer, or designee, shall consider, at least the following items in the permitting process. Additional information may be required in the discretion of the City Engineer:

a. Site plan showing right-of-way, utilities, driveways as directed by staff;

b. Sight distance per OCMC 10.32, Traffic Sight Obstructions;

c. Traffic control plan including parking per Manual on Uniform Traffic Control Devices (MUTCD);

d. Alternative routes if necessary;

e. Minimizing obstruction area; and

f. Hold harmless/maintenance agreement.

5. In determining whether to issue a right-of-way permit to allow a temporary obstruction, the City Engineer may issue such a permit only after finding that the following criteria have been satisfied:

a. *The obstruction will not unreasonably impair the safety of people using the right-of-way and nearby residents;*
b. *The obstruction will not unreasonably hinder the efficiency of traffic affected by the obstruction;*
c. *No alternative locations are available that would not require use of the public right-of-way; and*
d. *Any other factor that the City Engineer deems relevant.*

6. *The permittee shall post a weatherproof copy of the temporary obstruction permit in plain view from the right-of-way.*

C. *Fees. The fee for obtaining a right-of-way permit for either a permanent obstruction or a temporary obstruction shall be set by resolution of the City Commission.*

Finding: Complies with Condition. The development proposes construction activities in Fir Street which is a public right-of-way. The developer shall submit a traffic control plan for review and approval by the city. The traffic control may either be included on engineering plans or provided as a separate document prior to receiving construction permits. Traffic control measures must be in place and accepted by the city prior to construction commencing. **Staff has determined that it is possible, likely and reasonable that the applicant can meet this standard through the Conditions of Approval.**

12.04.150 - Street and alley vacations—Cost.

At the time of filing a petition for vacation of a street, alley or any part thereof, a fee as established by City Commission resolution shall be paid to the City. The City Commission, upon hearing such petition, may grant the same in whole or in part, or may deny the same in whole or in part, or may grant the same with such reservations as would appear to be for the public interest, including reservations pertaining to the maintenance and use of underground public utilities in the portion vacated.

Finding: Not Applicable. No vacations are proposed as part of this application.

12.04.170 - Street design—Purpose and general provisions.

All development shall be in conformance with the city's public facility master plans, public works policies, standard drawings and engineering specifications. All streets shall be reviewed and approved by the city engineer prior to construction. All streets and driveway connections to another jurisdiction's facility or right-of-way must be reviewed by the appropriate jurisdiction as a condition of the preliminary plat or site planning and when required by law or intergovernmental agreement shall be approved by the appropriate jurisdiction.

Finding: Complies with Condition. The development plans shall comply with all current Oregon City Public Works design standards, specifications, codes, and policies prior to receiving a permit and beginning construction. (Also written in findings from 16.12.010) **Staff has determined that it is possible, likely and reasonable that the applicant can meet this standard through the Conditions of Approval.**

12.04.270 - Standard construction specifications.

The workmanship and materials for any work performed under permits issued per this chapter shall be in accordance with the current edition of the "Oregon Standard Specifications for Construction" as prepared by the Oregon Department of Transportation (ODOT) and the Oregon Chapter of American Public Works Association (APWA) and as modified and adopted by the City in accordance with this ordinance, in effect at the time of application. The exception to this requirement is where this chapter and the Public Works Street Standard Drawings provide other design details, in which case the requirements of this chapter and the Public Works Street Standard Drawings shall control. In the case of work within ODOT or

Clackamas County rights-of-way, work shall be in conformance with their respective construction standards.

Finding: Complies with Condition. The workmanship and materials for any work performed under permits issued by Oregon City Public Works shall be in accordance with the edition of the "Oregon Standard Specifications for Construction" as prepared by the Oregon Department of Transportation (ODOT) and the Oregon Chapter of American Public Works Association (APWA) and as modified and adopted by the city. (Also written in findings from 16.12.010) **Staff has determined that it is possible, likely and reasonable that the applicant can meet this standard through the Conditions of Approval.**

CHAPTER 13.12 – STORMWATER MANAGEMENT

13.12.050 - Applicability and exemptions.

This chapter establishes performance standards for stormwater conveyance, quantity and quality. Additional performance standards for erosion prevention and sediment control are established in OCMC 17.47.

A. Stormwater Conveyance. The stormwater conveyance requirements of this chapter shall apply to all stormwater systems constructed with any development activity, except as follows:

1. The conveyance facilities are located entirely on one privately owned parcel;

2. The conveyance facilities are privately maintained; and

3. The conveyance facilities receive no stormwater runoff from outside the parcel's property limits.

Those facilities exempted from the stormwater conveyance requirements by the above subsection will remain subject to the requirements of the Oregon Uniform Plumbing Code. Those exempted facilities shall be reviewed by the Building Official.

Finding: Applicable. Connection to a public stormwater conveyance system is required to serve this development.

B. Water Quality and Flow Control. The water quality and flow control requirements of this chapter shall apply to the following proposed uses or developments, unless exempted under subsection C:

1. Activities located wholly or partially within water quality resource areas pursuant to OCMC 17.49 that will result in the creation of more than five hundred square feet of impervious surface within the NROD or will disturb more than one thousand square feet of existing impervious surface within the NROD as part of a commercial or industrial redevelopment project. These square footage measurements will be considered cumulative for any given five-year period; or

2. Activities that create or replace more than five thousand square feet of impervious surface, cumulated over any given five-year period.

Finding: Applicable. The proposed development will create more than 5000 square feet of new impervious area.

C. Exemptions. The following exemptions to subsection B of this section apply:

1. An exemption to the flow control requirements of this chapter will be granted when the development site discharges to the Willamette River, Clackamas River or Abernethy Creek; and either lies within the one hundred-year floodplain or is up to ten feet above the design flood elevation as defined in OCMC 17.42, provided that the following conditions are met:

a. The project site is drained by a conveyance system that is comprised entirely of manmade elements (e.g. pipes, ditches, culverts outfalls, outfall protection, etc.) and extends to the ordinary high water line of the exempt receiving water; and

b. The conveyance system between the project site and the exempt receiving water has sufficient hydraulic capacity and erosion stabilization measures to convey discharges from the proposed conditions of the project site and the existing conditions from non-project areas from which runoff is collected.

2. Projects in the following categories are generally exempt from the water quality and flow control requirements:

a. Stream enhancement or restoration projects approved by the City.

b. Farming practices as defined by ORS 30.960 and farm use as defined in ORS 214.000; except that buildings associated with farm practices and farm use are subject to the requirements of this chapter.
c. Actions by a public utility or any other governmental agency to remove or alleviate an emergency condition.
d. Road and parking area preservation/maintenance projects such as pothole and square cut patching, surface sealing, replacing or overlaying of existing asphalt or concrete pavement, provided the preservation/maintenance activity does not expand the existing area of impervious coverage above the thresholds in subsection B of this section.
e. Pedestrian and bicycle improvements (sidewalks, trails, pathways, and bicycle paths/lands) where no other impervious surfaces are created or replaced, built to direct stormwater runoff to adjacent vegetated areas.
f. Underground utility projects that replace the ground surface with in-kind material or materials with similar runoff characteristics.
g. Maintenance or repair of existing utilities.
Finding: Not Applicable. No exemptions apply to the proposed development.

D. Uses Requiring Additional Management Practices. In addition to any other applicable requirements of this chapter, the following uses are subject to additional management practices, as defined in the Public Works Stormwater and Grading Design Standards:
1. Bulk petroleum storage facilities;
2. Above ground storage of liquid materials;
3. Solid waste storage areas, containers, and trash compactors for commercial, industrial, or multi-family uses;
4. Exterior storage of bulk construction materials;
5. Material transfer areas and loading docks;
6. Equipment and/or vehicle washing facilities;
7. Development on land with suspected or known contamination;
8. Covered vehicle parking for commercial or industrial uses;
9. Industrial or commercial uses locating in high traffic areas, defined as average daily count trip of two thousand five hundred or more trips per day; and
10. Land uses subject to DEQ 1200-Z Industrial Stormwater Permit Requirements.
Finding: Complies with Condition. The development has proposed to keep a petroleum storage and dispensing facility on the development property. The existing fuel storage and dispensing facility proposed to remain on the development property for future use shall meet all applicable regulatory guidelines set forth by the Oregon Department of Environmental Quality prior to its use. The fuel dispensing facility shall meet requirements of section 6.3 of the Oregon City Public Works Stormwater and Grading Design Standards prior to issuance of building permits.
Staff has determined that it is possible, likely and reasonable that the applicant can meet this standard through the Conditions of Approval.

13.12.080 - Submittal requirements.
A. Applications subject to stormwater conveyance, water quality, and/or flow control requirements of this chapter shall prepare engineered drainage plans, drainage reports, and design flow calculation reports in compliance with the submittal requirements of the Public Works Stormwater and Grading Design Standards.
B. Each project site, which may be composed of one or more contiguous parcels of land, shall have a separate valid city approved plan and report before proceeding with construction.
Finding: Complies as Proposed. The applicant submitted a preliminary drainage plan and report which complies with the current version of the Oregon City Stormwater and Grading Design Standards. However, the drainage plan and report has not been finalized and approved by the city. **See findings from section 13.12.090 of this report for approval criteria for the engineered drainage plans and drainage report submitted.**

13.12.090 - Approval criteria for engineered drainage plans and drainage report.
An engineered drainage plan and/or drainage report shall be approved only upon making the following findings:
A. The plan and report demonstrate how the proposed development and stormwater facilities will accomplish the purpose statements of this chapter.
B. The plan and report meet the requirements of the Public Works Stormwater and Grading Design Standards adopted by resolution under OCMC 13.12.020.
C. The storm drainage design within the proposed development includes provisions to adequately control runoff from all public and private streets and roof, footing, and area drains and ensures future extension of the current drainage system.
D. Streambank erosion protection is provided where stormwater, directly or indirectly, discharges to open channels or streams.
E. Specific operation and maintenance measures are proposed that ensure that the proposed stormwater quantity control facilities will be properly operated and maintained.
Finding: Complies with Condition. The applicant's preliminary drainage plan and report shows general compliance with stormwater conveyance, water quality, and flow control requirements of the Oregon City Stormwater and Grading Design Standards. However, the drainage plan and report has not been finalized and approved by the city. The city will review the engineered drainage plan and drainage report submitted by the applicant for compliance with the Oregon City Public Works Stormwater and Grading Design Standards. The developer's engineer shall address comments provided during the city's review of the drainage plan and report and provide a finalized drainage plan and report addressing all city review comments prior to issuance of building permits. **Staff has determined that it is possible, likely and reasonable that the applicant can meet this standard through the Conditions of Approval.**

13.12.100 - Alternative materials, alternative design and methods of construction.
The provisions of this chapter are not intended to prevent the use of any material, alternate design or method of construction not specifically prescribed by this chapter or the Public Works Stormwater and Grading Design Standards, provided any alternate has been approved and its use authorized by the City Engineer. The City Engineer may approve any such alternate, provided that the City Engineer finds that the proposed design is satisfactory and complies with the intent of this chapter and that the material, method, or work offered is, for the purpose intended, at least the equivalent of that prescribed by this chapter in effectiveness, suitability, strength, durability and safety. The City Engineer shall require that sufficient evidence or proof be submitted to substantiate any claims that may be made regarding its use. The details of any action granting approval of an alternate shall be recorded and entered in the City files.
Finding: Not Applicable. The applicant has not proposed alternative design methods requiring special approval by the City Engineer. However, should the applicant propose such methods with the public facilities construction plan submittal, the proposal will be reviewed and approved by the City Engineer as required.

13.12.110 - Transfer of engineering responsibility.
Project drainage plans shall always have a project engineer. If the project engineer is changed during the course of the work, the City shall be notified in writing and the work shall be stopped until the replacement engineer has agreed to accept the responsibilities of the project engineer. The new project engineer shall provide written notice of accepting project responsibility to the City within seventy-two hours of accepting the position as project engineer.
Finding: Complies as Proposed. The applicant acknowledges that they are responsible for retaining the project engineer and notification of any changes.

13.12.120 - Standard construction specifications.

The workmanship and materials shall be in accordance with the current edition of the "Standard Specifications for Public Works Construction," as prepared by the Oregon Chapter of American Public Works Association (APWA) and as modified and adopted by the City, in effect at the time of application. The exception to this requirement is where this chapter and the Public Works Stormwater and Grading Design Standards provide other design details, in which case the requirements of this chapter and the Public Works Stormwater and Grading Design Standards shall be complied with.

Finding: Complies with Condition. The workmanship and materials for any work performed under permits issued by Oregon City Public Works shall be in accordance with the edition of the "Oregon Standard Specifications for Construction" as prepared by the Oregon Department of Transportation (ODOT) and the Oregon Chapter of American Public Works Association (APWA) and as modified and adopted by the city. (Also written in the findings of section 16.12.010) **Staff has determined that it is possible, likely and reasonable that the applicant can meet this standard through the Conditions of Approval.**

13.12.140 - Maintenance of public stormwater facilities.

A. A stormwater facility that receives stormwater runoff from a public right-of-way shall be a public facility. Upon expiration of the warranty period and acceptance by the City as described below, the City shall be responsible for maintenance of those public stormwater facilities. Access for maintenance of the stormwater facilities shall be provided to the City through the granting of a stormwater easement or other means acceptable to the City.

B. Responsibility for maintenance of stormwater facilities including all landscaping, irrigation systems, structures and appurtenances shall remain with the property owner/developer for two years (known as the warranty period). The owner/developer shall provide the City a separate two-year landscaping maintenance surety bond for one hundred ten percent of the landscaping cost. Transfer of maintenance of stormwater conveyance systems shall occur when the City accepts the stormwater conveyance system.

C. The City will perform an inspection of the development's entire publicly maintained stormwater system approximately forty-five days before the two-year warranty period expires. The stormwater system shall be found to be in a clean, functional condition by the City engineer before acceptance of maintenance responsibility by the City.

Finding: Not Appliable. The development has not proposed to construct stormwater facilities that receive stormwater runoff from a public right-of-way.

13.12.145 - Maintenance of private stormwater facilities.

A. An applicant shall submit an operation and maintenance plan for each proposed stormwater facilities, unless exempted in the Public Works Stormwater and Grading Design Standards. The information in the operation and maintenance plan shall satisfy the requirements of the Public Works Stormwater and Grading Design Standards.

B. Private owners are required to inspect and maintain stormwater facilities on their property in accordance with an approved operation and maintenance plan. A maintenance log is required to document facility inspections and specific maintenance activities. The log shall be available to City inspection staff upon request.

C. Failure to operate or maintain a stormwater facility according to the operation and maintenance plan may result in an enforcement action under Section 13.12.150.

Finding: Complies with Condition. The applicant has proposed private stormwater facilities on the development property to treat and manage stormwater runoff from the property. Private owners are required to inspect and maintain stormwater facilities on their property in accordance with an approved operation and maintenance plan. The property owner(s) shall execute an agreement providing access to and maintenance of privately-owned stormwater management facilities and pay associated recording fees. The agreement shall include a site plan identifying all privately-owned stormwater management facilities and an operation and maintenance plan for each type of stormwater facility in accordance with the Public Works Stormwater and Grading Design Standards. The agreement shall run with the land and be applicable to subsequent property owners. The Maintenance Covenant and Access Easement shall be

reviewed and accepted by the City prior to recording. **Staff has determined that it is possible, likely and reasonable that the applicant can meet this standard through the Conditions of Approval.**

13.12.150 - Penalties and enforcement.

A. The City is authorized to make inspections and take such actions as required to enforce the provisions of this chapter. The City has the authority to enter onto land for the purpose of inspecting site development activities or resulting improvements. City staff will make an effort to contact the property owner before entering onto that property.

B. If the City Engineer determines a site has any unpermitted or illegal facilities placed, constructed or installed on the site, then the City Engineer shall notify the owner in writing directing the owner to submit a written plan (with construction drawings completed by a professional engineer, if otherwise required by this chapter) within ten calendar days. This plan (and drawings, if required) shall depict the restoration or stabilization of the site or correct the work that has adversely impacted adjacent or downstream property owners. The City Engineer shall review the plan (and drawings, if required) for compliance with City standards and issue comments for correction, if necessary, or issue an approval to the owner. The City shall establish a fee by resolution for such review, with all costs borne by the owner. If the required corrective work constitutes a grading permit, then the City shall collect the appropriate grading permit fee.

C. Any person, firm, corporation or entity violating any of the provisions of this chapter, whether they be the property owner, the applicant, the contractor or any other person acting with or without the authorization of the property owner or applicant, shall be subject to the code enforcement procedures of OCMC 1.16, 1.20 and 1.24.

Finding: Please refer to the findings within section 13.12.145.C of this report.

13.12.160 - Hazardous conditions.

A. Determination and Notification. If the City Engineer determines that any excavation, embankment, erosion/sedimentation control or drainage facility is a safety hazard; endangers property; or adversely affects the safety, use or stability of a public way, water quality resource areas (pursuant to OCMC 17.49) or drainage course, the owner(s) of the subject property and/or the person or agent in control of the property shall be required to repair or eliminate the hazard in conformance with the requirements of this chapter and the Public Works Stormwater and Grading Design Standards. At the time that the City Engineer makes the determination that a hazardous condition exists, the property owner and/or person or agent in control of the property will be notified in writing that the hazard exists.

B. Order to Correct. The City Engineer will order the specific work to be undertaken or will order that an engineering design be submitted for review and approval by the City Engineer, and will specify the time periods within which the hazardous conditions be repaired or eliminated. In the event that the owner and/or the person or agent in control of the property fails to comply with this order, that person shall be subject to the code enforcement procedures of OCMC 1.16, 1.20, and 1.24.

Finding: Not Applicable. The City Engineer has not determined that any excavation, embankment, erosion/sedimentation control or drainage facility is a safety hazard; endangers property; or adversely affects the safety, use or stability of a public way, water quality resource areas (pursuant to OCMC 17.49) or drainage course.

13.12.170 - Permits from other jurisdictions.

A. The Oregon State Department of Environmental Quality (DEQ) currently issues NPDES 1200-C permits for projects that cover areas of one acre or greater. No permit shall be issued for projects of this size (or any other size as modified by DEQ) without a copy of said DEQ permit being on file with Oregon City. DEQ is responsible for policing its own permits; however, if City personnel observe conditions that are believed to be in violation of any such permit, and cannot get corrections made, the City will bring such conditions to the attention of the appropriate DEQ representatives.

Finding: Complies with Condition. The developer shall obtain a 1200-C (NPDES) permit from Oregon Department of Environmental Quality (DEQ) for construction activities one acre or greater prior to

receiving city permit(s) and beginning construction. **Staff has determined that it is possible, likely and reasonable that the applicant can meet this standard through the Conditions of Approval.**

B. Projects may require Oregon State Division of State Lands (DSL) and/or United States Army Corps of Engineers (USACE) permits. If such permits are required, no permission to construct will be granted until such a time as a copy of such permit is on file with the City or notice is received from those agencies that a permit is not required. DSL/USACE is responsible for enforcing its own permits; however, if City personnel observe conditions that are believed to be in violation of any such permit, and cannot get corrections made, the City will bring such conditions to the attention of the appropriate DSL/USACE representatives.
Finding: Not Applicable. The project does not require Oregon State Division of State Lands (DSL) and/or United States Army Corps of Engineers (USACE) permits.

C. Projects may require Oregon State Department of Fish and Wildlife (ODFW) permits. When ODFW permits are required, no work will be authorized until the receipt of a copy of the ODFW permit. ODFW is responsible for policing its own permits; however, if City personnel observe conditions that are believed to be in violation of any such permit, and cannot get corrections made, the City will bring such conditions to the attention of the appropriate ODFW representatives.
Finding: Not Applicable. The project does not impact any land which requires ODFW approval.

13.12.180 - Violation—Penalty.
Any act or omission in violation of this chapter shall be deemed a nuisance. Violation of any provision of this chapter is subject to the code enforcement procedures of OCMC 1.16, 1.20 and 1.24.
Finding: Not Applicable. The city has identified any acts or omission in violation of Chapter 13.12.

CHAPTER 15.48 – GRADING, FILLING AND EXCAVATING

15.48.030 Applicability—Grading permit required.
A. A city-issued grading permit shall be required before the commencement of any of the following filling or grading activities:
1. Grading activities in excess of ten cubic yards of earth;
2. Grading activities which may result in the diversion of existing drainage courses, both natural and man-made, from their natural point of entry or exit from the grading site;
3. Grading and paving activities resulting in the creation of impervious surfaces greater than two thousand square feet or more in area;
4. Any excavation beyond the limits of a basement or footing excavation, having an unsupported soil height greater than five feet after the completion of such a structure; or
5. Grading activities involving the clearing or disturbance of one-half acres (twenty-one thousand seven hundred eighty square feet) or more of land.
B. Those fill and grading activities proposed to be undertaken in conjunction with a land use application, including but not limited to subdivisions, planned unit developments, partitions and site plan reviews, are subject to the standards of this chapter. However, a separate grading permit is not required. Approval of the construction plans submitted through the land use application process shall constitute the grading permit required under this chapter.
Finding: Complies as Proposed. Fill and grading activities are proposed to be undertaken in conjunction with a land use application. A separate grading permit is not required. Approval of the construction plans submitted through the land use application process shall constitute the grading permit required under this chapter.

15.48.040 - Grading permit exemptions.
The following filling and grading activities shall not require the issuance of a grading permit:
A. Excavation for utilities, or for wells or tunnels allowed under separate permit by other governmental agencies;

B. An excavation below finished grade for basements and footings of a building, retaining wall or other structure authorized by a valid building permit. The placement of any fill material removed from such an excavation requires a grading permit if:
1. It exceeds fifty cubic yards,
2. More than ten cubic yards are removed from the site, or
3. The fill is placed on the site to a depth greater than one foot;
C. Farming practices as defined in ORS 30.930 and farm uses as defined in ORS 215.203, except that buildings associated with farm practices and farm uses are subject to the requirements of this chapter;
D. Excavation for cemetery graves;
E. Sandbagging, diking, ditching, filling or similar work when done to protect life or property during an emergency;
F. Repaving of existing paved surfaces that does not alter existing drainage patterns;
G. Maintenance work on public roads performed under the direction of the city, Clackamas County or Oregon State Department of Transportation personnel.

Finding: Not Applicable. Fill and grading activities are proposed to be undertaken in conjunction with a land use application. A separate grading permit is not required. Approval of the construction plans submitted through the land use application process shall constitute the grading permit required under this chapter.

15.48.090 Submittal requirements.

An engineered grading plan or an abbreviated grading plan shall be prepared in compliance with the submittal requirements of the Public Works Stormwater and Grading Design Standards whenever a city approved grading permit is required. In addition, a geotechnical engineering report and/or residential lot grading plan may be required pursuant to the criteria listed below.
A. Abbreviated Grading Plan. The city shall allow the applicant to submit an abbreviated grading plan in compliance with the submittal requirements of the Public Works Stormwater and Grading Design Standards if the following criteria are met:
1. No portion of the proposed site is within the flood management area overlay district pursuant to Chapter 17.42, the unstable soils and hillside constraints overlay district pursuant to Chapter 17.44, or a water quality resource area pursuant to Chapter 17.49; and
2. The proposed filling or grading activity does not involve more than fifty cubic yards of earth.
B. Engineered Grading Plan. The city shall require an engineered grading plan in compliance with the submittal requirements of the Public Works Stormwater and Grading Design Standards to be prepared by a professional engineer if the proposed activities do not qualify for abbreviated grading plan.
C. Geotechnical Engineering Report. The city shall require a geotechnical engineering report in compliance with the minimum report requirements of the Public Works Stormwater and Grading Design Standards to be prepared by a professional engineer who specializes in geotechnical work when any of the following site conditions may exist in the development area:
1. When any publicly maintained facility (structure, street, pond, utility, park, etc.) will be supported by any engineered fill;
2. When an embankment for a stormwater pond is created by the placement of fill;
3. When, by excavation, the soils remaining in place are greater than three feet high and less than twenty feet wide.
D .Residential Lot Grading Plan. The city shall require a residential lot grading plan in compliance with the minimum report requirements of the Public Works Stormwater and Grading Design Standards to be prepared by a professional engineer for all land divisions creating new residential building lots or where a public improvement project is required to provide access to an existing residential lot.

Finding: Complies as Proposed. Fill and grading activities are proposed to be undertaken in conjunction with a land use application. A separate grading permit is not required. Approval of the construction plans submitted through the land use application process shall constitute the grading permit required under this chapter.

CHAPTER 16.12 – MINIMUM PUBLIC IMPROVEMENTS AND DESIGN STANDARDS FOR DEVELOPMENT

16.12.010 - Purpose and general provisions.
All development shall be in conformance with the policies and design standards established by this chapter and with applicable standards in the City's public facility master plans and City design standards and specifications. In reviewing applications for development, the City Engineer shall take into consideration any approved development and the remaining development potential of adjacent properties. All street, water, sanitary sewer, storm drainage and utility plans associated with any development shall be reviewed and approved by the City Engineer prior to construction. All streets, driveways or storm drainage connections to another jurisdiction's facility or right-of-way shall be reviewed by the appropriate jurisdiction as a condition of the preliminary plat and when required by law or intergovernmental agreement shall be approved by the appropriate jurisdiction.
Finding: Complies with Condition. Compliance with the "propose and general provisions" of chapter 16.12 can be met by adhering to the following: The development shall comply with all current Oregon City Public Works design standards, specifications, codes, and policies. The workmanship and materials for any work performed under permits issued by Oregon City Public Works shall be in accordance with the edition of the "Oregon Standard Specifications for Construction" as prepared by the Oregon Department of Transportation (ODOT) and the Oregon Chapter of American Public Works Association (APWA) and as modified and adopted by the city. The development shall provide construction plans, stamped and signed by a professional engineer licensed in the State of Oregon, containing street, grading, stormwater, sanitary sewer and water infrastructure improvements that conforms to all current Oregon City Public Works standards, specifications, codes, and policies for review and approval by the City prior to receiving a permit for construction. **Staff has determined that it is possible, likely and reasonable that the applicant can meet this standard through the Conditions of Approval.**

16.12.011 - Applicability.

A. Compliance with this chapter is required for all development including land divisions, site plan and design review, master plan, detailed development plan and conditional use applications and all public improvements. Minor Site Plan and Design Review applications shall not be subject to this chapter unless improvements are proposed within the right-of-way, or as otherwise provided in this chapter.

B. Compliance with this chapter is also required for new construction or additions which exceed fifty percent of the existing square footage of all 3-4 plexes, single and two-family dwellings living space. Garages, carports, sheds, and porches may not be included in the calculation if these spaces are not living spaces. Accessory dwelling units are not subject to compliance with this chapter. All applicable 3-4 plexes, single and two -family dwellings shall provide any necessary dedications, easements or agreements as identified in the transportation system plan and this chapter, subject to constitutional limitations. In addition, the street frontage shall be improved to include the following priorities for improvements:

1. Improve street pavement, construct curbs, gutters, sidewalks and planter strips; and
2. Plant street trees.

The cost of compliance with the standards identified in 16.12.011.B.1 and 16.12.011.B.2 is calculated based on the square footage valuation from the State of Oregon Building Codes Division and limited to ten percent of the total construction costs. The value of the alterations and improvements is based on the total construction costs for a complete project rather than costs of various project component parts subject to individual building permits. The entire proposed construction project cost includes engineering and consulting fees and construction costs. It does

not include permit fees, recording fees, or any work associated with drafting or recording dedications or easements.

Finding: Not Applicable. This project is a minor site plan review and therefore is not subject to the requirements of Chapter 16.12.

16.12.012 - Jurisdiction and management of the public rights-of-way.

The City has jurisdiction and exercises regulatory management over all public rights-of-way as defined and outlined within 12.04 of the Oregon City Municipal Code.

Finding: Applicable. The city has exercised its regulatory management authority by providing findings within this staff report with conditions to be met by the applicant prior to working within all public rights-of-way.

16.12.013 - Modifications.

The applicant may request and the review body may consider modification of the standards in this chapter resulting from constitutional limitations restricting the City's ability to require the dedication of property or for any other reason, based upon the criteria listed below and other criteria identified in the standard to be modified. All modifications, except for adjustments approved by the City Engineer for tree preservation purposes pursuant to 16.12.013.A, shall be processed through a Type II Land Use application and may require additional evidence from a transportation engineer or others to verify compliance. Compliance with the following criteria is required:

A. The modification meets the intent of the standard;

Finding: Not Applicable. No modification has been requested.

B. The modification provides safe and efficient movement of pedestrians, motor vehicles, bicyclists and freight;

Finding: Not Applicable. No modification has been requested.

C. The modification is consistent with an adopted transportation or utility plan; and

Finding: Not Applicable. No modification has been requested.

D. The modification is complementary with a surrounding street design; or, in the alternative;

Finding: Not Applicable. No modification has been requested.

E. If a modification is requested for constitutional reasons, the applicant shall demonstrate the constitutional provision or provisions to be avoided by the modification and propose a modification that complies with the state or federal constitution. The City shall be under no obligation to grant a modification in excess of that which is necessary to meet its constitutional obligations.

Finding: Not Applicable. No modification has been requested.

16.12.014 - Administrative provisions.

An applicant shall submit the following items to the City and complete the following tasks prior to proceeding with construction of proposed development plans. These items include the following:

A. Pre-Design Meeting;

B. Final Engineering Plans, Stamped and Signed by an Oregon Licensed Professional Engineer;

C. Stormwater Report, Stamped and Signed by an Oregon Licensed Professional Engineer;

D. Geotechnical Report, Stamped and Signed by an Oregon Licensed Professional Engineer (if applicable);

E. Engineer's Preliminary and Final Cost Estimates (also may be known as engineer's opinion of probable construction cost);

F. Plan Check and Inspection Fees (as set by City resolution);
G. Certificate of Liability Insurance for city funded public projects contracted by the City (not less than one million dollars single incident and two million dollars aggregate);
H. Preconstruction Meeting Notes;
I. Financial Guarantee(s) per OCMC 17.50.140;
J. Applicable Approvals/Permits from other agencies or entities;
K. Developer/Engineer Agreement for public works improvements.
An applicant shall submit the following additional items to the City and complete the following tasks prior to completing construction of proposed development plans. These items include the following:
L. Project Engineer's Certificate of Completion;
M. Stormwater Operation and Maintenance Easement (if applicable);
N. Deed of Dedication (Bargain and Sale Deed);
O. Recorded Plat and/or Easements (if applicable);
P. Recorded Non-Remonstrance Covenant Agreement;
Q. Land Division Compliance Agreement (if applicable);
R. Permanent Stabilization and/or Restoration of the impact from the development;
S. Fulfillment of all Conditions of Approval;
T. Payment of all Outstanding Fees;
U. Maintenance Guarantee(s). per OCMC 17.50.141;
V. Indemnity Agreement (if applicable);
W. Completed Punchlist;
X. As-Built Drawings;
Details on individual items required by this subsection can be obtained by contacting Public Works. Many items, such as the engineer's cost estimate and plan check and inspection fee, maybe be submitted in conjunction with documentation for other infrastructure improvements that are done with the development (such as street, sanitary sewer, and water).
Finding: Complies with Condition. The applicant shall submit or address all items in section 16.12.014 of the Oregon City Municipal Code based on the timing requirements contained therein and as deemed applicable by the City.
The developer and engineer for the project shall execute a "Developer/Engineer Agreement for Public Works Improvements" and commit to the responsibilities outlined in the agreement prior to receiving a permit for construction. The development shall provide construction plans, stamped and signed by a professional engineer licensed in the State of Oregon, containing street, grading, stormwater, sanitary sewer and water infrastructure improvements that conforms to all current Oregon City Public Works standards, specifications, codes, and policies for review and approval by the City prior to receiving a permit for construction. The development's contractor(s) and engineer(s) shall attend a pre-construction meeting with Oregon City staff prior to beginning all construction work (public and private) associated with the development. The public improvements shall be constructed according to approved final engineering plans prior to occupancy. **Staff has determined that it is possible, likely and reasonable that the applicant can meet this standard through the Conditions of Approval.**

16.12.015 - Street design—Generally.
Development shall be required to provide existing or future connections to adjacent sites through the use of vehicular and pedestrian access easements where applicable. Development shall provide any necessary dedications, easements or agreements as identified in the Transportation System Plan, Trails Master Plan, and/or Parks and Recreation Master Plan and this chapter, subject to constitutional limitations. The location, width and grade of street shall be considered in relation to: existing and planned streets, topographical conditions, public convenience and safety for all modes of travel, existing

and identified future transit routes and pedestrian/bicycle accessways, overlay districts, and the proposed use of land to be served by the streets. The street system shall assure an adequate traffic circulation system with intersection angles, grades, tangents and curves appropriate for the traffic to be carried considering the terrain. To the extent possible, proposed streets shall connect to all existing or approved stub streets that abut the development site. The arrangement of streets shall either:
A. Provide for the continuation or appropriate projection of existing principal streets in the surrounding area and on adjacent parcels or conform to a plan for the area approved or adopted by the City to meet a particular situation where topographical or other conditions make continuance or conformance to existing streets impractical;
B. Where necessary to give access to or permit a satisfactory future development of adjoining land, streets shall be extended to the boundary of the development and the resulting dead-end street (stub) may be approved with a temporary turnaround as approved by the City Engineer. Notification that the street is planned for future extension shall be posted on the stub street until the street is extended and shall inform the public that the dead-end street may be extended in the future. Access control in accordance with OCMC 16.12.017 shall be required to preserve the objectives of street extensions.
C. Adequate right-of-way and improvements to streets, pedestrian ways, bike routes and bikeways, and transit facilities shall be provided and be consistent with the City's Transportation System Plan. Consideration shall be given to the need for street widening and other improvements in the area of the proposed development impacted by traffic generated by the proposed development. This shall include, but not be limited to, improvements to the right-of-way, such as installation of lighting, signalization, turn lanes, median and parking strips, traffic islands, paving, curbs and gutters, sidewalks, bikeways, street drainage facilities and other facilities needed because of anticipated vehicular and pedestrian traffic generation.

Finding: Not Applicable. This project is a minor site plan review and therefore is not subject to the requirements of Chapter 16.12. Furthermore, the development fronts Fir Street which has adequate pavement and sidewalk. Fir Street provides for continuation or appropriate projection of existing principal streets in the surrounding area and on adjacent parcels. Fir Street has adequate pavement width to accommodate the addition of a bike lane identified in the Transportation System Plan (Project B32). The existing right-of-way adequately accommodates the street width, pedestrian way and bikeway in a manner consistent with the City's Transportation System Plan. Dedication of additional right-of-way or public utility improvements, of this section does not apply.

16.12.016 - Street design.
All development regulated by this chapter shall provide street improvements in compliance with the standards in Table 16.12.016 depending on the street classification set forth in the Transportation System Plan and the Comprehensive Plan designation of the adjacent property, unless an alternative plan has been adopted. The table implements the adopted Transportation System Plan and illustrates the maximum design standards. These standards may be reduced with an alternative street design which may be approved based on the modification criteria in OCMC 16.12.013. The steps for reducing the street design are found in the Transportation System Plan.

Table 16.12.016 Street Design
Table 16.12.016 Street Design. To read the table select the road classification as identified in the Transportation System Plan and the Comprehensive Plan designation of the adjacent properties to find the maximum design standards for the road cross section. If the Comprehensive Plan designation for lands on either side of the street differs, the wider right-of-way standard shall apply.

Road Classification	Comprehensive Plan Designation	Right-of-Way Width	Pavement Width	Public Access	Sidewalk	Landscape Strip	Bike Lane	Street Parking	Travel Lanes	Median
Major Arterial	Mixed Use, Commercial or Public/Quasi Public	116 ft.	94 ft.	0.5 ft.	10.5 ft. sidewalk including 5 ft. x 5 ft. tree wells		6 ft.	8 ft.	(5) 12 ft. Lanes	6 ft.
	Industrial	120 ft.	88 ft.	0.5 ft.	5 ft.	10.5 ft.	6 ft.	N/A	(5) 14 ft. Lanes	6 ft.
	Residential	126 ft.	94 ft.	0.5 ft.	5 ft.	10.5 ft.	6 ft.	8 ft.	(5) 12 ft. Lanes	6 ft.

Road Classification	Comprehensive Plan Designation	Right-of-Way Width	Pavement Width	Public Access	Sidewalk	Landscape Strip	Bike Lane	Street Parking	Travel Lanes	Median
Minor Arterial	Mixed Use, Commercial or Public/Quasi Public	116 ft.	94 ft.	0.5 ft.	10.5 ft. sidewalk including 5 ft. x 5 ft. tree wells		6 ft.	8 ft.	(5) 12 ft. Lanes	6 ft.
	Industrial	118 ft.	86 ft.	0.5 ft.	5 ft.	10.5 ft.	6 ft.	7 ft.	(5) 12 ft. Lanes	N/A
	Residential	100 ft.	68 ft.	0.5 ft.	5 ft.	10.5 ft.	6 ft.	7 ft.	(3) 12 ft. Lanes	6 ft.

Road Classification	Comprehensive Plan Designation	Right-of-Way Width	Pavement Width	Public Access	Sidewalk	Landscape Strip	Bike Lane	Street Parking	Travel Lanes	Median
Collector	Mixed Use, Commercial or Public/Quasi Public	86 ft.	64 ft.	0.5 ft.	10.5 ft. sidewalk including 5 ft. x 5 ft. tree wells		6 ft.	8 ft.	(3) 12 ft. Lanes	N/A
	Industrial	88 ft.	62 ft.	0.5 ft.	5 ft.	7.5 ft.	6 ft.	7 ft.	(3) 12 ft. Lanes	N/A

	Residential	*85 ft.*	*59 ft.*	*0.5 ft.*	*5 ft.*	*7.5 ft.*	*6 ft.*	*7 ft.*	*(3) 11 ft. Lanes*	*N/A*

Road Classification	*Comprehensive Plan Designation*	*Right-of-Way Width*	*Pavement Width*	*Public Access*	*Sidewalk*	*Landscape Strip*	*Bike Lane*	*Street Parking*	*Travel Lanes*	*Median*
Local	*Mixed Use, Commercial or Public/Quasi Public*	*62 ft.*	*40 ft.*	*0.5 ft.*	*10.5 ft. sidewalk including 5 ft. x 5 ft. tree wells*		*N/A*	*8 ft.*	*(2) 12 ft. Lanes*	*N/A*
	Industrial	*60 ft.*	*38 ft.*	*0.5 ft.*	*5 ft.*	*5.5 ft.*	*(2) 19 ft. Shared Space*			*N/A*
	Residential	*54 ft.*	*32 ft.*	*0.5 ft.*	*5 ft.*	*5.5 ft.*	*(2) 16 ft. Shared Space*			*N/A*

1. Pavement width includes, bike lane, street parking, travel lanes and median.
2. Public access, sidewalks, landscape strips, bike lanes and on-street parking are required on both sides of the street in all designations. The right-of-way width and pavement widths identified above include the total street section.
3. A 0.5 foot curb is included in landscape strip or sidewalk width.
4. Travel lanes may be through lanes or turn lanes.
5. The 0.5 foot public access provides access to adjacent public improvements.
6. Alleys shall have a minimum right-of-way width of twenty feet and a minimum pavement width of sixteen feet. If alleys are provided, garage access shall be provided from the alley.
7. A raised concrete median or landscape median shall be utilized for roads identified to have access restrictions.

Finding: Not Applicable. This project is a minor site plan review and therefore is not subject to the requirements of Chapter 16.12. Furthermore, the development fronts Fir Street which has adequate pavement and sidewalk. Fir Street provides for continuation or appropriate projection of existing principal streets in the surrounding area and on adjacent parcels. Fir Street has adequate pavement width to accommodate the addition of a bike lane identified in the Transportation System Plan (Project B32). The existing right-of-way adequately accommodates the street width, pedestrian way and bikeway in a manner consistent with the City's Transportation System Plan. Dedication of additional right-of-way or public utility improvements, of this section does not apply.

A. Sidewalks. The applicant shall provide for sidewalks on both sides of all public streets, on any private street if so required by the decision-maker, and in any special pedestrian way within the development. Both sidewalks and curbs are to be constructed to City standards and at widths set forth above, and according to plans and specifications provided by the City Engineer. Exceptions to this requirement may be allowed in order to accommodate topography, trees or some similar site constraint. In the case of major or minor arterials, the decision-maker may approve a development without sidewalks where sidewalks are found to be dangerous or otherwise impractical to construct or are not reasonably related to the applicant's development. The decision-maker may require the applicant to provide sidewalks concurrent with the issuance of the initial building permit within the area that is the subject of the

development application. Applicants for partitions may be allowed to meet this requirement by providing the City with a financial guarantee per OCMC 16.12.110.
Finding: Not Applicable. This project is a minor site plan review and therefore is not subject to the requirements of Chapter 16.12. Furthermore, the development fronts Fir Street which has adequate pavement and sidewalk. The project proposes to reconstruct a section of public sidewalk where the existing center driveway is closed and provide ADA compliance upgrades as necessary, but does not propose any additional upgrades to the sidewalk, therefore this section does not apply.

B. Pedestrian and Bicycle Accessways Routes. If deemed appropriate to extend pedestrian and bicycle routes, existing or planned, the decision-maker may require the installation of separate pedestrian and bicycle facilities.
Finding: Not Applicable. This project is a minor site plan review and therefore is not subject to the requirements of Chapter 16.12. Furthermore, the development fronts Fir Street which has adequate pavement and sidewalk. Fir Street provides for continuation or appropriate projection of existing principal streets in the surrounding area and on adjacent parcels. Fir Street has adequate pavement width to accommodate the addition of a bike lane identified in the Transportation System Plan (Project B32). The existing right-of-way adequately accommodates the street width, pedestrian way and bikeway in a manner consistent with the City's Transportation System

C. Street Name Signs and Traffic Control Devices. The applicant shall install street signs and traffic control devices as directed by the City Engineer. Street name signs and traffic control devices shall be in conformance with all applicable city regulations and standards.
Finding: Not Applicable. No new streets or new traffic control devices are proposed or required to be installed with this development.

D. Street Lights. The applicant shall install street lights which shall be served from an underground source of supply. Street lights shall be in conformance with all City regulations.
Finding: Not Applicable. There is an existing streetlight along the frontage of the property is proposed to remain that is located near the center of the property's Fir Street frontage. This project does not propose any new installation or upgrades to street lighting, therefore this section does not apply.

E. Any new street proposed with a pavement width of less than thirty-two feet shall be processed through OCMC 16.12.013 and meet minimum life safety requirements, which may include fire suppression devices as determined by the Fire Marshall to assure an adequate level of fire and life safety. The modified street shall have no less than a twenty-foot wide unobstructed travel lane.
Finding: Not Applicable. No new streets are proposed or required with this development.

F. All development shall include vegetated planter strips that are five feet in width or larger and located between the sidewalk and curb unless otherwise approved pursuant to this chapter. All development shall utilize the vegetated planter strip for the placement of street trees or place street trees in other acceptable locations, as prescribed by OCMC 12.08. Development proposed along a collector, minor arterial, or major arterial roads may place street trees within tree wells within a wider sidewalk in lieu of a planter strip. In addition to street trees per OCMC 12.08, vegetated planter strips shall include ground cover and/or shrubs spaced four feet apart and appropriate for the location. No invasive or nuisance plant species shall be permitted.
Finding: Not Applicable. This project is a minor site plan review and therefore is not subject to the requirements of Chapter 16.12. The existing sidewalk has been approved without a vegetated planter strip between the sidewalk and curb.

G. Vehicle and pedestrian access easements may serve in lieu of streets when approved by the decision maker and only where dedication of a street is deemed impracticable.
Finding: Not Applicable. The decision maker has not approved access easements in lieu of streets nor has dedication of a street been deemed necessary.

H. Vehicular and pedestrian easements shall allow for public access and shall comply with all applicable pedestrian access requirements.
Finding: Not Applicable. No vehicular or pedestrian easements are proposed.

16.12.017 - Street design—Access control.
A. A street which is dedicated to end at the boundary of the development or in the case of half-streets dedicated along a boundary shall have an access control granted to the City as a City controlled plat restriction for the purposes of controlling ingress and egress to the property adjacent to the end of the dedicated street. The access control restriction shall exist until such time as a public street is created, by dedication and accepted, extending the street to the adjacent property.
B. The City may grant a permit for the adjoining owner to access through the access control.
C. The plat shall contain the following access control language or similar on the face of the map at the end of each street for which access control is required: "Access Control (See plat restrictions)."
D. Said plats shall also contain the following plat restriction note(s): "Access to (name of street or tract) from adjoining tracts (name of deed document number[s]) shall be controlled by the City of Oregon City by the recording of this plat, as shown. These access controls shall be automatically terminated upon the acceptance of a public road dedication or the recording of a plat extending the street to adjacent property that would access through those Access Controls."
Finding: Not Applicable. No new streets with dead ends are proposed for this development.

16.12.018 - Street design—Alignment.
The centerline of streets shall be:
A. Aligned with existing streets by continuation of the centerlines; or
B. Offset from the centerline by no more than five feet, provided appropriate mitigation, in the judgment of the City Engineer, is provided to ensure that the offset intersection will not pose a safety hazard.
C. Driveways that are at least twenty-four feet wide shall align with existing or planned streets on adjacent sites.
Finding: Not Applicable. The existing street alignment meet the City requirements and no driveways from the development align with existing or planned streets on adjacent sites.

16.12.019 - Traffic sight obstructions.
All new streets shall comply with the Traffic Sight Obstructions in Chapter 10.32.
Finding: Not Applicable. No new streets are proposed for this development.

16.12.020 - Street design—Intersection angles.
Except where topography requires a lesser angle, streets shall be laid out to intersect at angles as near as possible to right angles. In no case shall the acute angles be less than eighty degrees unless there is a special intersection design. An arterial or collector street intersecting with another street shall have at least one hundred feet of tangent adjacent to the intersection unless topography requires a lesser distance. Other streets, except alleys, shall have at least fifty feet of tangent adjacent to the intersection unless topography requires a lesser distance. All street intersections shall be provided with a minimum curb return radius of twenty-five feet for local streets. Larger radii shall be required for higher street

classifications as determined by the City Engineer. Additional right-of-way shall be required to accommodate curb returns and sidewalks at intersections. Ordinarily, intersections should not have more than two streets at any one point.
Not Applicable. No new intersections are being created.

16.12.021 - Street design—Grades and curves.
Grades and center line radii shall conform to standards approved by the City Engineer.
Finding: Not Applicable. No new streets are proposed for this development.

16.12.022 - Street design—Development abutting arterial or collector street.
Where development abuts or contains an existing or proposed arterial or collector street, the decision maker may require: access control; screen planting or wall contained in an easement or otherwise protected by a restrictive covenant in a form acceptable to the decision maker along the rear or side property line; or such other treatment it deems necessary to adequately protect residential properties or afford separation of through and local traffic. Reverse frontage lots with suitable depth may also be considered an option for residential property that has arterial frontage. Where access for development abuts and connects for vehicular access to another jurisdiction's facility then authorization by that jurisdiction may be required.
Finding: Not Applicable. The development abuts a collector street. However, the decision maker has not required: access control; screen planting or wall contained in an easement or otherwise protected by a restrictive covenant to adequately protect residential properties.

16.12.023 - Street design—Pedestrian and bicycle safety.
Where deemed necessary to ensure public safety, reduce traffic hazards and promote the welfare of pedestrians, bicyclists and residents of the subject area, the decision maker may require that local streets be so designed as to discourage their use by nonlocal automobile traffic.
The City Engineer may require that crosswalks include a large vegetated or sidewalk area which extends into the street pavement as far as practicable to provide safer pedestrian crossing opportunities. These curb extensions can increase the visibility of pedestrians and provide a shorter crosswalk distance as well as encourage motorists to drive slower. The City Engineer may approve an alternative design that achieves the same standard for constrained sites.
Finding: Not Applicable. The development does not require a street design that discourages use by non-local traffic. The City Engineer has not required that crosswalks include a large vegetated or sidewalk area which extends into the street pavement as far as practicable to provide safer pedestrian crossing opportunities.

16.12.024 - Street design—Half street.
Half streets, while generally not acceptable, may be approved where essential to the development, when in conformance with all other applicable requirements, and where it will not create a safety hazard. When approving half streets, the decision maker shall first determine that it will be practical to require the dedication of the other half of the street when the adjoining property is divided or developed. Where the decision maker approves a half street, the applicant shall construct a half street with at least twenty feet of pavement width and provide signage prohibiting street parking so as to make the half street safe until such time as the other half is constructed. Whenever a half street is adjacent to property capable of being divided or developed, the other half of the street shall be provided and improved when that adjacent property divides or develops. Access control may be required to preserve the objectives of half streets.

When the remainder of an existing half-street improvement is completed it shall include the following items: dedication of required right-of-way, construction of the remaining portion of the street including pavement, curb and gutter, landscape strip, sidewalk, street trees, lighting and other improvements as required for that particular street. It shall also include at a minimum the pavement replacement to the centerline of the street. Any damage to the existing street shall be repaired in accordance with the City's "Pavement Cut Standards" or as approved by the City Engineer.
Finding: Not Applicable. This application does not propose any half streets.

16.12.025 - Street design—Cul-de-sacs and dead-end streets.
The City discourages the use of cul-de-sacs and permanent dead-end streets except where construction of a through street is found by the decision maker to be impracticable due to topography or some significant physical constraint such as geologic hazards, wetland, natural or historic resource areas, pre-existing dedicated open space, pre-existing development patterns, arterial access restrictions or similar situation as determined by the decision maker. This section is not intended to preclude the use of curvilinear eyebrow widening of a street where needed.
A. When permitted, access from new cul-de-sacs and permanent dead-end streets shall be limited to a maximum of twenty-five dwelling units.
Finding: Not Applicable. No cul-de-sacs or dead-end streets are proposed or required for this development.

B. Cul-de-sacs and permanent dead-end streets shall include pedestrian/bicycle accessways to meet minimum block width standards as prescribed in OCMC 16.12.030.
Finding: Not Applicable. No cul-de-sacs or dead-end streets are proposed or required for this development.

C. Cul-de-sacs shall have sufficient radius to provide adequate turn-around for emergency vehicles in accordance with fire district and city adopted street standards.
Finding: Not Applicable. No cul-de-sacs or dead-end streets are proposed or required for this development.

D. Permanent dead-end streets shall provide public street right-of-way/easements sufficient to provide a sufficient amount of turn-around space complete with appropriate no-parking signs or markings to accommodate waste disposal, sweepers, emergency and other long vehicles in the form of a hammerhead or other design to be approved by the decision maker.
Finding: Not Applicable. No cul-de-sacs or dead-end streets are proposed or required for this development.

E. In the case of dead-end stub streets that will connect to streets on adjacent sites in the future, notification that the street is planned for future extension shall be posted on the stub street until the street is extended and shall inform the public that the dead-end street may be extended in the future. A dead-end street shall include signage or barricade meeting Manual on Uniform Traffic Control Devices (MUTCD).
Finding: Not Applicable. No cul-de-sacs or dead-end streets are proposed or required for this development.

16.12.026 - Street design—Alleys.
Alleys with public access easements on private property shall be provided in the Park Place and South End concept plan areas for the following districts R-5, R-3.5, R-2, MUC-1, MUC-2 and NC zones unless

other permanent provisions for private access to off-street parking and loading facilities are approved by the decision maker. All alleys intended to provide access for emergency vehicles shall be a minimum width of twenty feet. The corners of alley intersections shall have a radius of not less than ten feet and shall conform to standards approved by the City Engineer. Access easements and maintenance agreements shall be recorded on affected properties.
Finding: Not Applicable. Alleys are not proposed or required for this development.

16.12.027 - Street design—Off-site street improvements.
During consideration of the preliminary plan for a development, the decision maker shall determine whether existing streets impacted by, adjacent to, or abutting the development meet the applicable design or dimensional requirements. Where such streets fail to meet these requirements, the decision-maker shall require the applicant to make proportional improvements sufficient to achieve conformance with minimum applicable design standards required to serve the proposed development.
Finding: Not Applicable. Off-site street improvements are not proposed or required for this development.

16.12.028 - Street design—Transit.
Streets shall be designed and laid out in a manner that promotes pedestrian and bicycle circulation. The applicant shall coordinate with transit agencies where the application impacts transit streets as identified in OCMC 17.04.1310. Pedestrian/bicycle access ways shall be provided as necessary to minimize the travel distance to transit streets and stops and neighborhood activity centers. The decision maker may require provisions, including easements, for transit facilities along transit streets where a need for bus stops, bus pullouts or other transit facilities within or adjacent to the development has been identified.
Finding: Complies as Proposed. No new streets are required or proposed and the existing streets adjacent to the development are laid out in a manner that promotes pedestrian and bicycle circulation.

16.12.029 - Excavations—Restoration of pavement.
Whenever any excavation shall have been made in any pavement or other street improvement on any street or alley in the City for any purpose whatsoever under the permit granted by the engineer, it shall be the duty of the person making the excavation to restore the pavement in accordance with the City of Oregon City Public Works Pavement Cut Standards in effect at the time the permit is granted. The City Commission may adopt and modify the City of Oregon City Public Works Pavement Cut Standards by resolution as necessary to implement the requirements of this chapter.
Finding: Complies with Condition. Reconstruction of a driveway approaches connecting to Fir Street is proposed. Pavement cuts or improvements on any public street or alley in the City shall adhere to the City of Oregon City Public Works Pavement Cut Standards. **Staff has determined that it is possible, likely and reasonable that the applicant can meet this standard through the Conditions of Approval.**

16.12.030 - Blocks—Width.
The width of blocks shall ordinarily be sufficient to allow for two tiers of lots with depths consistent with the type of land use proposed. The length, width and shape of blocks shall take into account the need for adequate building site size, convenient motor vehicle, pedestrian, bicycle and transit access, control of traffic circulation, and limitations imposed by topography and other natural features.
All new streets shall be designed as local streets unless otherwise designated as arterials and collectors in the current adopted Transportation System Plan. The maximum block spacing between streets is 530 feet and the minimum block spacing between streets is 150 feet as measured between the right-of-way centerlines except in zones GI, CI, MUE, I, and WFDD where determining the appropriate street spacing

will be determined by the City Engineer. If the maximum block size is exceeded, pedestrian accessways shall be provided every 330 feet. The spacing standards within this section do not apply to alleys.
Finding: Not Applicable. The development property is zoned GI and the existing street spacing has been deemed appropriate by the City Engineer.

16.12.031 - Street design—Street names.
Except for extensions of existing streets, no street name shall be used which will duplicate or be confused with the name of an existing street. Street names shall conform to the established standards in the City and shall be subject to the approval of the City.
Finding: Not Applicable. No new street is proposed.

16.12.032 – Public off-street pedestrian and bicycle accessways.
Pedestrian/bicycle accessways are intended to provide direct, safe and convenient connections between residential areas, retail and office areas, institutional facilities, industrial parks, transit streets, neighborhood activity centers, rights-of-way, and pedestrian/bicycle accessways which minimize out-of-direction travel, and transit-orientated developments where public street connections for automobiles, bicycles and pedestrians are unavailable. Pedestrian/bicycle accessways are appropriate in areas where public street options are unavailable, impractical or inappropriate. Pedestrian and bicycle accessways are required through private property or as right-of-way connecting development to the right-of-way at intervals not exceeding 330 feet of frontage; or where the lack of street continuity creates inconvenient or out of direction travel patterns for local pedestrian or bicycle trips.
A. Entry points shall align with pedestrian crossing points along adjacent streets and with adjacent street intersections.
B. Accessways shall be free of horizontal obstructions and have a nine foot six inch high vertical clearance to accommodate bicyclists. To safely accommodate both pedestrians and bicycles, accessway right-of-way widths shall be as follows:

> *1. Accessways shall have a fifteen- foot wide right-of-way with a seven-foot wide paved surface with a minimum four-foot planter strip on either side.*
> *2. If an accessway also provides secondary fire access, the right-of-way width shall be at least twenty- four feet wide with a - sixteen foot paved surface between four-foot planter strips on either side.*

C. Accessways shall be direct with at least one end point of the accessway always visible from any point along the accessway. On-street parking shall be prohibited within fifteen feet of the intersection of the accessway with public streets to preserve safe sight distance and promote safety.
D. To enhance pedestrian and bicycle safety, accessways shall be lighted with pedestrian-scale lighting. Accessway lighting shall be to a minimum level of one-half-foot-candles, a one and one-half foot-candle average, and a maximum to minimum ratio of seven-to-one and shall be oriented not to shine upon adjacent properties. Street lighting shall be provided at both entrances.
E. Accessways shall comply with Americans with Disabilities Act (ADA).
F. The planter strips on either side of the accessway shall be landscaped along adjacent property by installation of the following:
1. Either an evergreen hedge screen of thirty to forty-two inches high or shrubs spaced no more than four feet apart on average; and
2. Ground cover covering one hundred percent of the exposed ground. No bark mulch shall be allowed except under the canopy of shrubs and within two feet of the base of trees; and
3. A two-inch minimum caliper tree for every thirty-five -feet along the accessway. Trees may be planted on either side of the accessway, provided they are spaced no more than thirty-five feet apart; and

4. In satisfying the requirements of this section, evergreen plant materials that grow over forty-two inches in height shall be avoided. All plant materials shall be selected from the Oregon City Native Plant List.
G. Accessways shall be designed to prohibit unauthorized motorized traffic. Curbs and removable, lockable bollards are suggested mechanisms to achieve this.
H. Accessway surfaces shall be paved with all-weather materials as approved by the City. Pervious materials are encouraged. Accessway surfaces shall be designed to drain stormwater runoff to the side or sides of the accessway. Minimum cross slope shall be two percent.
I. In parks, greenways or other natural resource areas, accessways may be approved with a five-foot wide gravel path with wooden, brick or concrete edgings.
J. The decision maker may approve an alternative accessway design due to existing site constraints through the modification process set forth in OCMC 16.12.013.
K. Ownership, liability and maintenance of accessways. To ensure that all pedestrian/bicycle accessways will be adequately maintained over time, the City Engineer shall require one of the following:
1. Dedicate the accessways to the public as public right-of-way prior to the final approval of the development; or
2. The developer incorporates the accessway into a recorded easement or tract that specifically requires the property owner and future property owners to provide for the ownership, liability and maintenance of the accessway.
Finding: Not Applicable. Existing public street options are available and provide direct, safe and convenient connections between residential areas and the development property. Public off-street pedestrian and bicycle accessways have not been deemed necessary or applicable for this development.

16.12.033 - Mobility standards.
Development shall demonstrate compliance with intersection mobility standards. When evaluating the performance of the transportation system, the City of Oregon City requires all intersections, except for the facilities identified in subsection E below, to be maintained at or below the following mobility standards during the two-hour peak operating conditions. The first hour has the highest weekday traffic volumes and the second hour is the next highest hour before or after the first hour. Except as provided otherwise below, this may require the installation of mobility improvements as set forth in the Transportation System Plan (TSP) or as otherwise identified by the City Engineer.
A. For intersections within the regional center, the following mobility standards apply:
1. During the first hour, a maximum v/c ratio of 1.10 shall be maintained. For signalized intersections, this standard applies to the intersection as a whole. For unsignalized intersections, this standard applies to movements on the major street. There is no performance standard for the minor street approaches.
2. During the second hour, a maximum v/c ratio of 0.99 shall be maintained at signalized intersections. For signalized intersections, this standard applies to the intersection as a whole. For unsignalized intersections, this standard applies to movements on the major street. There is no performance standard for the minor street approaches.
3. Intersections located on the Regional Center boundary shall be considered within the Regional Center.
B. For intersections outside of the Regional Center but designated on the Arterial and Throughway Network, as defined in the Regional Transportation Plan, the following mobility standards apply:
1. During the first hour, a maximum v/c ratio of 0.99 shall be maintained. For signalized intersections, this standard applies to the intersection as a whole. For unsignalized intersections, this standard applies to movements on the major street. There is no performance standard for the minor street approaches.
2. During the second hour, a maximum v/c ratio of 0.99 shall be maintained at signalized intersections. For signalized intersections, this standard applies to the intersection as a whole. For unsignalized

intersections, this standard applies to movements on the major street. There is no performance standard for the minor street approaches.
C. For intersections outside the boundaries of the Regional Center and not designated on the Arterial and Throughway Network, as defined in the Regional Transportation Plan, the following mobility standards apply:
1. For signalized intersections:
a. During the first hour, LOS "D" or better will be required for the intersection as a whole and no approach operating at worse than LOS "E" and a v/c ratio not higher than 1.0 for the sum of the critical movements.
b. During the second hour, LOS "D" or better will be required for the intersection as a whole and no approach operating at worse than LOS "E" and a v/c ratio not higher than 1.0 for the sum of the critical movements.
2. For unsignalized intersections outside of the boundaries of the Regional Center:
a. For unsignalized intersections, during the peak hour, all movements serving more than twenty vehicles shall be maintained at LOS "E" or better. LOS "F" will be tolerated at movements serving no more than twenty vehicles during the peak hour.
D. For the intersection of OR 213 & Beavercreek Road, the following mobility standards apply:
1. During the first, second & third hours, a maximum v/c ratio of 1.00 shall be maintained. Calculation of the maximum v/c ratio will be based on an average annual weekday peak hour.
E. Until the City adopts new performance measures that identify alternative mobility targets, the City shall exempt proposed development that is permitted, either conditionally, outright, or through detailed development master plan approval, from compliance with the above-referenced mobility standards for the following state-owned facilities:
I-205/OR 99E Interchange
State intersections located within or on the Regional Center Boundaries
1. In the case of conceptual development approval for a master plan that impacts the above references intersections:
a. The form of mitigation will be determined at the time of the detailed development plan review for subsequent phases utilizing the Code in place at the time the detailed development plan is submitted; and
b. Only those trips approved by a detailed development plan review are vested.
2. Development which does not comply with the mobility standards for the intersections identified in OCMC 16.12.033 shall provide for the improvements identified in the Transportation System Plan (TSP) in an effort to improve intersection mobility as necessary to offset the impact caused by development. Where required by other provisions of the Code, the applicant shall provide a traffic impact study that includes an assessment of the development's impact on the intersections identified in this exemption and shall construct the intersection improvements listed in the TSP or required by the Code.

Finding: Complies with Condition. The applicant provided a traffic impact analysis. The results of the traffic impact analysis indicate that the proposed Oregon City Operations Center development can be constructed while maintaining acceptable traffic operations at the study intersections. The City's Traffic Engineering Consultant, John Replinger, of John Replinger and Associates reviewed the submitted TIA, and concluded that the TIA provides an adequate basis upon which to evaluate the impacts of the development. Additionally, the City's Traffic Engineering Consultant made the following recommendation to offset the development's impacts:

> "That the developer participates in the funding of improvements of the intersection of Highway 213 and Beavercreek Road in proportion to the development's traffic volume as a

percentage of the predicted 2035 traffic volume. A project to add a right-turn lane on westbound Beavercreek Road and a merge lane on northbound Highway 213 was identified in the July 2017 Highway 213 Corridor Alternative Mobility Study. The project's cost was estimated at $1.5 million. Based on previously established methodology, the contribution for each peak hour trip is calculated to be $211. Based on the preliminary PM peak hour trip generation from the proposed development, the development's share of the project is $6,752."

Prior to issuance of an occupancy permit, the applicant shall pay a proportional share towards the funding of improvements of the intersection of Highway 213 and Beavercreek Road. Based on previously established methodology, the contribution for each peak hour trip is calculated to be $6,752. Based on the preliminary PM peak hour trip generation from the proposed development, the development's share of the project is $6,752. **Staff has determined that it is possible, likely and reasonable that the applicant can meet this standard through the Conditions of Approval.**

16.12.035 - Driveways.
A. All new development and redevelopment shall meet the minimum driveway spacing standards identified in Table 16.12.035.A.

Table 16.12.035.A Minimum Driveway Spacing Standards

Street Functional Classification	*Minimum Driveway Spacing Standards*	*Distance*
Major Arterial Streets	*Minimum distance from a street corner to a driveway for all uses other than detached single and two-family dwellings*	*175 ft.*
Minor Arterial Streets	*Minimum distance from a street corner to a driveway for all uses other than detached single and two-family dwellings*	*175 ft.*
Collector Streets	*Minimum distance from a street corner to a driveway for all uses other than detached single and two-family dwellings*	*100 ft.*
Local Streets	*Minimum distance from a street corner to a driveway for all uses other than detached single and two-family dwellings*	*25 ft.*

The distance from a street corner to a driveway is measured along the right-of-way from the edge of the intersection (on the same side of the road) right-of-way to the nearest portion of the driveway and the distance between driveways is measured at the nearest portions of the driveway at the right-of-way.
Finding: Complies as Proposed. There are three existing driveways along the frontage of the development. The development proposes to remove the existing driveway in the middle of the other two. The remaining driveways meet the minimum driveway spacing standards identified in Table 16.12.035.A.

B. Nonresidential or multi-family residential driveways that generate high traffic volumes shall be treated as intersections and shall adhere to requirements of OCMC 16.12.020.
Finding: Not Applicable. This project does not propose generation of sufficient traffic volumes to be considered an intersection, therefore this section does not apply.

C. One driveway may be allowed per frontage, unless otherwise restricted. In no case shall more than two driveways be allowed for any single-family attached or detached residential property, duplex, 3-4

plex, or property developed with an ADU or internal conversion with multiple frontages, unless otherwise approved by the City Engineer.

Finding: Complies as Proposed. The existing site contains three driveway access points along its 326 LF of public frontage (Fir Street). The existing center driveway is proposed to be removed, leaving the existing western and eastern driveways to remain. The development is not a single-family development. The two driveways to remain are approximately 235 LF apart, which exceeds the 100 foot minimum spacing standard for a collector per 16.12.035 (when measured from a street corner). The easternmost driveway is combined with the driveway to the property to the east. Since the development fronts a collector road (Fir Street), the proposed design is consistent with requirements of part D of this code section which states, "*All lots proposed with a driveway and lot orientation on a collector or minor arterial shall combine driveways into one joint access.*"

D. When a property fronts multiple roads, access shall be provided from the road with the lowest classification in the Transportation System Plan whenever possible to minimize points of access to arterials and collectors. At the discretion of the City Engineer, properties fronting a collector or arterial road may be allowed a second driveway, for the creation of a circulation pattern that eliminates reverse maneuvers for vehicles exiting a property if applied for and granted through procedures in OCMC 16.12.013. All lots proposed with a driveway and lot orientation on a collector or minor arterial shall combine driveways into one joint access per two or more lots unless the City Engineer determines that:
1. No driveway access may be allowed since the driveway(s) would cause a significant traffic safety hazard; or
2. Allowing a single driveway access per lot will not cause a significant traffic safety hazard.

Finding: Not Applicable. The property only fronts one road.

E. All driveway approaches shall be limited to the dimensions identified in Table 16.12.035.D.

Table 16.12.035.D Driveway Approach Size Standards			
Property Use	*Minimum Driveway Approach Width*		*Maximum Driveway Approach Width*
Single-Family Attached	*10 feet*		*12 feet*
Single-Family Detached in R-5 & R-3.5	*10 feet*		*12 feet*
Single-Family Detached in R-10, R-8, & R-6	*12 feet*		*24 feet*
Duplexes	*12 feet*		*24 feet*
3-4 Plexes	*12 feet*		*24 feet*
Multi-Family	*18 feet*		*30 feet*
Commercial, Industrial, Office, Institutional, Mixed Use, and/or Nonresidential	*One-Way 12 feet*	*Two-Way 20 feet*	*40 feet*

Driveway widths shall match the width of the driveway approach where the driveway meets sidewalk or property line but may be widened onsite (for example between the property line and the entrance to a garage). Groups of more than four parking spaces shall be so located and served by driveways so that

their use will not require backing movements or other maneuvering within a street right-of-way other than an alley.
Finding: Complies as Proposed. The existing western and eastern commercial driveways to remain are approximately thirty feet wide and twenty feet wide, respectively. This is in compliance with Table 16.12.035.D.

F. The City Engineer reserves the right to require a reduction in the number and size of driveway approaches as far as practicable for any of the following purposes:
1. To provide adequate space for on-street parking;
2. To facilitate street tree planting requirements;
3. To assure pedestrian and vehicular safety by limiting vehicular access points; and
4. To assure that adequate sight distance requirements are met.
a. Where the decision maker determines any of these situations exist or may occur due to the approval of a proposed development for non-residential uses or attached or multi-family housing, a shared driveway shall be required and limited to twenty-four feet in width adjacent to the sidewalk or property line.
Finding: Not Applicable. No restrictions are proposed by the City Engineer.

G. For all driveways, the following standards apply.
1. Each new or redeveloped curb cut shall have an approved concrete approach or asphalted street connection where there is no concrete curb and a minimum hard surface for at least ten feet back into the property as measured from the current edge of sidewalk or street pavement to provide for controlling gravel tracking onto the public street. The hard surface may be concrete, asphalt, or other surface approved by the City Engineer.
2. Any driveway approach built within public right-of-way shall be built and permitted per City requirements as approved by the City Engineer.
3. No driveway with a slope of greater than fifteen percent shall be permitted without approval of the City Engineer.
Finding: Complies with Condition. The existing site contains three driveway access points along its 326 LF of public frontage (Fir Street). The existing center driveway is proposed to be removed, leaving the existing western and eastern driveways to remain. The development has proposed concrete driveway approaches with a minimum hard surface for at least ten feet back into the lot as measured from the edge of street pavement and does not propose driveways exceeding fifteen percent slope. All driveway approaches, proposed and existing, that intersect with a public sidewalk, shall be made Americans with Disabilities Act (ADA) compliant. An approved driveway approach design will need included on engineering plans following proper engineering technical standards prior to receiving a permit and beginning construction. **Staff has determined that it is possible, likely and reasonable that the applicant can meet this standard through the Conditions of Approval.**

H. Exceptions. The City Engineer reserves the right to waive these standards or not allow driveway access, if the driveway(s) would cause a significant traffic safety hazard. Narrower driveway widths may be considered where field conditions preclude use of recommended widths. When larger vehicles and trucks will be the predominant users of a particular driveway, turning templates may be utilized to develop a driveway width that can safely and expeditiously accommodate the prevalent type of ingress and egress traffic.
Finding: Not Applicable. No exemptions are proposed.

16.12.065 - Building site—Grading.

Grading of building sites shall conform to the State of Oregon Structural Specialty Code, Title 18, any approved grading plan and any approved residential lot grading plan in accordance with the requirements of OCMC 13.12,15.48, 16.12 and the Public Works Stormwater and Grading Design Standards, and the erosion control requirements of OCMC 17.47.
Finding: Applicable. See Findings under 15.48

16.12.085 - Easements.
The following shall govern the location, improvement and layout of easements:
A. Utilities. Utility easements shall be required where necessary as determined by the City Engineer. Insofar as practicable, easements shall be continuous and aligned from block-to-block within the development and with adjoining subdivisions or partitions. Specific utility easements for water, sanitary or storm drainage shall be provided based on approved final engineering plans.
Finding: Complies as Proposed. The existing public water and storm mains within the development property are within existing public easements.

B. Unusual Facilities. Easements for unusual facilities such as high voltage electric transmission lines, drainage channels and stormwater detention facilities shall be adequately sized for their intended purpose, including any necessary maintenance roads. These easements shall be shown to scale on the preliminary and final plats or maps. If the easement is for drainage channels, stormwater detention facilities or related purposes, the easement shall comply with the requirements of the Public Works Stormwater and Grading Design Standards.
Finding: Complies with Condition. The development shall provide a 10-foot-wide public utility easement (PUE) along all property lines fronting the existing right-of-way. **Staff has determined that it is possible, likely and reasonable that the applicant can meet this standard through the Conditions of Approval.**

C. Watercourses. Where a development is traversed or bounded by a watercourse, drainageway, channel or stream, a stormwater easement or drainage right-of-way shall be provided which conforms substantially to the line of such watercourse, drainageway, channel or stream and is of a sufficient width to allow construction, maintenance and control for the purpose as required by the responsible agency. For those subdivisions or partitions which are bounded by a stream of established recreational value, setbacks or easements may be required to prevent impacts to the water resource or to accommodate pedestrian or bicycle paths.
Finding: Not Applicable. The application does not affect any watercourses.

D. Access. When easements are used to provide vehicular access to lots within a development, the construction standards, but not necessarily width standards, for the easement shall meet City specifications. The minimum width of the easement shall be 20 feet. The easements shall be improved and recorded by the applicant and inspected by the City Engineer. Access easements may also provide for utility placement.
Finding: Not Applicable. The application does not proposed any joint access use; therefore, no access easements are required

E. Resource Protection. Easements or other protective measures may also be required as the Community Development Director deems necessary to ensure compliance with applicable review criteria protecting any unusual significant natural feature or features of historic significance.
Finding: Not Applicable. The application does not impact any natural resources; therefore, no access easements are required

16.12.090 - Minimum improvements—Procedures.
In addition to other requirements, improvements installed by the applicant either as a requirement of these or other regulations, or at the applicant's option, shall conform to the requirements of this title and be designed to City specifications and standards as set out in the City's facility master plan and Public Works Stormwater and Grading Design Standards. The improvements shall be installed in accordance with the following procedure:
A. Improvement work shall not commence until construction plans have been reviewed and approved by the City Engineer and to the extent that improvements are located in County or State right-of-way, they shall be approved by the responsible authority. To the extent necessary for evaluation of the proposal, the plans may be required before approval of the preliminary plat of a subdivision or partition. Expenses incurred thereby shall be borne by the applicant and paid for prior to final plan review.
Finding: Complies with Condition. The development plans shall comply with all current Oregon City Public Works design standards, specifications, codes, and policies prior to receiving a permit and beginning construction. (Also written in findings from 16.12.010) **Staff has determined that it is possible, likely and reasonable that the applicant can meet this standard through the Conditions of Approval.**

B. Improvements shall be constructed under the inspection and approval of the City Engineer. Expenses incurred thereby shall be borne by the applicant and paid prior to final approval. Where required by the City Engineer or other City decision-maker, the applicant's project engineer also shall inspect construction.
Finding: Complies with Condition. Improvements shall be constructed under the inspection and approval of the City. Expenses incurred thereby shall be borne by the applicant and paid prior to final approval. The developer's project engineer also shall inspect construction. A certificate of completion is required prior to providing a punchlist for the contractor. The punchlist must be completed prior to occupancy. **Staff has determined that it is possible, likely and reasonable that the applicant can meet this standard through the Conditions of Approval.**

C. Erosion control or resource protection facilities or measures are required to be installed in accordance with the requirements of OCMC 17.47, 17.49 and the Public Works Erosion and Sediment Control Standards.
Finding: Compiles with Condition. See findings from section 17.47, 17.49 of this report.

D. Underground utilities, waterlines, sanitary sewers and storm drains installed in streets shall be constructed prior to the surfacing of the streets. Stubs for service connections for underground utilities, such as, storm, water and sanitary sewer shall be placed beyond the ten-foot wide franchise utility easement within private property.
Finding: Not Applicable. No new waterlines, sanitary sewers and storm drains are proposed to be installed in streets.

E. As-built construction plans and digital copies of as-built drawings shall be filed with the City Engineer upon completion of the improvements.
Finding: Complies with Condition: As-built construction plans and digital copies of as-built drawings shall be filed with the City Engineer within 90 days of completing improvements. **Staff has determined that it is possible, likely and reasonable that the applicant can meet this standard through the Conditions of Approval.**

F. The City Engineer may regulate the hours of construction and access routes for construction equipment to minimize impacts on adjoining residences or neighborhoods.
Finding: Complies with Condition. Permitted hours of construction shall be set forth by the City Engineer in the pre-construction meeting. **Staff has determined that it is possible, likely and reasonable that the applicant can meet this standard through the Conditions of Approval.**

16.12.095 - Minimum improvements—Public facilities and services.
The following minimum improvements shall be required of all applicants for a development, unless the decision-maker determines that any such improvement is not proportional to the impact imposed on the City's public systems and facilities:
A. Transportation System. Applicants and all subsequent lot owners shall be responsible for improving the City's planned level of service on all public streets, including alleys within the development and those portions of public streets adjacent to but only partially within development. Applicants are responsible for designing and providing adequate vehicular, bicycle and pedestrian access to their developments and for accommodating future access to neighboring undeveloped properties that are suitably zoned for future development. Storm drainage facilities shall be installed and connected to off-site natural or man-made drainageways. Upon completion of the street improvement survey, the applicant shall reestablish and protect monuments of the type required by ORS 92.060 in monument boxes with covers at every public street intersection and all points or curvature and points of tangency of their center line, and at such other points as directed by the City Engineer.
Finding: Complies as Proposed. The applicant has proposed minimum improvements proportional to the development's impact.

B. Stormwater Drainage System. Applicants shall design and install drainage facilities within a development and shall connect the development's drainage system to the appropriate downstream storm drainage system as a minimum requirement for providing services to the applicant's development. The applicant shall obtain county or state approval when appropriate. Applicants are responsible for extending the appropriate storm drainage system to the development site and for providing for the connection of upgradient properties to that system. The applicant shall design the drainage facilities in accordance with City drainage master plan requirements, OCMC 13.12 and the Public Works Stormwater and Grading Design Standards.
Finding: Not Applicable. The existing stormwater drainage system provides for the connection of upgradient properties to that system.

C. Sanitary Sewer System. The applicant shall design and install a sanitary sewer system to serve all lots or parcels within a development in accordance with the City's sanitary sewer design standards, and shall connect those lots or parcels to the City's sanitary sewer system, except where connection is required to the county sanitary sewer system as approved by the county. Applicants are responsible for extending the City's sanitary sewer system to the development site and through the applicant's property to allow for the future connection of neighboring undeveloped properties that are suitably zoned for future development. The applicant shall obtain all required permits and approvals from all affected jurisdictions prior to final approval and prior to commencement of construction. Design shall be approved by the City Engineer before construction begins.
Finding: Not Applicable. The existing sanitary sewer system is able to serve the development site and allows for the future connection of neighboring properties that are suitably zoned for future development.

D. Water System. The applicant shall design and install a water system to serve all lots or parcels within a development in accordance with the City public works water system design standards, and shall connect those lots or parcels to the City's water system. Applicants are responsible for extending the City's water system to the development site and through the applicant's property to allow for the future connection of neighboring undeveloped properties that are suitably zoned for future development.
Finding: Not Applicable. The existing water system is able to serve the development site and allows for the future connection of neighboring properties that are suitably zoned for future development.

E. Street Trees. Refer to OCMC 12.08, Street Trees.
Finding: See findings from section 12.08.

F. Bench Marks. At least one bench mark shall be located within the subdivision boundaries using datum plane specified by the City Engineer.
Finding: Complies with Condition. The engineering plans shall provide a local benchmark, onsite, using the NAVD88 datum. **Staff has determined that it is possible, likely and reasonable that the applicant can meet this standard through the Conditions of Approval.**

G. Other Utilities. The applicant shall make all necessary arrangements with utility companies or other affected parties for the installation of underground lines and facilities. Existing and new electrical lines and other wires, including but not limited to communication, street lighting and cable television, shall be placed underground.
Finding: Not Applicable. This project is a minor site plan review and therefore is not subject to the requirements of Chapter 16.12.

H. Oversizing of Facilities. All facilities and improvements shall be designed to City standards as set out in the City's facility master plan, public works design standards, or other City ordinances or regulations. Compliance with facility design standards shall be addressed during final engineering. A development may be required to modify or replace existing offsite systems if necessary to provide adequate public facilities. The City may require oversizing of facilities to meet standards in the City's facility master plan or to allow for orderly and efficient development. Where oversizing is required, the applicant may request reimbursement from the City for oversizing based on the City's reimbursement policy and funds available, or provide for recovery of costs from intervening properties as they develop.
Finding: Not Applicable. No facilities are required to be oversized as part of this application.

I. Erosion Control Plan—Mitigation. The applicant shall be responsible for complying with all applicable provisions of OCMC 17.47 with regard to erosion control.
Finding: See findings from section 17.47 of this report

16.12.100 - Same—Road standards and requirements.
A. The creation of a public street and the resultant separate land parcels shall be in conformance with requirements for subdivisions or partitions and the applicable street design standards of this Chapter. However, the decision-maker may approve the creation of a public street to be established by deed without full compliance with the regulations applicable to subdivisions or partitions where any of the following conditions exist:
1. The establishment of the public street is initiated by the City Commission and is declared essential for the purpose of general traffic circulation and the partitioning of land is an incidental effect rather than the primary objective of the street;

2. The tract in which the street is to be dedicated is within an isolated ownership either not over one acre or of such size and characteristics as to make it impossible to develop building sites for more than three dwelling units.
Finding: Not Applicable. The creation of a new public street is not proposed or required.

B. For any public street created pursuant to subsection A of this section, a copy of a preliminary plan and the proposed deed shall be submitted to the Community Development Director and City Engineer at least ten days prior to any public hearing scheduled for the matter. The plan, deed and any additional information the applicant may submit shall be reviewed by the decision-maker and, if not in conflict with the standards of Title 16 and Title 17, may be approved with appropriate conditions.
Finding: Not Applicable. The applicant has not proposed the creation of a public street to be established by deed without full compliance with the regulations applicable to subdivisions or partitions.

16.12.105 - Same—Timing requirements.
A. Prior to applying for final plat approval, the applicant shall either complete construction of all public improvements required as part of the preliminary plat approval or guarantee the construction of those improvements. Whichever option the applicant elects shall be in accordance with OCMC 17.50.140.
Finding: Not Applicable. The city has only afforded the applicant the option to construct the public improvements according to approved final engineering plans and all applicable requirements of this Code.

B. Construction. The applicant shall construct the public improvements according to approved final engineering plans and all applicable requirements of this Code, and under the supervision of the City Engineer. Under this option, the improvement shall be complete and accepted by the City Engineer prior to final plat approval.
Finding: Applicable. Improvements are required to be completed and accepted by the City Engineer. See findings from section 16.12.090 of this report.

16.12.110 -Public improvements—Financial guarantees.
A. To ensure construction of required public improvements, the applicant shall provide the City with a performance guarantee in accordance with OCMC 17.50.140.
Finding: Please see findings from Section17.50.140 of this report.

B. After satisfactory completion of required public improvements and facilities, all public improvements not constructed by the City, shall be maintained and under warranty provided by the property owner or developer constructing the facilities until the City accepts the improvements at the end of the warranty period as prescribed in OCMC 17.50.141.
Finding: Please see findings from Section17.50.141 of this report.

16.12.120 Waiver of Remonstrance
The review authority may require a property owner to sign a waiver of remonstrance against the formation of and participation in a local improvement district where it deems such a waiver necessary to provide needed improvements reasonably related to the impacts created by the proposed development. To ensure compliance with this chapter, the review authority may require an applicant to sign or accept a legal and enforceable covenant, contract, dedication, easement, performance guarantee, or other document, which shall be approved in form by the City Attorney.
Finding: Complies with Condition. The property owner shall sign a Restrictive Covenant Non-Remonstrance Agreement for the purpose of making storm sewer, sanitary sewer, water or street

improvements in the future that benefit the property. The applicant shall pay all fees associated with processing and recording the Non-Remonstrance Agreement. **Staff has determined that it is possible, likely and reasonable that the applicant can meet this standard through the Conditions of Approval.**

CHAPTER 17.47 – EROSION AND SEDIMENT CONTROL

17.47.030 - Applicability.
A. This chapter, which may also be referred to as "erosion control" in this Code, applies to development that may cause visible or measurable erosion on any property within the city limits of Oregon City.
B. This chapter does not apply to work necessary to protect, repair, maintain or replace existing structures, utility facilities, roadways, driveways, accessory uses and exterior improvements in response to emergencies, provided that after the emergency has passed, adverse impacts are mitigated in accordance with applicable standards.
Finding: Applicable. The application disturbs more than 1,000 square feet of earth; therefore, erosion and sediment control standards shall be followed.

17.47.060 - Permit required.
The applicant must obtain an erosion and sediment control permit prior to, or contemporaneous with, the approval of an application for any building, land use or other city-issued permit that may cause visible or measurable erosion.
Finding: Complies with Condition. The applicant seeks approval of an application for land use which requires construction that may cause visible or measurable erosion. A city issued erosion and sediment control permit shall be obtained prior to commencement of any earth disturbing activities. **Staff has determined that it is possible, likely and reasonable that the applicant can meet this standard through the Conditions of Approval.**

17.47.070 - Erosion and sediment control plans.
A. An application for an erosion and sediment control permit shall include an erosion and sediment control plan, which contains methods and interim measures to be used during and following construction to prevent or control erosion prepared in compliance with City of Oregon City public works standards for erosion and sediment control. These standards are incorporated herein and made a part of this title and are on file in the office of the city recorder.
B. Approval Standards. An erosion and sediment control plan shall be approved only upon making the following findings:
1. The erosion and sediment control plan meets the requirements of the City of Oregon City public works standards for erosion and sediment control incorporated by reference as part of this chapter;
2. The erosion and sediment control plan indicates that erosion and sediment control measures will be managed and maintained during and following development. The erosion and sediment control plan indicates that erosion and sediment control measures will remain in place until disturbed soil areas are permanently stabilized by landscaping, grass, approved mulch or other permanent soil stabilizing measures.
C. The erosion and sediment control plan shall be reviewed in conjunction with the requested development approval. If the development does not require additional review, the manager may approve or deny the permit with notice of the decision to the applicant.
D. The city may inspect the development site to determine compliance with the erosion and sediment control plan and permit.
E. Erosion that occurs on a development site that does not have an erosion and sediment control permit, or that results from a failure to comply with the terms of such a permit, constitutes a violation of this chapter.

F. If the manager finds that the facilities and techniques approved in an erosion and sediment control plan and permit are not sufficient to prevent erosion, the manager shall notify the owner or his/her designated representative. Upon receiving notice, the owner or his/her designated representative shall immediately install interim erosion and sediment control measures as specified in the City of Oregon City public works standards for erosion and sediment control. Within three days from the date of notice, the owner or his/her designated representative shall submit a revised erosion and sediment control plan to the city. Upon approval of the revised plan and issuance of an amended permit, the owner or his/her designated representative shall immediately implement the revised plan.
G. Approval of an erosion and sediment control plan does not constitute an approval of permanent road or drainage design (e.g., size and location of roads, pipes, restrictors, channels, retention facilities, utilities, etc.).
Finding: Complies with Condition. Erosion and sediment control plans shall be submitted for review and approval by the City prior to issuance of an erosion and sediment control permit. **Staff has determined that it is possible, likely and reasonable that the applicant can meet this standard through the Conditions of Approval.**

17.47.090 - Plan performance guarantee and security.
After the plan is approved by the manager and prior to construction or grading, the owner shall provide a financial guarantee. Erosion and sediment control shall be included in the cost estimate for the primary project, such as land division or site plan, and included in that project's performance guarantee.
Finding: Complies with Condition. See Findings in Chapter 17.50.

CHAPTER 12.08 PUBLIC AND STREET TREES

12.08.015 - Street tree selection, planting and maintenance requirements.
All development shall provide street trees adjacent to all street frontages. Species and locations of trees shall be selected based upon vision clearance requirements, but shall in all cases be selected from the Oregon City Street Tree List, an approved street tree list for a jurisdiction in the metropolitan region, or be approved by a certified arborist unless otherwise approved pursuant to this section. If a setback sidewalk has already been constructed or the Public Works Department determines that the forthcoming street design shall include a setback sidewalk, then all street trees shall be installed with a planting strip or within tree wells. If existing street design includes a curb-tight sidewalk, then all street trees shall be placed according to OCMC 12.08.035.C.
Finding: Not Applicable. Though the applicant's proposal qualifies as development, no street trees are required as part of Minor Site Plan and Design Review applications as the impacts of Minor Site Plan and Design Review applications are relatively small and mitigated with System Development Charges.

CHAPTER 17.36 GI GENERAL INDUSTRIAL DISTRICT

17.36.020 - Permitted uses.
In the GI district, the following uses are permitted:
A. Manufacturing and/or fabrication;
B. Distributing, wholesaling and warehousing, excluding explosives and substances which cause an undue hazard to the public health, welfare and safety;
C. Heavy equipment service, repair, sales, rental or storage (includes but is not limited to construction equipment and machinery and farming equipment);
D. Veterinary or pet hospital, kennel;
E. Necessary dwellings for caretakers and watchmen (all other residential uses are prohibited);

F. Retail sales and services, including but not limited to eating establishments for employees (i.e. a cafe or sandwich shop) or marijuana , located in a single building or in multiple buildings that are part of the same development shall be limited to a maximum of twenty thousand square feet or five percent of the building square footage, whichever is less and the retail sales and services shall not occupy more than ten percent of the net developable portion of all contiguous industrial lands;
G. Emergency service facilities (police and fire), excluding correctional facilities;
H. Outdoor sales and storage;
I. Recycling center and solid waste facility;
J. Wrecking yards;
K. Public utilities, including sub-stations (such as buildings, plants and other structures);
L. Utilities: basic and linear facilities, such as water, sewer, power, telephone, cable, electrical and natural gas lines, not including major facilities such as sewage and water treatment plants, pump stations, water tanks, telephone exchanges and cell towers;
M. Storage facilities;
N. Transportation facilities;
O. Marijuana production, processing, wholesaling, and laboratories;
P. Mobile food units operating on a property for less than five hours in a twenty-four hour period.
Finding: Permitted. The proposal is for the Oregon City Public Works Operations Center which includes a heavy equipment service and storage use which is permitted under OCMC 17.36.020.C. The proposed office use is accessory to the heavy equipment use.

17.36.040 - Dimensional standards.
Dimensional standards in the GI district are:
B. Maximum building height, three stories, not to exceed forty feet;
Finding: Not Applicable. No changes to the existing building height are proposed.

C. Minimum required setbacks:
1. Front yard, ten feet minimum setback;
Finding: Complies as Proposed. The proposed front yard setback is approximately 80 feet and the standard is met.

3. Corner side yard, ten feet minimum setback;
Finding: Not Applicable. The subject site is not a corner lot.

4. Rear yard, ten feet minimum setback;
Finding: Complies as Proposed. No changes to the existing rear yard setback are proposed.

D. Buffer Zone. If a use in this zone abuts or faces a residential or commercial use, a yard of at least twenty-five feet shall be required on the side abutting or facing the adjacent residential use and commercial uses in order to provide a buffer area, and sight obscuring landscaping thereof shall be subject to site plan review. The community development director may waive any of the foregoing requirements if he/she determines that the requirement is unnecessary in the particular case.
Finding: The applicant has requested a variance to this standard. Please refer to the variance findings in OCMC 17.60.

E. Outdoor storage within building or yard space other than required setbacks and such occupied yard space shall be enclosed by a sight-obscuring wall or fence of sturdy construction and uniform color or an evergreen hedge not less than six feet in height located outside the required yard, further provided that such wall or fence shall not be used for advertising purposes.
Finding: Complies as Proposed. The applicant has proposed sight-obscuring slats within the existing chain link fence along the perimeter of the outdoor storage area.

F. Minimum required landscaping (including landscaping within a parking lot): Fifteen percent.
Finding: The applicant has requested a variance to this standard. Please refer to the variance findings in OCMC 17.60.

CHAPTER 17.41 TREE PROTECTION, PRESERVATION, REMOVAL AND REPLANTING STANDARDS

17.41.020 - Tree protection—Applicability.
1. Applications for development subject to OCMC 16.08 (Land Divisions) or OCMC 17.62 (Site Plan and Design Review) shall demonstrate compliance with these standards as part of the review proceedings for those developments. Compliance with this chapter is required from the date a land use application is filed until a land division is recorded or other development approval is final.
2. For public capital improvement projects, the City Engineer shall demonstrate compliance with these standards pursuant to a Type I process.
3. Tree canopy removal greater than twenty-five percent on areas with greater than twenty-five percent slope, unless exempted under OCMC 17.41.040, shall be subject to these standards.
4. A heritage tree or grove which has been designated pursuant to the procedures of OCMC 12.32 shall be subject to the standards of this section.
5. A tree that has been planted pursuant to this section shall remain or shall be replaced with a new tree if removed.
Finding: Applicable. The development includes a Site Plan and Design Review application, therefore, this chapter is applicable.

17.41.030 - Tree protection—Conflicting code provisions.
Except as otherwise specified in this section, where these standards conflict with adopted city development codes or policies, the provision which provides the greater protection for regulated trees or groves, as defined in OCMC 17.04, shall govern.
Finding: Not Applicable. No conflicts have been identified.

17.41.040 - Exemptions.
These regulations are not intended to regulate normal cutting, pruning and maintenance of trees on private property except where trees are located on lots that are undergoing development review or are otherwise protected within the Natural Resource Overlay District (NROD) of OCMC 17.49. These standards are not intended to regulate farm and forest practices as those practices are defined under ORS 30.930, for farm or forestlands. These regulations to not apply to the removal of trees that are considered invasive species. An applicant for development may claim exemption from compliance with these standards if the development site containing the regulated grove or trees was a designated farm or forest use, tree farm, Christmas tree plantation, or other approved timber use within one year prior to development application. "Forest practices" and "forestlands" as used in this subsection shall have the meaning as set out in ORS 30.930. The Community Development Director has the authority to modify or waive compliance in this case.

Finding: Not Applicable. The applicant has proposed tree removal which is not exempt under this section.

17.41.050 - Compliance options.
Applicants for review shall comply with these requirements through one or a combination of the following procedures:
A. Option 1—Mitigation. Retention and removal of trees, with subsequent mitigation by replanting pursuant to OCMC 17.41.060.
B. Option 2—Dedicated Tract. Protection of trees or groves by placement in a tract within a new subdivision or partition plat pursuant to OCMC 17.41.080; or
C. Option 3—Restrictive Covenant. Protection of trees or groves by recordation of a permanent restrictive covenant pursuant to OCMC 17.41.110; or
D. Option 4—Cash-in-lieu of planting pursuant to OCMC 17.41.120.
Finding: Complies as Proposed. The applicant identified that the development will utilize Option 1 – Mitigation.

17.41.060 - Tree removal and replanting—Mitigation (Option 1).
A. Applicants for development who select this option shall ensure that all healthy trees shall be preserved outside the construction area as defined in OCMC 17.04 to the extent practicable. Preserved trees are subject to Option 3 of this Chapter. Compliance with these standards shall be demonstrated in a tree mitigation plan report prepared by a certified arborist, horticulturalist or forester or other environmental professional with experience and academic credentials in forestry or arboriculture. Tree inventories for the purposes of mitigation calculations may be prepared by a licensed surveyor. At the applicant's expense, the City may require the report to be reviewed by a consulting arborist. The number of replacement trees required on a development site shall be calculated separately from, and in addition to, any public or street trees in the public right-of-way required under OCMC 12.08— Public and Street Trees, any required tree planting in parking lots, and any trees planted in pedestrian and bicycle accessways.
Finding: Complies with Condition. The applicant submitted a tree removal plan prepared by a certified arborist and a tree inventory of existing trees onsite. However, the applicant did not submit a tree mitigation plan. Prior to issuance of a building permit associated with the proposed development, the applicant shall submit a tree mitigation plan which distinguishes mitigation trees from parking lot trees or any other required trees. **Staff has determined that it is possible, likely and reasonable that the applicant can meet this standard through the Conditions of Approval.**

B. The applicant shall determine the number of trees to be mitigated on the site by counting all of the trees six-inch DBH (minimum four and one-half feet from the ground) or larger on the entire site and either:
1. Trees that are removed outside of the construction area shall be replanted with the number of trees specified in Column 1 of Table 17.41.060-1. Trees that are removed within the construction area shall be replanted with the number of replacement trees required in Column 2; or
2. Dying, diseased or hazardous trees, when the condition is verified by a certified arborist to be consistent with the definitions in OCMC 17.04, may be removed from the tree replacement calculation. Dead trees may also be removed from the calculation, with the condition of the tree verified either by the Community Development Director or by a certified arborist at the applicant's expense, when the Community Development Director cannot make a determination. To the extent that the Community Development Director determines that the dead, dying, hazardous or diseased condition of the tree is the result of intentional action, the removal of that tree shall require mitigation pursuant to Column 2 of Table 17.41.060-1.

Table 17.41.060-1
Tree Replacement Requirements

Size of tree removed (DBH)	*Column 1* *Number of trees to be planted. (If removed **Outside** of construction area)*	*Column 2* *Number of trees to be planted. (If removed **Within** the construction area)*
6 to 12"	*3*	*1*
13 to 18"	*6*	*2*
19 to 24"	*9*	*3*
25 to 30"	*12*	*4*
31 and over"	*15*	*5*

Steps for calculating the number of replacement trees:

1. Count all trees measuring six inches DBH (minimum four and one-half feet from the ground) or larger on the entire development site.

2. Designate the size (DBH) of all trees pursuant to accepted industry standards.

3. Document in a certified arborist report any trees that are currently dead, dying, diseased or hazardous.

4. Subtract the number of dead, dying, diseased or hazardous trees in step 3 from the total number of trees on the development site in step 1. The remaining number is the number of healthy trees on the site. Use this number to determine the number of replacement trees in steps 5 through 8.

5. Identify the construction area (as defined in OCMC 17.04.230).

6. Determine the number and diameter of trees to be removed within the construction area. Based on the size of each tree, use Column 2 to determine the number of replacement trees required.

7. Determine the number and diameter of trees to be removed outside of the construction area. Based on the size of each tree, use Column 1 to determine the number of replacement trees required.

8. Determine the total number of replacement trees from steps 6 and 7.

Finding: Complies with Condition. The applicant followed the steps in this section to calculate the required mitigation trees, however, the tree removal plan includes trees proposed to be removed that are outside of the construction area that were mitigated using the calculation for trees within the construction area. Prior to issuance of a building permit associated with the proposed development, the applicant shall submit a tree mitigation plan which includes a recalculation of required mitigation trees based on the definition of construction area within OCMC 17.04.230. **Staff has determined that it is possible, likely and reasonable that the applicant can meet this standard through the Conditions of Approval.**

C. Planting area priority for mitigation.

Development applications which opt for removal of trees with subsequent replanting pursuant to OCMC 17.41.050.A. shall be required to mitigate for tree cutting by complying with the following priority for replanting standards below:

1. First Priority. Replanting on the development site.

2. Second Priority. Off-site replacement tree planting locations. If the Community Development Director determines that it is not practicable to plant the total number of replacement trees on-site, a suitable off-site planting location for the remainder of the trees may be approved that will reasonably

satisfy the objectives of this section. Such locations may include either publicly owned or private land and shall be approved by the Community Development Director.
Finding: Complies with Condition. The applicant's narrative identified that the mitigation trees would be planted onsite, however, a mitigation plan was not submitted and the number of mitigation trees was miscalculated. Prior to issuance of a building permit associated with the proposed development, the applicant shall submit a tree mitigation plan complying with the mitigation tree requirements in OCMC 17.41. If the required mitigation trees cannot be accommodated onsite, the applicant may utilize off-site mitigation or fee-in-lieu of planting as needed. **Staff has determined that it is possible, likely and reasonable that the applicant can meet this standard through the Conditions of Approval.**

D. Replacement tree planting standards.
1. All replacement trees shall be either two-inch caliper deciduous or six-foot high conifer.
2. Replacement tree species shall be approved by a landscape architect or certified arborist or shall be found on the City's Native Plant or Street Tree lists.
Finding: Complies with Condition. The applicant's narrative identified compliance with these standards, however, a mitigation plan was not submitted and the number of mitigation trees was miscalculated. Prior to issuance of a building permit associated with the proposed development, the applicant shall submit a tree mitigation plan complying with the mitigation tree requirements in OCMC 17.41. **Staff has determined that it is possible, likely and reasonable that the applicant can meet this standard through the Conditions of Approval.**

3. Due to their diminishing range in the region, Oregon white oak (Quercus garryana) trees, if removed, shall be replaced by the same species.
Finding: Not Applicable. The applicant has not proposed removal of any Oregon White Oak trees.

E. All existing tree(s) in the tract shall be protected by a permanent restrictive covenant or easement approved in form by the City.
Finding: Not Applicable. All saved and replanted trees are protected by Chapter 17.41 and a covenant or easement is not required.

F. Alternative mitigation plan.
The Community Development Director may, subject to a Type II procedure, approve an alternative mitigation plan that adequately protects habitat pursuant to the standards for the Natural Resource Overlay District alternative mitigation plan in OCMC 17.49.190.
Finding: Not Applicable. The applicant has not proposed an alternative mitigation plan.

17.41.120 - Cash-in-lieu of planting (Option 4).
The applicant may choose this option in-lieu-of or in addition to Compliance Options 1 through 3. In this case, the Community Development Director may approve the payment of cash-in-lieu into a dedicated fund for the remainder of trees that cannot be replanted in the manner described above.
The cash-in-lieu payment per required mitigation tree shall be as listed on the adopted fee schedule and shall be adjusted annually based on the Consumer Price Index. The price shall include 150% of the cost of materials, transportation and planting.
Finding: Complies with Condition. The applicant's narrative identified that mitigation option one will be used, however, a mitigation plan was not submitted and the number of mitigation trees was miscalculated. Prior to issuance of a building permit associated with the proposed development, the applicant shall submit a tree mitigation plan complying with the mitigation tree requirements in OCMC

17.41. If the required mitigation trees cannot be accommodated onsite, the applicant may utilize off-site mitigation or fee-in-lieu of planting as needed. **Staff has determined that it is possible, likely and reasonable that the applicant can meet this standard through the Conditions of Approval.**

17.41.130 - Regulated tree protection procedures during construction.

A. No permit for any grading or construction of public or private improvements may be released prior to verification by the Community Development Director that regulated trees designated for protection or conservation have been protected according to the following standards. No trees designated for removal shall be removed without prior written approval from the Community Development Director.

B. Tree protection shall be as recommended by a qualified arborist or, as a minimum, to include the following protective measures:

1. Except as otherwise determined by the Community Development Director, all required tree protection measures set forth in this section shall be instituted prior to any development activities, including, but not limited to clearing, grading, excavation or demolition work, and such measures shall be removed only after completion of all construction activity, including necessary landscaping and irrigation installation, and any required plat, tract, conservation easement or restrictive covenant has been recorded.

2. Approved construction fencing, a minimum of four feet tall with steel posts placed no farther than ten feet apart, shall be installed at the edge of the tree protection zone or dripline, whichever is greater. An alternative may be used with the approval of the Community Development Director.

3. Approved signs shall be attached to the fencing stating that inside the fencing is a tree protection zone, not to be disturbed unless prior approval has been obtained from the Community Development Director.

4. No construction activity shall occur within the tree protection zone, including, but not limited to; dumping or storage of materials such as building supplies, soil, waste items; nor passage or parking of vehicles or equipment.

5. The tree protection zone shall remain free of chemically injurious materials and liquids such as paints, thinners, cleaning solutions, petroleum products, and concrete or dry wall excess, construction debris, or run-off.

6. No excavation, trenching, grading, root pruning or other activity shall occur within the tree protection zone unless directed by an arborist present on site and approved by the Community Development Director.

7. No machinery repair or cleaning shall be performed within ten feet of the dripline of any trees identified for protection.

8. Digging a trench for placement of public or private utilities or other structure within the critical root zone of a tree to be protected is prohibited. Boring under or through the tree protection zone may be permitted if approved by the Community Development Director and pursuant to the approved written recommendations and on-site guidance and supervision of a certified arborist.

9. The Community Development Director may require that a certified arborist be present during any construction or grading activities that may affect the dripline of trees to be protected.

10. The Community Development Director may impose conditions to avoid disturbance to tree roots from grading activities and to protect trees and other significant vegetation identified for retention from harm. Such conditions may include, if necessary, the advisory expertise of a qualified consulting arborist or horticulturist both during and after site preparation, and a special maintenance/management program to provide protection to the resource as recommended by the arborist or horticulturist.

C. Changes in soil hydrology due to soil compaction and site drainage within tree protection areas shall be avoided. Drainage and grading plans shall include provision to ensure that drainage of the site does not conflict with the standards of this section. Excessive site run-off shall be directed to appropriate storm drainage facilities and away from trees designated for conservation or protection.

Finding: Complies as Proposed. The applicant provided a plan for tree protection during construction prepared by a certified arborist.

CHAPTER 17.50 – ADMINISTRATION AND PROCEDURES

17.50.050 – Pre-application conference.

A Pre-application Conference. Prior to a Type II – IV or Legislative application, excluding Historic Review, being deemed complete, the applicant shall schedule and attend a pre-application conference with City staff to discuss the proposal, unless waived by the Community Development Director. The purpose of the pre-application conference is to provide an opportunity for staff to provide the applicant with information on the likely impacts, limitations, requiremets, approval standards, fees and other information that may affect the proposal.

1. To schedule a pre-application conference, the applicant shall contact the Planning Division, submit the required materials, and pay the appropriate conference fee.

2. At a minimum, an applicant should submit a short narrative describing the proposal and a proposed site plan, drawn to a scale acceptable to the City, which identifies the proposed land uses, traffic circulation, and public rights-of-way and all other required plans.

3. The Planning Division shall provide the applicant(s) with the identity and contact persons for all affected neighborhood associations as well as a written summary of the pre-application conference.

B. A pre-application conference shall be valid for a period of six months from the date it is held. If no application is filed within six months of the conference or meeting, the applicant shall schedule and attend another conference before the City will accept a permit application. The Community Development Director may waive the pre-application requirement if, in the Director's opinion, the development has not changed significantly and the applicable municipal code or standards have not been significantly amended. In no case shall a pre-application conference be valid for more than one year.

Finding: Complies as Proposed. The applicant held a pre-application conference (PA-20-00003) on February 4, 2020. The applicant submitted the land use application within six months of the pre-application conference on April 13, 2020.

17.50.055 - Neighborhood association meeting.

Neighborhood Association Meeting. The purpose of the meeting with the recognized neighborhood association is to inform the affected neighborhood association about the proposed development and to receive the preliminary responses and suggestions from the neighborhood association and the member residents.

A. Applicants applying for annexations, zone change, comprehensive plan amendments, conditional use, Planning Commission variances, subdivision, or site plan and design review (excluding minor site plan and design review), general development master plans or detailed development plans applications shall schedule and attend a meeting with the City-recognized neighborhood association in whose territory the application is proposed no earlier than one year prior to the date of application. Although not required for other projects than those identified above, a meeting with the neighborhood association is highly recommended.

B. The applicant shall request via email or regular mail a request to meet with the neighborhood association chair where the proposed development is located. The notice shall describe the proposed project. A copy of this notice shall also be provided to the chair of the Citizen Involvement Committee.

C. A meeting shall be scheduled within thirty days of the date that the notice is sent. A meeting may be scheduled later than thirty days if by mutual agreement of the applicant and the neighborhood association. If the neighborhood association does not want to, or cannot meet within thirty days, the applicant shall host a meeting inviting the neighborhood association, Citizen Involvement Committee, and

all property owners within three hundred feet to attend. This meeting shall not begin before six p.m. on a weekday or may be held on a weekend and shall occur within the neighborhood association boundaries or at a City facility.

D. If the neighborhood association is not currently recognized by the City, is inactive, or does not exist, the applicant shall request a meeting with the Citizen Involvement Committee.

E. To show compliance with this section, the applicant shall submit a copy of the email or mail notice to the neighborhood association and CIC chair, a sign-in sheet of meeting attendees, and a summary of issues discussed at the meeting. If the applicant held a separately noticed meeting, the applicant shall submit a copy of the meeting flyer, postcard or other correspondence used, and a summary of issues discussed at the meeting and submittal of these materials shall be required for a complete application.

Finding: Complies as Proposed. Due to the Covid-19 pandemic, the Gaffney Lane Neighborhood Association meetings were cancelled, therefore, the applicant held their own virtual meeting on May 4, 2020. The applicant submitted all required documentation and has demonstrated compliance with the neighborhood association meeting requirements.

17.50.100 - Notice posting requirements.

Where this chapter requires notice of a pending or proposed permit application or hearing to be posted on the subject property, the requirements of this section shall apply.

A. City Guidance and the Applicant's Responsibility. The City shall supply all of the notices which the applicant is required to post on the subject property and shall specify the dates the notices are to be posted and the earliest date on which they may be removed. The City shall also provide a statement to be signed and returned by the applicant certifying that the notice(s) were posted at the correct time and that if there is any delay in the City's land use process caused by the applicant's failure to correctly post the subject property for the required period of time and in the correct location, the applicant agrees to extend the applicable decision-making time limit in a timely manner.

B. Number and Location. The applicant shall place the notices on each frontage of the subject property. If the property's frontage exceeds six hundred feet, the applicant shall post one copy of the notice for each six hundred feet or fraction thereof. Notices do not have to be posted adjacent to alleys or unconstructed right-of-way. Notices shall be posted within ten feet of the street and shall be visible to pedestrians and motorists. Notices shall not be posted within the public right-of-way or on trees. The applicant shall remove all signs within ten days following the event announced in the notice.

Finding: Complies as Proposed. The subject site was posted with land use notice signs longer than the required amount of time.

17.50.140 – Financial guarantees.

When conditions of permit approval require a permitee to construct certain public improvements, the City shall require the permitee to provide financial guarantee for construction of the certain public improvements. Financial guarantees shall be governed by this section.

A. Form of Guarantee. Guarantees shall be in a form approved by the City Attorney. Approvable forms of guarantee include irrevocable standby letters of credit to the benefit of the City issued by a recognized lending institution, certified checks, dedicated bank accounts or allocations of construction loans held in reserve by the lending institution for the benefit of the City. The form of guarantee shall be specified by the City Engineer and, prior to execution and acceptance by the City shall be reviewed and approved by the City Attorney. The guarantee shall be filed with the City Engineer.

B. Performance Guarantees. A permittee shall be required to provide a performance guarantee as follows.

1. After Final Approved Design by The City: The City may request the Permittee to submit a Performance Guarantee for construction of certain public improvements. A permitee may request the option of submitting a Performance Guarantee when prepared for temporary/final occupancy. The guarantee shall be one hundred twenty percent of the

estimated cost of constructing the public improvements as submitted by the permittee's engineer. The engineer's estimated costs shall be supported by a verified engineering estimate and approved by the City Engineer.

2. Before Complete Design Approval and Established Engineered Cost Estimate: The City may request a permittee to submit a Performance Guarantee for construction of certain public improvements. A permitee may request the option of submitting a performance guarantee before public improvements are designed and completed. The guarantee shall be one hundred fifty percent of the estimated cost of constructing the public improvements as submitted by *the permittee's engineer and approved by the City Engineer. The engineer's estimated costs shall be supported by a verified engineering estimate and approved by the City Engineer.*

C. Release of Guarantee. The guarantee shall remain in effect until the improvement is actually constructed and accepted by the City. Once the City has inspected and accepted the improvement, the City shall release the guarantee to the permittee. If the improvement is not completed to the City's satisfaction within the time limits specified in the permit approval, the City Engineer may, at their discretion, draw upon the guarantee and use the proceeds to construct or complete construction of the improvement and for any related administrative and legal costs incurred by the City in completing the construction, including any costs incurred in attempting to have the permittee complete the improvement. Once constructed and approved by the City, any remaining funds shall be refunded to the permittee. The City shall not allow a permittee to defer construction of improvements by using a performance guarantee, unless the permittee agrees to construct those improvements upon written notification by the City, or at some other mutually agreed-to time. If the permittee fails to commence construction of the required improvements within six months of being instructed to do so, the City may, without further notice, undertake the construction of the improvements and draw upon the permittee's performance guarantee to pay those costs.

D. Fee-in-lieu. When conditions of approval or the City Engineer allows a permittee to provide a fee-in-lieu of actual construction of public improvements, the fee shall be one hundred fifty percent of the estimated cost of constructing the public improvements as submitted by the permittee's engineer and approved by the City Engineer. The percentage required is to ensure adequate funds for the future work involved in design, bid, contracting, and construction management and contract closeout. The engineer's estimated costs shall be supported by a verified engineering estimate and approved by the City Engineer. The fee-in-lieu shall be submitted as cash, certified check, or other negotiable instrument acceptable by the City Attorney.

Finding: Not Applicable. The development has not been required to construct public improvements. This project is a minor site plan review and therefore is not subject to the requirements of Chapter 16.12. The development has only proposed improvement of existing driveways and sidewalks to ensure compliance with existing city codes and Americans With Disabilities Act.

17.50.141 – Public improvements – Warranty

All public improvements not constructed by the City, shall be maintained and under warranty provided by the property owner or developer constructing the facilities until the City accepts the improvements at the end of the warranty period. The warranty is to be used at the discretion of the City Engineer or designee to correct deficiencies in materials or maintenance of constructed public infrastructure, or to address any failure of engineering design.

A. Duration of Warranty. Responsibility for maintenance of public improvements shall remain with the property owner or developer for a warranty period of two years.

B. Financial Guarantee. Approvable forms of guarantee include irrevocable standby letters of credit to the benefit of the City issued by a recognized lending institution, bond, certified checks, dedicated bank accounts or allocations of construction loans held in reserve by the lending institution for the benefit of the City. The form of guarantee shall be specified by the City Engineer and, prior to execution and acceptance by the City shall be reviewed and approved by the City Attorney. The guarantee shall be filed with the City Engineer.

C. Amount of Warranty. The amount of the warranty shall be equal to fifteen percent of the estimated cost of construction of all public improvements (including those improvements that will become owned and maintained by the City at the end of the two year maintenance period), and shall be supported by a verified engineering estimate and approved by the City Engineer. Upon expiration of the warranty period and acceptance by the City as described below, the City shall be responsible for maintenance of those improvements.

D. *Transfer of Maintenance. The City will perform an inspection of all public improvements approximately forty-five days before the two-year warranty period expires. The public improvements shall be found to be in a clean, functional condition by the City Engineer before acceptance of maintenance responsibility by the City.*

Transfer of maintenance of public improvements shall occur when the City accepts the improvements at the end of the two year warranty period.
Finding: Not applicable. The development has not been required to construct public improvements. This project is a minor site plan review and therefore is not subject to the requirements of Chapter 16.12. The development has only proposed improvement of existing driveways and sidewalks to ensure compliance with existing city codes and Americans With Disabilities Act.

CHAPTER 17.52 OFF-STREET PARKING AND LOADING

17.52.010 - Applicability.
The construction of a new structure or parking lot, or alterations to the size or use of an existing structure, parking lot or property use shall require site plan review approval and compliance with this chapter. This chapter does not apply to single-family attached, detached residential dwellings and duplexes.
Finding: Applicable. The applicant has proposed parking lot modifications, therefore, this chapter is applicable.

17.52.015 - Planning commission adjustment of parking standards.
Finding: Applicable. The applicant has not requested a Planning Commission adjustment of parking standards.

17.52.020 - Number of automobile spaces required.
A. The number of parking spaces shall comply with the minimum and maximum standards listed in Table 17.52.020. The parking requirements are based on spaces per one thousand square feet net leasable area unless otherwise stated.

Table 17.52.020		
LAND USE	*PARKING REQUIREMENTS*	
	MINIMUM	*MAXIMUM*
Multifamily Residential	*1.00 per unit*	*2.5 per unit*
3-4 Plex Residential	*2.00*	*4*
Hotel, Motel	*1.0 per guest room*	*1.25 per guest room*
Correctional Institution	*1 per 7 beds*	*1 per 5 beds*
Senior housing, including congregate care, residential care and assisted living facilities; nursing homes and other types of group homes	*1 per 7 beds*	*1 per 5 beds*
Hospital	*2.00*	*4.00*
Preschool Nursery/Kindergarten	*2.00*	*3.00*
Elementary/Middle School	*1 per classroom*	*1 per classroom + 1 per administrative employee + 0.25 per seat in auditorium/assembly room/stadium*

High School, College, Commercial School for Adults	*0.20 per # staff and students*	*0.30 per # staff and students*
Auditorium, Meeting Room, Stadium, Religious Assembly Building, movie theater,	*.25 per seat*	*0.5 per seat*
Retail Store, Shopping Center, Restaurants	*4.10*	*5.00*
Office	*2.70*	*3.33*
Medical or Dental Clinic	*2.70*	*3.33*
Sports Club, Recreation Facilities	*Case Specific*	*5.40*
Storage Warehouse, Freight Terminal	*0.30*	*0.40*
Manufacturing, Wholesale Establishment	*1.60*	*1.67*
Light Industrial, Industrial Park	*1.3*	*1.60*

1. Multiple Uses. In the event several uses occupy a single structure or parcel of land, the total requirements for off-street parking shall be the sum of the requirements of the several uses computed separately.

Finding: Complies as Proposed. The applicant identified that the development includes 23,700 SF of office space and a 5,638 SF fleet maintenance shop requiring a minimum of 69 parking stalls and a maximum of 85 parking stalls, however, based on the applicant's submitted plans, the building also includes a 39,978 SF warehouse/indoor storage area which was not considered in the parking calculations. It also appears that the sign shop which is approximately 1,000 SF in size and a 475 SF storage area connected to the sign shop were not considered in the parking calculations. The sign shop is subject to compliance with parking requirements for light industrial uses and the storage area is subject to compliance with storage warehouse parking requirements. The parking requirements for the entire development are identified below:

Land Use	Square Footage	Minimum Parking Required	Maximum Parking Allowed
Office	23,700 SF	64	79
Light Industrial (Fleet Maintenance and Sign Shop)	6,638 SF	9	11
Storage Warehouse	40,453 SF	12	16
Total	69,316	85	106

The applicant indicated that 69 total visitor and staff parking spaces are proposed, however, based on the site plan submitted it appears that 77 total staff and visitor parking stalls are proposed. Though the applicant did not request it, due to the miscalculation of minimum required parking stalls, a reduction in required parking spaces is needed. Please refer to the findings in OCMC 17.52.020.C.

2. Requirements for types of buildings and uses not specifically listed herein shall be determined by the Community Development Director, based upon the requirements of comparable uses listed.

Finding: Not Applicable. All proposed uses are listed in Table 17.52.020.

3. Where calculation in accordance with the above list results in a fractional space, any fraction less than one-half shall be disregarded and any fraction of one-half or more shall require one space.
Finding: Complies as Proposed. Fractions were rounded in accordance with this chapter.

4. Fleet vehicle parking shall be accommodated within the maximum parking ratio, except that in GI, CI, and MUE zones, fleet vehicle parking may be included in a parking lot in addition to the maximum number of permitted parking spaces.
Finding: Complies as Proposed. The applicant has proposed a fleet vehicle parking area, however, the site is zoned MUE where fleet vehicle parking does not count towards the parking maximum.

5. A change in use within an existing habitable building located in the MUD Design District or the Willamette Falls Downtown District is exempt from additional parking requirements. Additions to an existing building and new construction are required to meet the minimum parking requirements for the areas as specified in Table 17.52.020 for the increased square footage.
Finding: Not Applicable. The subject site is not within the MUD Design District or the Willamette Falls Downtown District. These standards are not applicable.

B. Parking requirements can be met either onsite, or offsite by meeting one or multiple of the following conditions:
1. Parking may be located on the same site as the associated use which it is supporting.
Finding: Complies as Proposed. The parking lot is located on the same site as the use it is supporting.

2. Mixed Uses. If more than one type of land use occupies a single structure or parcel of land, the total requirements for off-street automobile parking shall be the sum of the requirements for all uses, unless it can be shown that the peak parking demands are actually less (e.g. the uses operate on different days or at different times of the day). In that case, the total requirements shall be reduced accordingly, up to a maximum reduction of fifty percent, as determined by the Community Development Director.
Finding: Complies as Proposed. The development includes mixed uses and the total requirements of the parking are the sum of requirements for all uses in accordance with OCMC 17.52.020.

3. Shared Parking. Required parking facilities for two or more uses, structures, or parcels of land may be satisfied by the same parking facilities used jointly, to the extent that the owners or operators show that the need for parking facilities does not materially overlay (e.g., uses primarily of a daytime versus nighttime nature), that the shared parking facility is within one thousand feet of the potential uses, and provided that the right of joint use is evidenced by a recorded deed, lease, contract, or similar written instrument authorizing the joint use.
Finding: Not Applicable. The applicant has not proposed a shared parking agreement.

4. On-Street Parking. On-street parking may be counted toward the minimum standards when it is on the street face abutting the subject land use. An on-street parking space shall not obstruct a required clear vision area and it shall not violate any law or street standard. On-street parking for commercial uses shall conform to the following standards:
a. Dimensions. The following constitutes one on-street parking space:
1. Parallel parking: twenty-two feet of uninterrupted and available curb;
2. Forty-five and/or sixty-degree diagonal parking: Fifteen feet of curb;
3. Ninety-degree (perpendicular) parking: Twelve feet of curb.

4. Public Use Required for Credit. On-street parking spaces counted toward meeting the parking requirements of a specific use may not be used exclusively by that use, but shall be available for general public use at all times. Signs or other actions that limit general public use of on-street spaces are prohibited.

Finding: Not Applicable. The applicant has not proposed to utilize on-street parking to meet the minimum parking requirements.

C. Reduction of the Number of the Minimum Automobile Spaces Required. Any combination of the reductions below is permitted unless otherwise noted.

1. Downtown Parking Overlay. The minimum required number of parking stalls is reduced within the Downtown Parking Overlay by fifty percent.

2. Transit Oriented Development. For projects not located within the Downtown Parking Overlay District, the minimum required number of parking stalls is reduced up to twenty-five percent when:

a. In a commercial center (sixty thousand square feet or greater of retail or office use measured cumulatively within a five hundred foot radius) or

b. When adjacent to multi-family development with over eighty units or

c. Within 1,320 feet of an existing or planned public transit street and within 1,320 feet of the opposite use (commercial center or multi-family development with over eighty units).

3. Tree Preservation. The Community Development Director may grant an adjustment to any standard of this requirement provided that the adjustment preserves a designated heritage tree or grove so that the reduction in the amount of required pavement can help preserve existing healthy trees in an undisturbed, natural condition.

4. Transportation Demand Management. The Community Development Director shall reduce the required number of parking stalls up to twenty-five percent when a parking-traffic study prepared by a traffic engineer demonstrates alternative modes of transportation, including transit, bicycles, and walking, and/or special characteristics of the customer, client, employee or resident population will reduce expected vehicle use and parking space demand for this development, as compared to standard Institute of Transportation Engineers vehicle trip generation rates and further that the transportation demand management program promotes or achieves parking utilization lower than minimum city parking requirements.

A transportation demand management (TDM) program shall be developed to include strategies for reducing vehicle use and parking demand generated by the development and will be measured annually. If, at the annual assessment, the City determines the plan is not successful, the plan may be revised. If the City determines that no good-faith effort has been made to implement the plan, the City may take enforcement actions.

Finding: Not Applicable. The applicant has not requested any of the parking stall reductions within this section.

5. The minimum required number of stalls may be reduced by up to ten percent when the subject property is adjacent to an existing or planned fixed public transit route or within one thousand feet of an existing or planned transit stop.

Finding: Complies as Proposed. The applicant miscalculated the required number of parking stalls and did not request a reduction to the minimum required parking, however, it appears that the applicant has not provided the minimum amount of parking required and a reduction to the minimum required number of stalls is needed. The subject site is approximately 550 feet from an existing transit stop and is eligible to use this reduction. The minimum required number of parking stalls is 85 which can be reduced to 77 utilizing this reduction (85*0.1 = 8.5; 85-8.5 = 76.7). The applicant has provided 77 parking stalls, therefore, the minimum required parking using this reduction has been provided.

17.52.030 - Standards for automobile parking.

A. Access. Ingress and egress locations on public thoroughfares shall be located in the interests of public traffic safety and meet requirements of OCMC 16.12.035. Groups of more than four parking spaces shall be so located and served by driveways so that their use will require no backing movements or other maneuvering within a street right-of-way other than an alley.

Finding: Not Applicable. The site access is existing and no changes are proposed to the existing site access locations.

B. Surfacing. Required off-street parking spaces and access aisles shall have paved surfaces adequately maintained. The use of pervious asphalt/concrete and alternative designs that reduce storm water runoff and improve water quality pursuant to the City's stormwater and low impact development design standards are encouraged.

Finding: Complies as Proposed. The applicant has proposed paved surfaces for all off-street parking spaces and access aisles.

C. Drainage. Drainage shall be designed in accordance with the requirements of OCMC 13.12 and the City public works stormwater and grading design standards.

Finding: Please refer to the findings from section 13.12 of this report.

D. Dimensional Standards.

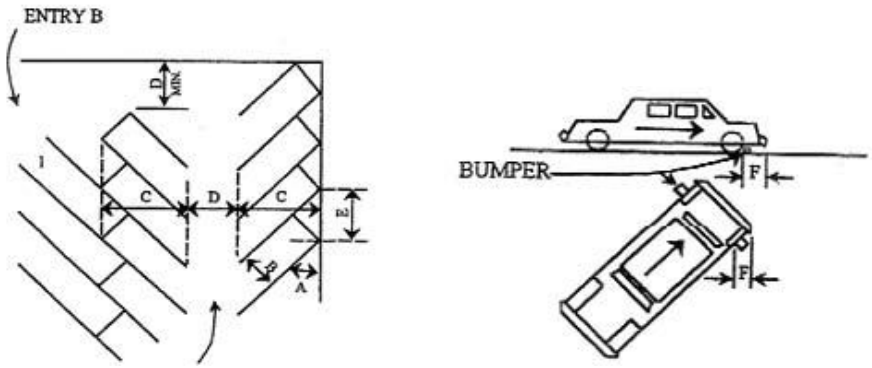
1. Requirements for parking developed at varying angles are according to the table included in this section. A parking space shall not be less than seven feet in height when within a building or structure, and shall have access by an all-weather surface to a street or alley. Parking stalls in compliance with the American with Disabilities Act may vary in size in order to comply with the building division requirements. Up to thirty-five percent of the minimum required parking may be compact, while the remaining required parking stalls are designed to standard dimensions. The Community Development Director may approve alternative dimensions for parking stalls in excess of the minimum requirement which comply with the intent of this chapter.

PARKING STANDARD

PARKING ANGLE SPACE DIMENSIONS

A Parking Angle		*B Stall Width*	*C Stall to Curb*	*D Aisle Width*	*E Curb Length*	*F Overhang*
0 degrees		*8.5*	*9.0*	*12*	*20*	*0*
30 degrees	*Standard* *Compact*	*9'* *8'*	*17.3'* *14.9'*	*11'* *11'*	*18'* *16'*	
45 degrees	*Standard* *Compact*	*8.5* *8.5*	*19.8'* *17.0'*	*13'* *13'*	*12.7'* *11.3'*	*1.4*
60 degrees	*Standard* *Compact*	*9'* *8'*	*21'* *17.9'*	*18'* *16'*	*10.4'* *9.2'*	*1.7*
90 degrees	*Standard* *Compact*	*9'* *8'*	*19.0'* *16.0'*	*24'* *22'*	*9'* *8'*	*1.5*

All dimensions are to the nearest tenth of a foot.



Finding: Complies with Condition. The applicant has proposed 0-degree, 45-degree and 90-degree parking stalls. It appears that the proposed parking stalls do not comply with the following dimensional requirements:

- The 0-degree parking stalls have a stall width of 8 feet rather than the required 8.5 feet.
- The 45-degree parking stalls exceed stall width, curb length, aisle length and overhang.
- The three 90-degree parking stalls near the entrance of the covered parking area exceed stall width and stall length.
- The eight 90-degree parking stalls north of the loading dock exceed stall width, length and aisle width.
- The drive aisle under the covered parking area exceeds aisle width, however, fleet vehicles can enter an exit the fleet maintenance shop through this drive aisle and due to the size of fleet vehicles that may have to utilize this drive aisle, the exceeded width is permissible.

Prior to issuance of a permit associated with the proposed development, the applicant shall submit a revised parking lot layout plan which complies with parking lot dimensional standards in OCMC 17.52.030.D, with the exception of the drive aisle under the covered parking area which can exceed aisle width in order to allow large fleet vehicles to enter and exit the fleet maintenance area, and any existing non-conforming parking stalls and drive aisles which are not proposed to be modified with this development application. **Staff has determined that it is possible, likely and reasonable that the applicant can meet this standard through the Conditions of Approval.**

2. Alternative parking/plan. Any applicant may propose an alternative parking plan. Such plans are often proposed to address physically constrained or smaller sites, however innovative designs for larger sites may also be considered. In such situations, the Community Development Director may approve an alternative parking lot plan with variations to parking dimensions of this section. The alternative shall be consistent with the intent of this chapter and shall create a safe space for automobiles and pedestrians while providing landscaping to the quantity and quality found within parking lot landscaping requirements.
Finding: Complies as Proposed. Though the applicant did not request it, an alternative parking plan is required for the exceeded aisle width under the covered parking area. Fleet vehicles enter and exit the fleet maintenance shop using this drive aisle, therefore, the exceeded width is allowed due to the large fleet vehicles that may be utilizing this drive aisle to access the fleet maintenance area.

E. Carpool and Vanpool Parking. New developments with seventy-five or more parking spaces, excluding projects where seventy-five percent or more of the total floor area is residential , and new hospitals, government offices, group homes, nursing and retirement homes, schools and transit park-and-ride facilities with fifty or more parking spaces, shall identify the spaces available for employee, student and

commuter parking and designate at least five percent, but not fewer than two, of those spaces for exclusive carpool and vanpool parking. Carpool and vanpool parking spaces shall be located closer to the main employee, student or commuter entrance than all other employee, student or commuter parking spaces with the exception of ADA accessible parking spaces. The carpool/vanpool spaces shall be clearly marked "Reserved - Carpool/Vanpool Only."

Finding: Complies with Condition. The proposed development is a new government office with 77 staff and visitor parking spaces, therefore, the project is subject to compliance with this standard and must provide a minimum of four carpool/vanpool parking stalls (77*.05 = 3.85). Prior to issuance of a permit associated with the proposed development, the applicant shall provide a revised parking lot plan which identifies a minimum of four carpool/vanpool parking stalls that comply with the location and carpool/vanpool signage requirements within OCMC 17.52.030.D. **Staff has determined that it is possible, likely and reasonable that the applicant can meet this standard through the Conditions of Approval.**

17.52.040 - Bicycle parking standards.

B. Number of Bicycle Spaces Required. For any use not specifically mentioned in Table A, the bicycle parking requirements shall be the same as the use which, as determined by the Community Development Director, is most similar to the use not specifically mentioned. Calculation of the number of bicycle parking spaces required shall be determined in the manner established in OCMC 17.52.020 for determining automobile parking space requirements. Modifications to bicycle parking requirements may be made through the site plan and design, conditional use, or master plan review process.

*TABLE A Required Bicycle Parking Spaces**

Where two options for a requirement are provided, the option resulting in more bicycle parking applies. Where a calculation results in a fraction, the result is rounded up to the nearest whole number.

USE	*MINIMUM BICYCLE PARKING*	*MINIMUM BICYCLE PARKING - COVERED - The following percentage of bicycle parking is required to be covered*
Multi-family (five or more units)	*1 per 10 units (minimum of 2)*	*50% (minimum of 1)*
Correctional institution	*1 per 15 auto spaces (minimum of 2)*	*30% (minimum of 1)*
Nursing home or care facility	*1 per 30 auto spaces (minimum of 2)*	*30% (minimum of 1)*
Hospital	*1 per 20 auto spaces (minimum of 2)*	*30% (minimum of 1)*
Park-and-ride lot	*1 per 5 auto spaces (minimum of 2)*	*50% (minimum of 1)*
Transit center	*1 per 5 auto spaces (minimum of 2)*	*50% (minimum of 1)*
Parks and open space	*1 per 10 auto spaces (minimum of 2)*	*0%*

Public parking lots	*1 per 10 auto spaces (minimum of 2)*	*50% (minimum of 1)*
Automobile parking structures	*1 per 10 auto spaces (minimum of 4)*	*80% (minimum of 2)*
Religious institutions, movie theater, auditorium or meeting room	*1 per 10 auto spaces (minimum of 2)*	*30% (minimum of 1)*
Libraries, museums	*1 per 5 auto spaces (minimum of 2)*	*30% (minimum of 1)*
Preschool, nursery, kindergarten	*2 per classroom (minimum of 2)*	*50% (minimum of 1)*
Elementary	*4 per classroom (minimum of 2)*	*50% (minimum of 1)*
Junior high and High school	*2 per classroom (minimum of 2)*	*50% (minimum of 2)*
College, business/commercial schools	*2 per classroom (minimum of 2)*	*50% (minimum of 1)*
Swimming pools, gymnasiums, ball courts	*1 per 10 auto spaces (minimum of 2)*	*30% (minimum of 1)*
Retail stores and shopping centers	*1 per 20 auto spaces (minimum of 2)*	*50% (minimum of 2)*
Retail stores handling exclusively bulky merchandise such as automobile, boat or trailer sales or rental	*1 per 40 auto spaces (minimum of 2)*	*0%*
Bank, office	*1 per 20 auto spaces (minimum of 2)*	*50% (minimum of 1)*
Medical and dental clinic	*1 per 20 auto spaces (minimum of 2)*	*50% (minimum of 1)*
Eating and drinking establishment	*1 per 20 auto spaces (minimum of 2)*	*0%*
Gasoline service station	*1 per 10 auto spaces (minimum of 2)*	*0%*

** Covered bicycle parking is not required for developments with two or fewer parking stalls.*

Finding: Complies as Proposed. The proposal includes a total of 77 vehicle parking stalls, however, bicycle parking requirements are not provided for light industrial/storage uses. Because the secondary use is office space, the applicant may use the office bicycle parking requirements to calculate required bicycle parking for the entire site. Offices require one bicycle parking space for every 20 vehicle parking stalls, therefore, a total of four bicycle parking stalls are required, two of which must be covered. The applicant has proposed six covered bicycle parking stalls meeting this requirement.

C. Design Standards.

1. Bicycle parking facilities shall be in the form of a lockable enclosure onsite, secure room in a building onsite, a covered or uncovered rack onsite, or within the adjacent right-of-way.
Finding: Complies as Proposed. The applicant has proposed a covered bicycle rack to meet the bicycle parking requirements.

2. Bicycle parking areas shall be clearly marked or visible from on-site buildings or the street. If a bicycle parking area is not plainly visible from the street or main building entrance, a sign shall be posted indicating the location of the bicycle parking area. Indoor bicycle parking areas shall not require stairs to access the space. If sites have more than one building, bicycle parking shall be distributed as appropriate to serve all buildings.
Finding: Complies as Proposed. The bicycle parking is proposed to be located in front of the building near the entranceway and is visible from the street.

3. All bicycle racks shall be designed so that:
a. The bicycle frame is supported horizontally at two or more places.
Finding: Complies as Proposed. The proposed bicycle parking is a staple "U" design which provides support at two places.

b. The frame and at least one wheel of the bicycle can be locked to the rack with a standard U-type lock.
Finding: Complies as Proposed. The bicycle parking is a staple "U" design which allows the bicycle frame and at least one wheel to be safely locked.

c. The user is not required to lift the bicycle onto the bicycle rack.
Finding: Complies as Proposed. The bicycle parking is in an easily accessible area where bicycles do not need to be lifted into the bicycle parking area.

d. Each bicycle parking space is accessible without moving another bicycle.
Finding: Complies as Proposed. The bicycle parking is a staple "U" design which allows two bicycles to be locked to each rack without interfering with any other bicycles in the bicycle parking area.

e. It is a minimum of thirty inches tall and eighteen inches wide between the two points of contact.
Finding: Complies with Condition. The applicant did not submit details on the proposed bicycle rack design. Prior to issuance of a building permit associated with the proposed development, the applicant shall submit details on the bicycle rack design demonstrating that it is a minimum of 30 inches tall and provides a minimum of 18 inches between the two points of contact. **Staff has determined that it is possible, likely and reasonable that the applicant can meet this standard through the Conditions of Approval.**

f. Provides an area of six feet by two feet per bicycle.
Finding: Complies with Condition. It appears that the bicycle parking area provides an area that is approximately 6' by 1.5' per bicycle. Prior to issuance of a building permit associated with the proposed development, the applicant shall submit a revised bicycle parking layout which provides an area of six feet by two feet per bicycle. **Staff has determined that it is possible, likely and reasonable that the applicant can meet this standard through the Conditions of Approval.**

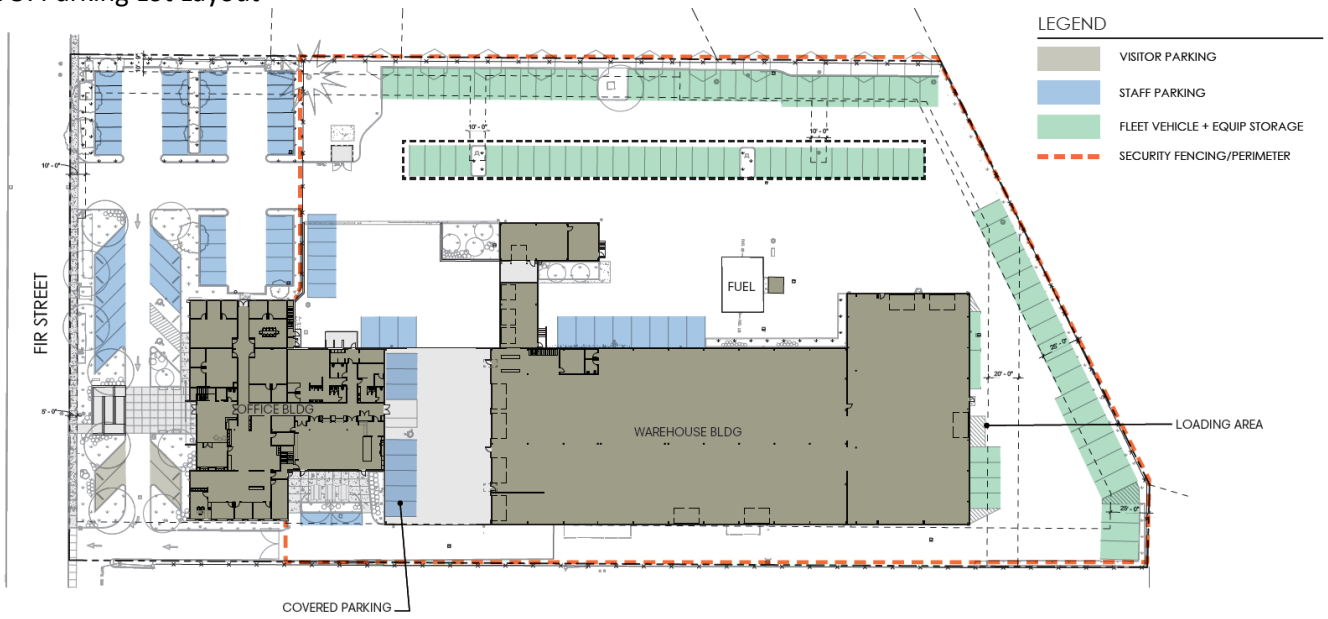
g. All bicycle racks and lockers shall be securely anchored to the ground or to a structure.
Finding: Complies as Proposed. The bicycle racks are proposed to be anchored to the ground.

17.52.060 - Parking lot landscaping.

A. Applicability. Unless otherwise specified, construction of new parking lots and alterations of existing parking lots shall comply with parking lot landscaping standards. Parking lot landscaping requirements within this section do not apply to parking structures or parking garages, except landscaping as required in OCMC 17.62.

Finding: Applicable. The applicant has proposed parking lot landscaping. The covered parking area between the office portion of the building and the fleet maintenance and storage part of the building is a parking structure/parking garage which is not subject to the parking lot landscaping requirements within this section. Additionally, the fleet parking area is a separate storage area, not a parking lot, therefore it is not subject to the parking lot landscaping standards.

Figure 5: Parking Lot Layout



B. Development Standards.

1. The landscaping shall be located in defined landscaped areas that are uniformly distributed throughout the parking or loading area.

Finding: Complies as Proposed. The proposed landscaping throughout the parking lot is uniformly distributed.

2. All areas in a parking lot not used for parking, maneuvering, or circulation shall be landscaped.

Finding: Complies with Condition. The parking lot includes a drive aisles and parking stalls that are larger than the code allows. The additional drive aisle width and parking stall size is not required for maneuvering or circulation. Additionally, the 45-degree parking stalls include a larger overhang than allowed which is not used for parking, maneuvering or circulation. Prior to issuance of a permit associated with the proposed development, the applicant shall provide a revised parking lot layout and a revised landscaping plan in which all areas within the parking lot not used for parking, maneuvering or

circulation are landscaped. **Staff has determined that it is possible, likely and reasonable that the applicant can meet this standard through the Conditions of Approval.**

3. Parking lot trees shall be a mix of deciduous shade trees and coniferous trees. The trees shall be evenly distributed throughout the parking lot as both interior and perimeter landscaping.
Finding: Complies as Proposed. The landscape plan includes a mix of deciduous and coniferous trees spread throughout the interior and perimeter parking lot landscaping.

4. Required landscaping trees shall be of a minimum two-inch minimum caliper size (though it may not be standard for some tree types to be distinguished by caliper), planted according to American Nurseryman Standards, and selected from the Oregon City Street Tree List or approved by an arborist;
Finding: Complies with Condition. The landscape plan identifies that all parking lot trees will be a minimum of two inches in caliper, and were approved by Registered Landscape Architect, Daniel K. Chin. The landscaping did not identify that trees will be planted in accordance with American Nurseryman Standards. Prior to issuance of a building permit associated with the proposed development, the applicant shall submit a revised landscaping plan which identifies that proposed plantings will be planted in accordance with American Nurseryman Standards. **Staff has determined that it is possible, likely and reasonable that the applicant can meet this standard through the Conditions of Approval.**

5. At maturity, all of the landscaped area shall be planted in ground cover plants, which includes grasses. Mulch (as a ground cover) shall only be allowed underneath plants at full growth and within two feet of the base of a tree and is not a substitute for ground cover.
Finding: Complies with Condition. The landscaping plan does not identify that mulch will not be allowed except underneath plants at full growth and within two feet of the base of a tree. Prior to issuance of a permit associated with the proposed development, the applicant shall submit a revised landscaping plan which identifies that the landscaping will not include mulch as ground cover except underneath plants at full growth and within two feet of the base of trees. **Staff has determined that it is possible, likely and reasonable that the applicant can meet this standard through the Conditions of Approval.**

6. Landscaped areas shall include irrigation systems unless an alternate plan is submitted, and approved by the Community Development Director, that can demonstrate adequate maintenance;
Finding: Complies as Proposed. The applicant's landscaping plan identified that the landscaping will be served by an automatic irrigation system.

7. All landscaping shall be installed according to accepted planting procedures, according to American Nurseryman Standards.
Finding: Complies with Condition. The landscaping did not identify that trees will be planted in accordance with American Nurseryman Standards. Prior to issuance of a building permit associated with the proposed development, the applicant shall submit a revised landscaping plan which identifies that proposed plantings will be planted in accordance with American Nurseryman Standards. **Staff has determined that it is possible, likely and reasonable that the applicant can meet this standard through the Conditions of Approval.**

C. Perimeter Parking Lot Landscaping and Parking Lot Entryway/Right-of-Way Screening. Parking lots and associated drive aisles shall include a five-foot wide landscaped buffer where the parking lot abuts the right-of-way and/or adjoining properties. In order to provide connectivity between non-single-family sites, the Community Development Director may approve an interruption in the perimeter parking lot landscaping for a single driveway where the parking lot abuts property designated as multi-family,

commercial or industrial. Shared driveways and parking aisles that straddle a lot line do not need to meet perimeter landscaping requirements.
Finding: Complies as Proposed. The applicant has proposed a perimeter parking lot area that is approximately 11 feet in width along the southern property line. The site is non-conforming with regard to the perimeter parking lot landscaping along the eastern property line. The applicant has not proposed changes to the parking area or landscaping in this location, therefore, the non-conforming perimeter parking lot landscaping along the eastern property line is allowed to remain except as required to be upgraded in accordance with standards for non-conforming upgrades in OCMC 17.58.

1. The perimeter parking lot are[a] shall include:
a. Trees spaced a maximum of thirty feet apart (minimum of one tree on either side of the entryway is required). When the parking lot is adjacent to a public right-of-way, the parking lot trees shall be offset from the street trees;
Finding: Complies with Condition. The perimeter parking lot landscaping includes trees spaced more than thirty feet apart. Prior to issuance of a building permit associated with the proposed development, the applicant shall submit a revised landscaping plan which includes trees spaced no more than 30 feet apart within the new perimeter parking lot landscaping area. **Staff has determined that it is possible, likely and reasonable that the applicant can meet this standard through the Conditions of Approval.**

b. An evergreen hedge screen of thirty to forty-two inches high or shrubs spaced no more than four feet apart on average. The hedge/shrubs shall be parallel to and not nearer than two feet from the right-of-way line. The required screening shall be designed to allow for free access to the site and sidewalk by pedestrians. Visual breaks, no more than five feet in width, shall be provided every thirty feet within evergreen hedges abutting public right-of-ways.
Finding: Complies as Proposed. The landscaping plan includes shrubs spaced no more than 4 feet on center on average within the perimeter parking lot landscaping area. The required screening allows for free access to the site and sidewalk by pedestrians, and visual breaks, no more than five feet in width, are provided every thirty feet within evergreen hedges abutting public right-of-way. The shrubs within the perimeter parking lot landscaping area are parallel to the right-of-way line, but they appear to be closer than two feet to the right-of-way. Prior to issuance of a permit associated with the proposed development, the applicant shall submit a revised landscaping plan which includes shrubs within the perimeter parking lot landscaping area that are not nearer than two feet from the right-of-way line. **Staff has determined that it is possible, likely and reasonable that the applicant can meet this standard through the Conditions of Approval.**

D. Parking Area/Building Buffer. Except for parking lots with fewer than five parking stalls, parking areas (excluding drive aisles with no adjacent parking) shall be separated from the exterior wall of a structure, exclusive of pedestrian entranceways or loading areas, by one of the following:
1. Minimum five-foot wide landscaped planter strip (excluding areas for pedestrian connection) meeting the standards for perimeter parking lot area landscaping; or:
2. Minimum seven foot sidewalks with shade trees spaced a maximum of thirty feet apart in three-foot by five-foot tree wells.
Finding: Complies with Condition. The landscaping plan does not include parking area/building buffer landscaping in all required locations. Prior to issuance of a permit associated with the proposed development, the applicant shall submit a revised landscaping plan which includes a five-foot wide landscaping buffer meeting the perimeter parking lot landscaping standards or a seven-foot sidewalk with shade trees spaced a maximum of 30 feet apart in three-foot by five-foot tree wells between all new parking and the exterior wall of a structure, exclusive of pedestrian entranceways or loading areas

in accordance with the parking area/building buffer landscaping requirements in OCMC 17.52.060.D. **Staff has determined that it is possible, likely and reasonable that the applicant can meet this standard through the Conditions of Approval.**

E. Interior Parking Lot Landscaping. Surface parking lots with more than five parking stalls shall include at least forty-five square feet of interior parking lot landscaping per parking stall to improve the water quality, reduce storm water runoff, and provide pavement shade. Pedestrian walkways or any impervious surface in the landscaped areas are not to be counted in the percentage. Fractions shall be rounded up when calculating the required number of plantings. Interior parking lot landscaping shall include:

a. A minimum of one tree per four parking spaces.

Finding: Complies with Condition. The proposal includes a total of 77 staff and visitor parking stalls, however, 9 of these stalls are within a parking garage/parking structure which is exempt from parking lot landscaping requirements. Therefore, there are a total of 68 parking stalls requiring 17 interior parking lot landscaping trees (68/4 = 17). The applicant has proposed only 12 trees within the interior parking lot landscaping area. Prior to issuance of a building permit associated with the proposed development, the applicant shall submit a revised parking lot landscaping plan which includes one tree for every four parking stalls within the interior parking lot landscaping area in accordance with the interior parking lot landscaping requirements in OCMC 17.52.060.E. **Staff has determined that it is possible, likely and reasonable that the applicant can meet this standard through the Conditions of Approval.**

b. A minimum of 1.5 shrubs per parking space.

Finding: Complies with Condition. The proposal includes a total of 77 staff and visitor parking stalls, however, 9 of these stalls are within a parking garage/parking structure which is exempt from parking lot landscaping requirements. Therefore, there are a total of 68 parking stalls requiring 102 interior parking lot landscaping shrubs (68*1.5 = 102). The applicant has not proposed an adequate amount of shrubs within the interior parking lot landscaping area. Prior to issuance of a building permit associated with the proposed development, the applicant shall submit a revised parking lot landscaping plan which includes 1.5 shrubs per parking space planted within the interior parking lot landscaping area in accordance with the interior parking lot landscaping requirements in OCMC 17.52.060.E. **Staff has determined that it is possible, likely and reasonable that the applicant can meet this standard through the Conditions of Approval.**

c. No more than eight contiguous parking spaces shall be created without providing an interior landscape strip between them. Landscape strips shall be provided between rows of parking shall be a minimum of six feet in width and a minimum of ten feet in length.

Finding: Complies as Proposed. The applicant has not proposed more than eight contiguous parking spaces without an interior landscape strip between them.

F. Alternative landscaping plan.

Any applicant may propose an alternative landscaping plan. Such plans are often proposed to address physically constrained or smaller sites, however innovative designs for larger sites may also be considered. Alternative plans may include the use of low impact development techniques and minimized landscaping requirements. In such situations, the Community Development Director may approve variations to the landscaping standards of OCMC 17.52.060 in accordance with A and/or B below.

1. General Review Standard. The alternative shall meet the standards in OCMC 17.62.015- Modifications that will better meet design review requirements.

2. Credit for Pervious/Low Impact Development. The Community Development Director may count up to fifty percent of the square footage of any pervious hardscaped landscape material within a parking lot that is designed and approved pursuant to the City's adopted stormwater and low impact development design standards toward minimum landscaping requirements for the site. (This includes porous pavement detention, open celled block pavers, porous asphalt, porous concrete pavement, porous turf, porous gravel, etc.).

Finding: Not Applicable. The applicant has not proposed an alternative landscaping plan.

17.52.080 - Maintenance.

The owner, tenant and their agent, if any, shall be jointly and severally responsible for the maintenance of the site including but not limited to the off-street parking and loading spaces, bicycle parking and all landscaping which shall be maintained in good condition so as to present a healthy, neat and orderly appearance and shall be kept free from refuse and debris.

All plant growth in interior landscaped areas shall be controlled by pruning, trimming, or otherwise so that:

a. It will not interfere with the maintenance or repair of any public utility;

b. It will not restrict pedestrian or vehicular access; and

c. It will not constitute a traffic hazard due to reduced visibility.

Finding: Complies as Proposed. The applicant's narrative identified that the landscaped areas will be maintained by the property owner in accordance with this section.

17.52.090 - Loading areas.

A. Purpose.

The purpose of this section is to provide adequate loading areas for commercial, office, retail and industrial uses that do not interfere with the operation of adjacent streets.

B. Applicability.

OCMC 17.52.090 applies to uses that are expected to have service or delivery truck visits with a forty-foot or longer wheelbase, at a frequency of one or more vehicles per week. The City Engineer and decision maker shall determine through site plan and design review the number, size, and location of required loading areas, if any.

C. Standards.

1. The off-street loading space shall be large enough to accommodate the largest vehicle that is expected to serve the use without obstructing vehicles or pedestrian traffic on adjacent streets and driveways. Applicants are advised to provide complete and accurate information about the potential need for loading spaces because the City Engineer or decision maker may restrict the use of other public right-of-way to ensure efficient loading areas and reduce interference with other uses.

Finding: Complies as Proposed. Though the proposed development does include multiple loading areas the applicant does not anticipate service or delivery truck visits with forty foot or longer wheelbase vehicles occurring more than once a week. All deliveries or services requiring a loading area will be accommodated on site and will not interfere with the operation of adjacent streets.

2. Where parking areas are prohibited between a building and the street, loading areas or drive isles are also prohibited.

Finding: Not Applicable. The development has not proposed load areas between a building and the street.

3. The City Engineer and decision maker, through site plan and design review, may approve a loading area adjacent to or within a street right-of-way when all of the following loading and unloading operations conditions are met:
a. Short in duration (i.e., less than one hour);
b. Infrequent (less than three operations daily between 5:00 a.m. and 12:00 a.m. or all operations between 12:00 a.m. and 5:00 a.m. at a location that is not adjacent to a residential zone);
c. Does not obstruct traffic during peak traffic hours;
d. Does not interfere with emergency response services; and
e. Is acceptable to the applicable roadway authority.
Finding: Complies as proposed. Though the proposed development does include multiple loading areas the applicant does not anticipate service or delivery truck visits with forty foot or longer wheelbase vehicles occurring more than once a week. All deliveries or services requiring a loading area will be accommodated on site and will not interfere with the operation of adjacent streets.

CHAPTER 17.54 SUPPLEMENTAL ZONING REGULATIONS AND EXCEPTIONS

17.54.100 Fences, Hedges, Walls, and Retaining Walls.
A. A fence, hedge, wall, retaining wall, or combination thereof may be located on real property, not within the right-of-way, subject to all of the following:
1. A fence, hedge, wall, retaining wall, or combination thereof located in front of a building may be up to 3.5-feet in total height as measured from the finished grade at any point on the fence.
2. A fence, hedge, wall, located next to, or behind the forward most building, or within more than forty feet of the right-of-way, whichever is less may be up to:
a. Six feet in total height for residential properties with less than five units as measured from the finished grade at any point on the fence; or
b. Eight feet in total height for all other uses as measured from the finished grade at any point on the fence.
3. A retaining wall or combination of a fence, hedge, wall located next to and behind the forward most building, or within more than forty feet of the right-of-way, whichever is less, may be up to (as measured from the finished grade) 8.5 feet in height from the finished grade.
4. Fences, hedges, and/or walls located within two feet above a retaining wall, as measured on a horizontal plane, shall be measured together for the purposes of determining height.
5. Property owners shall ensure compliance with the Traffic Sight Obstruction requirements in Chapter 10.32 of the Oregon City Municipal Code.
6. Retaining walls completely below the elevation of the right-of-way may be up to six feet in height.
7. Minimum fall protection required by the Building Official, such as railings, is not included in the height of a retaining wall but must comply with the fence height requirements.
Finding: Complies as Proposed. The applicant's narrative identified that proposed fences and walls will be in compliance with fence height regulations within this section.

B. When no other practicable alternative exists, the City Engineer may permit a fence, hedge, wall, retaining wall, or combination thereof to be located within the right-of-way subject to all of the following:
1. A Revocable Permanent Obstruction in the Right of Way permit is granted per OCMC 12.04.120;
2. Retaining walls, fences, or hedges comply with OCMC 17.54.100.A, unless determined to be impracticable by the City Engineer.
3. The abutting property owner shall ensure compliance with the Traffic Sight Obstruction requirements in Chapter 10.32 of the Oregon City Municipal Code.

Finding: Not Applicable. No fences or walls within the right-of-way have been proposed as part of this development.

C. It is unlawful for any person to erect any electric fence or any fence constructed in whole or in part of barbed wire or to use barbed wire, except as erected in connection with security installations at a minimum height of six feet, providing further that prior written approval has been granted by the City Manager.
Finding: Complies as Proposed. The applicant's narrative identified that no barbed wire or electric fences are proposed as part of this development.

CHAPTER 17.58 LAWFUL NONCONFORMING USES, LOTS, STRUCTURES, AND SITES

17.58.040 - Lawful nonconforming structure or site.
A structure or site that was lawfully established but no longer conforms to all development standards of this land use code (such as setbacks) shall be considered lawfully nonconforming. Notwithstanding development standard requirements in this Code, minor repairs and routine maintenance of a lawful nonconforming structure are permitted. The continuation of a lawful nonconforming structure or site is subject to the following:
A. Accidental Destruction. When a nonconforming structure is damaged by fire or other causes, the structure may be rebuilt using the same structure footprint.
B. Intentional Destruction. When a nonconforming structure is removed or intentionally damaged by fire or other causes within the control of the owner, the replacement structure shall comply with the development standards of this title.
C. Expansion. An expansion of a lawful nonconforming structure or site may be approved, conditionally approved or denied in accordance with the standards and procedures of this section.
1. In making a determination on such applications, the decision maker shall weigh the proposal's positive and negative features and the public convenience or necessity to be served against any adverse conditions that would result from authorizing the particular development at the location proposed, and, to approve such expansion, it shall be found that the criteria identified in OCMC 17.58.060 have either been met, can be met by observance of conditions, or are not applicable.
2. Increases in the square footage of a building and/or site improvements which include installation of any additional off-street parking stalls that exceed the threshold of subparagraph C.2.a. below shall comply with the development standards listed in subparagraph C.2.b. The value of the alterations and improvements is based on the entire project and not individual building permits.
a. Thresholds triggering compliance. The standards of subparagraph C.2.b. below shall be met when the value of the increase in square footage of a building and/or increase in off-street parking stalls, as determined by the Community Development Director, is more than seventy-five thousand dollars. The following alterations and improvements shall not be included in the threshold calculation:
1. Proposed alterations to meet approved fire and life safety agreements;
2. Alterations related to the removal of existing architectural barriers, as required by the Americans with Disabilities Act, or as specified in Section 1113 of the Oregon Structural Specialty Code;
3. Alterations required to meet Seismic Design Requirements; and
4. Improvements to on-site stormwater management facilities in conformance with Oregon City Stormwater Design Standards.
Finding: Not Applicable. Though the site is non-conforming for various reasons, no increase in building square footage or site improvements which include installation of additional off-street parking stalls is proposed, therefore, non-conforming upgrades are not required as part of this development.

CHAPTER 17.60 VARIANCES

17.60.020 - Variances—Procedures.

A. A request for a variance shall be initiated by a property owner or authorized agent by filing an application with the city recorder. The application shall be accompanied by a site plan, drawn to scale, showing the dimensions and arrangement of the proposed development. When relevant to the request, building plans may also be required. The application shall note the zoning requirement and the extent of the variance requested. Procedures shall thereafter be held under Chapter 17.50. In addition, the procedures set forth in subsection D. of this section shall apply when applicable.

B. A nonrefundable filing fee, as listed in OCMC 17.50.080, shall accompany the application for a variance to defray the costs.

Finding: Applicable. The applicant has requested a variance to the following standards:

OCMC 17.62.050.B.1 – Parking in front of building
OCMC 17.36.040.D – Landscape buffer for industrial uses
OCMC 17.36.040.F – Minimum site landscaping

C. Before the planning commission may act on a variance, it shall hold a public hearing thereon following procedures as established in Chapter 17.50. A Variance shall address the criteria identified in OCMC 17.60.030, Variances — Grounds.

Finding: Complies as Proposed. The application has been noticed in accordance with the standards in 17.50 and is subject to the variance criteria within this chapter.

D. Minor variances, as defined in subsection E. of this section, shall be processed as a Type II decision, shall be reviewed pursuant to the requirements in OCMC 17.50.030B., and shall address the criteria identified in OCMC 17.60.030, Variance — Grounds.

E. For the purposes of this section, minor variances shall be defined as follows:

1. Variances to setback and yard requirements to allow additions to existing buildings so that the additions follow existing building lines;

2. Variances to width, depth and frontage requirements of up to twenty percent;

3. Variances to residential yard/setback requirements of up to twenty-five percent;

4. Variances to nonresidential yard/setback requirements of up to ten percent;

5. Variances to lot area requirements of up to five percent;

6. Variance to lot coverage requirements of up to twenty-five percent;

7. Variances to the minimum required parking stalls of up to five percent; and

8. Variances to the floor area requirements and minimum required building height in the mixed-use districts.

9. Variances to design and/or architectural standards for single family dwellings, duplexes, single-family attached dwellings, internal conversions, accessory dwelling units, and 3-4 plexes in OCMC 17.14, 17.16, 17.20, 17.21, and 17.22.

Finding: Not Applicable. The variances requested are major variances subject to a Type III review process.

17.60.030 - Variance—Grounds.

A variance may be granted only in the event that all of the following conditions exist:

A. That the variance from the requirements is not likely to cause substantial damage to adjacent properties by reducing light, air, safe access or other desirable or necessary qualities otherwise protected by this title;

Finding: Complies as Proposed

OCMC 17.62.050.B.1 – Parking in front of building

Finding: Complies as Proposed. Currently there are 23 parking stalls located in front of the building. The proposed site modifications will reduce the number of stalls in that same location to 21, however, the front portion of the building will also be demolished and thus the building will be further away from the street. As a result of the demolition, 7 additional parking stalls which are currently next to the building and are not being modified as part of this proposal, will be in front of the structure. In summary, there are currently 23 stalls in front of the building but after construction there will be 28. Because the building will have a slightly smaller footprint and the change is in the middle of the site, this will have no effect on the light, air, or access of adjacent properties. It will create a building which is further from the street, however, the zoning of the site and others around it is industrial which does not require the building to be adjacent to the street. The project is only subject to the requirement because the user is institutional. Public notice was posted onsite and provided to property owners within 300 feet of the property and no comments from adjacent property owners have been received indicating that the proposed parking in front of the building will result in substantial damage to their properties.

OCMC 17.36.040.D – Landscape buffer for industrial uses

Finding: Complies as Proposed. Pursuant with OCMC 17.36.040.D, a 20-foot buffer zone with site obscuring landscaping is required if an industrial use abuts a residential or commercial use. The subject site abuts the back of buildings with commercial uses to the north and to the west. Rather than the required 20-foot buffer, the applicant has proposed a landscape buffer ranging from 5 -7 feet, as well as a site-obscuring fence. The proposed industrial use faces the back of the adjacent commercial buildings which are inaccessible to patrons, therefore, the 20-foot buffer is not as critical as it is for industrial uses facing or abutting the front of commercial buildings and sites. Furthermore, the commercial property to the north is the Fred Meyer grocery store and the subject site abuts the loading dock where loading and unloading uses taking place are consistent with industrial uses which typically do not require a buffer zone. Finally, though the site is industrial, fleet maintenance activities will take place within the building and the outdoor uses will be limited to vehicle fueling, vehicle washing, and fleet vehicle parking. These are not heavy-duty industrial uses which may generate excessive noise and result in a disturbance to adjacent property owners, therefore, granting the variance for a decreased buffer zone is not likely to cause damage to adjacent properties. Public notice was posted onsite and provided to property owners within 300 feet of the property and no comments from adjacent property owners have been received indicating that the reduced buffer zone between commercial uses and the industrial zone will result in substantial damage to their properties.

OCMC 17.36.040.F – Minimum site landscaping

Finding: Complies as Proposed. Pursuant with OCMC 17.36.040.F, 15% of the site must be landscaped. Though the proposal includes only approximately 8% site landscaping, new perimeter parking lot landscaping will comply with perimeter parking lot landscaping requirements, while existing perimeter parking lot landscaping will remain as is. Because adequate perimeter parking lot landscaping is provided, adjacent properties should not be affected by the request to decrease the site landscaping, particularly as the reduction will not result in loss of light or air. Public notice was posted onsite and provided to property owners within 300 feet of the property and no comments from adjacent property owners have been received indicating that the reduced site landscaping will result in substantial damage to their properties.

B. That the request is the minimum variance that would alleviate the hardship;

Finding: Complies with Condition.

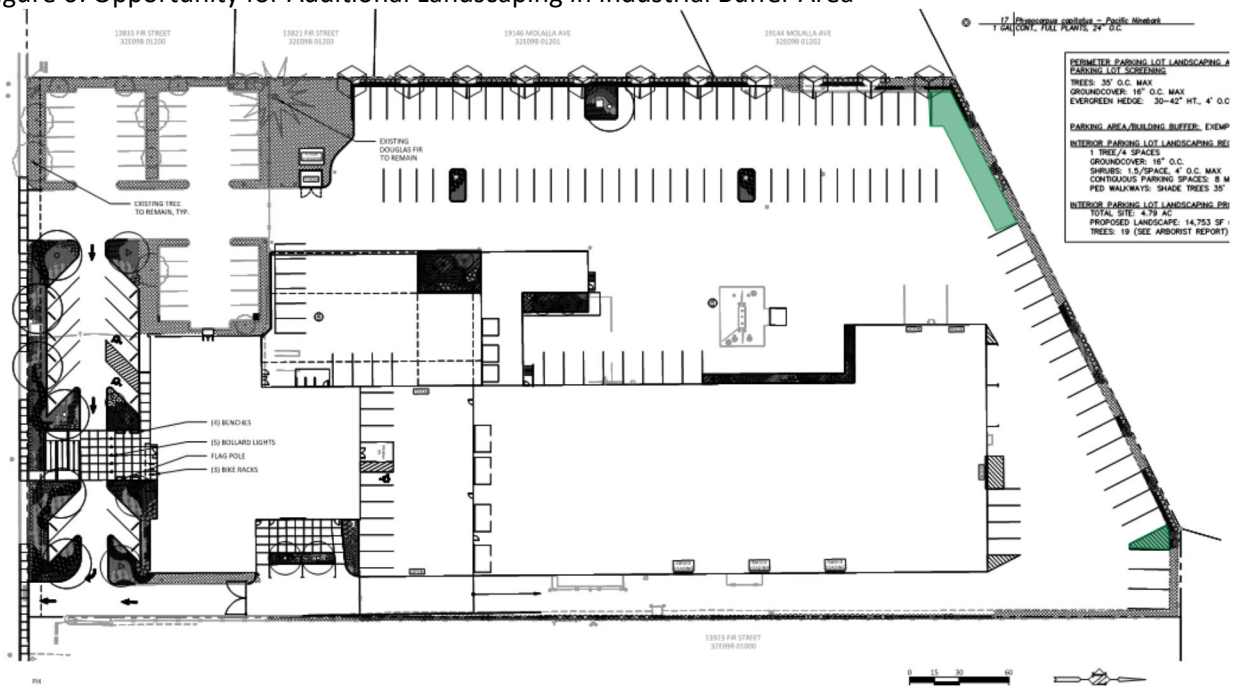
OCMC 17.62.050.B.1 – Parking in front of building

Finding: Complies as Proposed. The hardship for the development is working within the confinements of the pre-existing building and site conditions while accommodating the needs of the new tenant. Currently there are 23 parking stalls located in front of the building. The proposed site modifications will result in 21 parking stalls located in the same area front of the building, however, the building itself will also move back as a result of the demolition of the two vestibules in front of the building. The demolition will result in 7 existing parking stalls being in front of the building for a total of 28 parking stalls in front of the building. The additional parking that will be in front of the building is existing parking which is a pre-existing condition outside of the applicant's control, and the proposed building modifications are necessary tenant improvements to make the existing building suitable for the new tenant. Allowing the additional 7 parking stalls in front of the building would allow the new tenant to use the existing building efficiently while meeting their needs while working with the existing site conditions, and is the minimum variance that would alleviate the hardship.

OCMC 17.36.040.D – Landscape buffer for industrial uses

Finding: Complies with Condition. The hardship preventing the applicant from complying with the standard is providing an adequate fleet vehicle storage area with enough room for large fleet vehicles to circulate the site, maneuver, and park. The applicant's proposal includes a total of 98 fleet and equipment storage spaces, and the applicant has submitted documentation identifying that the Public Works Operations Division currently has 112 fleet vehicles and other equipment requiring storage on the property. Though some of the equipment will be stored within the warehouse, all 98 proposed fleet and equipment storage spaces are necessary to accommodate the Public Works Operations Division's vehicle fleet. Nevertheless, it appears that additional landscaping could be added in areas not used for parking, circulation or maneuvering within the fleet storage area (Figure 6/Exhibit 5):

Figure 6: Opportunity for Additional Landscaping in Industrial Buffer Area



Prior to issuance of a building permit, the applicant shall provide a revised landscaping plan which incorporates landscaping into the buffer area identified in Exhibit 5 or provide documentation explaining

why landscaping cannot be accommodated in this area in order to show that the variance being requested is the minimum that would alleviate the hardship. **Staff has determined that it is possible, likely and reasonable that the applicant can meet this standard through the Conditions of Approval.**

OCMC 17.36.040.F – Minimum site landscaping

Finding: Complies with Condition. The hardship preventing the applicant from complying with the standard is providing an adequate fleet vehicle storage area with enough room for large fleet vehicles to circulate the site, maneuver, and park as well as providing enough parking for staff and visitors. The applicant's proposal includes a total of 98 fleet and equipment storage spaces, and the applicant has submitted documentation identifying that the Public Works Operations Division currently has 112 fleet vehicles and other equipment requiring storage on the property. Though some of the equipment will be stored within the warehouse, all 98 proposed fleet and equipment storage spaces are necessary to accommodate the Public Works Operations Division's vehicle fleet. Additionally, the applicant is proposing less than the minimum staff and visitor parking required and utilizing a parking reduction, therefore, additional parking stalls cannot be removed in order to accommodate more landscaping. However, per the parking lot dimensional standards in OCMC 17.52.030.D, the proposed parking lot layout exceeds parking stall and aisle width dimensional standards. As conditioned within this report, all proposed parking must comply the dimensional standards in OCMC 17.52.030.D and any areas within a parking lot not used for parking, maneuvering or circulation must be landscaped. Modifying the proposed parking to comply with dimensional standards will allow for additional landscape areas bringing the development closer to the 15% requirement. Additionally, it appears that there are areas within the site that are not used for parking, maneuvering or circulation and could accommodate additional landscaping (Figure 7/Exhibit 6).

Figure 7: Opportunity for Additional Site Landscaping

Prior to issuance of a building permit associated with the proposed development, the applicant shall provide a revised parking lot layout which complies with parking lot dimensional standards in OCMC 17.52.030.D and provides additional landscaping in all areas of the parking lot not used for parking,

maneuvering or circulation. Additionally, the revised landscaping plan shall incorporate landscaping within the areas identified in Exhibit 6 or provide documentation explaining why landscaping cannot be accommodated in these areas in order to show that the variance being requested is the minimum that would alleviate the hardship. **Staff has determined that it is possible, likely and reasonable that the applicant can meet this standard through the Conditions of Approval.**

C. Granting the variance will equal or exceed the purpose of the regulation to be modified.

Finding: Complies as Proposed.

OCMC 17.62.050.B.1 – Parking in front of building

Finding: Complies as Proposed. The purpose of requiring parking behind buildings is to create walkable, pedestrian-friendly streets and developments which encourage alternative modes of transportation, and encourage interaction between public and private space. Though the proposal will result in five more parking stalls in front of the building than there currently are, the development will be vastly more pedestrian-friendly than the current site conditions. As conditioned within this report, there will be fourteen pedestrian amenities between the building and the public street creating interaction between public and private space and contributing to a pedestrian friendly environment. Additionally, the development will include an ADA ramp providing access to the building and plaza from Fir Street improving pedestrian conditions. Finally, although the building will be further back from the street and five additional parking stalls will be in front of the building, the proposed building design is much more modern and aesthetically pleasing creating a visually interesting development and streetscape that contributes to walkability and a pedestrian friendly design.

OCMC 17.36.040.D – Landscape buffer for industrial uses

Finding: Complies as Proposed. The purpose of the 20-foot buffer zone for industrial properties abutting a commercial use is to provide sight obscuring, a noise buffer, and a separation of uses. The subject site faces the backs of the adjacent commercial buildings which are inaccessible to patrons, therefore, the 20-foot buffer is not as critical as it is for industrial uses abutting the front of commercial buildings and sites. Furthermore, the commercial property to the north is the Fred Meyer grocery store and the subject site abuts the loading dock where loading and unloading uses taking place are consistent with industrial uses which typically do not require a buffer zone or a separation of uses. Finally, though the site is industrial, fleet maintenance activities will take place within the building and the outdoor uses will be limited to vehicle fueling, vehicle washing, and fleet vehicle parking. These are not heavy-duty industrial uses which may result in a noise disturbance to adjacent property owners and the fleet and equipment storage is organized with striped parking rather than unsightly and unorganized outdoor storage which commercial developments may want to block from view. Given the fact that the applicant has proposed a light industrial use which abuts the backs of commercial uses, as conditioned within this report, the proposed decreased landscape buffer and fence are adequate to provide sight obscuring, block any noises coming from the site and establish a separation of uses, meeting the intent of the standard.

OCMC 17.36.040.F – Minimum site landscaping

Finding: Complies as Proposed. The purpose of minimum site landscaping requirements is to provide shade, cooling, stormwater retention, and aesthetically pleasing developments. By providing the mitigation for the site landscaping variance request as conditioned within this report, the site landscaping will meet the intent of minimum site landscaping requirements and will provide stormwater, shading, cooling and aesthetic benefits.

D. Any impacts resulting from the adjustment are mitigated;

Finding:

OCMC 17.62.050.B.1 – Parking in front of building

Finding: Complies as Proposed. Currently there are 23 parking stalls located in front of the building. The proposed site modifications will result in 21 parking stalls located in front of the building, however, the building itself will also move back as a result of the demolition of the two vestibules in front of the building. The demolition will result in an additional 7 parking stalls being in front of the building for a total of 28 parking stalls in front of the building. The increase in parking in front of the building is a result of the building moving back and the increased setback. As conditioned within this report, the increased setback is already mitigated in accordance with the standards in OCMC 17.62.055.D by providing a total of fourteen pedestrian amenities in the increased setback area. Because the parking in front of the building is a result of the building moving back and the increased setback is already being mitigated, no additional mitigation is required.

OCMC 17.36.040.D – Landscape buffer for industrial uses

Finding: Complies with Condition. The applicant has not proposed any mitigation, however, in order to offset any potential negative impacts resulting from the decreased buffer, the applicant shall provide mitigation by installing landscaping including trees spaced no more than 35 feet apart within the buffer zone where the subject site abuts commercial properties. Prior to issuance of a permit associated with the proposed development, the applicant shall submit a revised landscaping plan which includes trees spaced no more than 35 feet apart within the buffer zone where the subject site abuts commercial properties. These trees may not be double counted as mitigation trees. **Staff has determined that it is possible, likely and reasonable that the applicant can meet this standard through the Conditions of Approval.**

OCMC 17.36.040.F – Minimum site landscaping

Finding: Complies with Condition. The applicant has proposed an oversized stormwater facility in order to mitigate the impacts of having less landscaping. However, aside from stormwater benefits, landscaping also provides aesthetic, shading and cooling benefits. In order to mitigate the loss of these benefits, prior to issuance of a building permit associated with the proposed development, the applicant shall provide a revised landscaping plan which includes the following elements in all existing and proposed landscaping planters as mitigation for the minimum site landscaping variance:

- Trees spaced no more than 30 feet apart; and
- Shrubs spaced no more than 4 feet on center; and
- Ground cover covering 100% of the landscaped areas within 3 years of planting; and
- The landscaped areas shall not include mulch as ground cover except underneath plants at full growth and within two feet of the base of trees; and
- A minimum of 15 newly planted trees shall be 3 inches in caliper at the time of planting as opposed to the required 2 inches; or,
- A minimum of 15 newly planted trees shall be a tree species which has a canopy width of at least 30 feet at maturity.

Staff has determined that it is possible, likely and reasonable that the applicant can meet this standard through the Conditions of Approval.

E. No practical alternatives have been identified which would accomplish the same purpose and not require a variance; and

Finding: Complies as Proposed.

OCMC 17.62.050.B.1 – Parking in front of building

Finding: Complies as Proposed. Currently there are 23 parking stalls located in front of the building. The proposed site modifications will result in 21 parking stalls located in the same area in front of the building, however, the building itself will also move back as a result of the demolition of the two vestibules at the front of the building. The demolition will result in an additional 7 parking stalls being in front of the building for a total of 28 parking stalls in front of the building. Though a practical alternative could be to retain the vestibules proposed to be removed, the tenant does not have any use for the existing vestibules and they would interfere with the proposed lobby which is more practicable for a public office building. Alternatively, parking stalls in front of the building could be removed in order to not increase the parking in front of the building, however, the applicant is already providing the minimum required parking for the development and is also using a transit reduction for the required parking, therefore, additional parking cannot be removed without bringing the development out of compliance with minimum parking requirements. Finally, the applicant could provide a canopy or another structure which projects far enough in front of the building in order to bring the front building line of the building in front of the 7 additional parking stalls, however, this would require a canopy that is at least 20 feet long. Though this option is feasible, the tenant has no need for a canopy or addition that large and the structure would be an inefficient use of resources. Furthermore, a large canopy would not necessarily make the site any more pedestrian-friendly than the plaza that is being proposed in the location in front of the building or provide any additional benefit.

OCMC 17.36.040.D – Landscape buffer for industrial uses

Finding: Complies as Proposed. A practical alternative to decreasing the required landscape buffer would be to decrease the fleet and equipment storage area. The applicant's proposal includes a total of 98 fleet and equipment storage spaces, and the applicant has submitted documentation identifying that the Public Works Operations Division currently has 112 fleet vehicles and other equipment requiring storage on the property. Though some of the equipment will be stored within the warehouse, all 98 proposed fleet and equipment storage spaces are necessary to accommodate the Public Works Operations Division's vehicle fleet, and the size of the fleet storage area will allow the Public Works Operations Division adequate space to grow the vehicle fleet as needed to accommodate the city's growth. No other practical alternatives which do not require a variance have been identified.

OCMC 17.36.040.F – Minimum site landscaping

Finding: Complies as Proposed. A practical alternative to requesting the variance would be to decrease the size of the outdoor storage area and/or parking lot. The applicant's proposal includes a total of 98 fleet and equipment storage spaces, and the applicant has submitted documentation identifying that the Public Works Operations Division currently has 112 fleet vehicles and other equipment requiring storage on the property. Though some of the equipment will be stored within the warehouse, all 98 proposed fleet and equipment storage spaces are necessary to accommodate the Public Works Operations Division's vehicle fleet. Additionally, the applicant is proposing less than the minimum staff and visitor parking required and utilizing a parking reduction, therefore, additional parking stalls cannot be removed in order to accommodate more landscaping. No other practical alternatives have been identified.

F. The variance conforms to the comprehensive plan and the intent of the ordinance being varied.

Finding: Complies as Proposed. The variance requests comply with the comprehensive plan and the ordinance being varied.

OCMC 17.62.050.B.1 – Parking in front of building

Finding: Complies as Proposed. The following comprehensive plan goals and policies apply to the variance:

Goal 2.1 Efficient Use of Land
Ensure that property planned for residential, commercial, office, and industrial uses is used efficiently and that land is developed following principles of sustainable development.
Finding: Complies as proposed. The available site area and existing site conditions are being maximized in their use while accommodating the tenant's parking and building needs for a public office and fleet storage and maintenance facility.

OCMC 17.36.040.D – Landscape buffer for industrial uses
OCMC 17.36.040.F – Minimum site landscaping
Finding: Complies as Proposed. The following comprehensive plan goals and policies apply to the landscaping variances being requested:

Goal 2.1: Efficient Use of Land
Ensure that property planned for residential, commercial, office, and industrial uses is used efficiently and that land is developed following principles of sustainable development.
Policy 2.1.1
Create incentives for new development to use land more efficiently, such as by having minimum floor area ratios and maximums for parking and setbacks.
Policy 2.1.2
Encourage vertical and horizontal mixing of different land use types in selected areas of the city where compatible uses can be designed to reduce the overall need for parking, create vibrant urban areas, reduce reliance on private automobiles, create more business opportunities and achieve better places to live.
Finding: Complies as Proposed. Granting the requested variance will result in an efficient use of limited industrial land. Redevelopment of this site will allow the property to be efficiently developed by utilizing existing utilities, parking and shared facilities. The available site area and existing site conditions are being maximized in their use while accommodating the tenant's parking and building needs for a public office and fleet storage and maintenance facility.

Goal 6.1: Air Quality
Promote the conservation, protection and improvement of the quality of the air in Oregon City.
Policy 6.1.1
Promote land-use patterns that reduce the need for distance travel by single-occupancy vehicles and increase opportunities for walking, biking and/or transit to destinations such as places of employment, shopping and education.
Policy 6.1.4
Encourage the maintenance and improvement of the City's tree canopy to improve air quality.
Finding: Complies as Proposed. Though the variance is requesting less landscaping than required by the code, as conditioned within this report, the new landscaping will include a mix of vertical and horizontal landscaping elements and more trees, shrubs and groundcover than what is required by the code providing more quality landscaping and an overall improvement of the landscaping onsite resulting in better air quality among other benefits provided by quality landscaping.

Goal 11.4: Stormwater Management
Seek the most efficient and economical means available for constructing, operating and maintaining the City's stormwater management system while protecting the environment and meeting regional, state and federal standards for protection and restoration of water resources and fish and wildlife habitat.

Policy 11.4.3
Ensure parking lot designs that mitigate stormwater impacts. Take measures to reduce waterflow and increase water absorption through the use of bioswales, vegetated landscape islands with curb cuts to allow water inflow and tree planting.
Finding: Complies as Proposed. Though granting the variance will result in less overall site landscaping, the overall parking lot landscaping will increase and the quality of landscaping resulting in overall more quality landscaping which better mitigates stormwater impacts. Additionally, the applicant is proposing an oversized stormwater facility to offset impacts of the loss of landscaping.

CHAPTER 17.62 - SITE PLAN AND DESIGN REVIEW

17.62.015 - Modifications that will better meet design review requirements.
The review body shall consider modification of certain site related development standards of this Chapter specified below. These modifications may be approved as part of a Type II design review process.
A. Applicability.
1. This process shall apply to modifications to:
a. Landscaping in OCMC 17.62.050.A;
b. Vehicular Connections to Adjoining Properties in OCMC 17.62.050.B.2;
c. On-site pedestrian circulation in OCMC 17.62.050.C;
d. Utility Undergrounding Requirements in OCMC 16.12.095.G;
e. Building location in OCMC 17.62.055.D;
f. Building Details in OCMC 17.62.050.B.9.055.I;
g. Windows in OCMC 17.62.050.B.10.055.JParking Lot Landscaping in OCMC 17.52.060.
Finding: Complies as Proposed. A modification is required to the special materials standards for metal siding which require that metal siding includes corner molding and trim, as well as concrete or other durable material at the first two feet above ground level.

B. The review body may approve requested modifications if it finds that the applicant has shown that the following approval criteria are met:
1. The modification will result in a development that better meets the applicable design guidelines; and
Findings: Complies as Proposed. The proposed building design provides a unique and high-quality building design which results in a modern, aesthetically pleasing building while maintaining compatibility and consistency with the warehouse portion of the building which is not proposed to change significantly as part of this development. Though the applicant has not proposed concrete at the base of the building, the proposal includes a concrete accent wall on the front façade which provides additional visual interest and a modern building design resulting in a development that will better meet design guidelines.

2. The modification meets the intent of the standard. On balance, the proposal will be consistent with the purpose of the standard for which a modification is requested.
Findings: Complies as Proposed. The intent of the building materials standards is to encourage high quality, durable materials that will withstand outdoor conditions, maintain a finished appearance and result in aesthetically interesting buildings. The applicant has proposed a high quality durable building material which will result in a modern, aesthetically pleasing building design while maintaining compatibility and consistency with the warehouse portion of the building which is not proposed to change significantly as part of this development. The intent of the standard is met.

17.62.030 - When required.

Site plan and design review shall be required for all development of real property in all zones except the low and medium density residential districts, unless otherwise provided for by this title or as a condition of approval of a permit. Site plan and design review shall also apply to all conditional uses, cluster housing developments, multi-family uses, manufactured home parks, and non-residential uses in all zones. Site Plan and Design Review does not apply to activities occurring within the right-of-way except for communication facilities pursuant to OCMC 17.80.

Site plan and design review is required for a change in use between the uses in Table 17.62.030:

Table 17.62.030

Existing Use	*Proposed Use*
Residential	*Nonresidential use, including but not limited to: commercial, office, industrial, retail, or institutional*
Single-family or duplex	*3 or more dwellings*

Site plan and design review shall not alter the type and category of uses permitted in the underlying zoning districts.

The general standards of section 17.62.050 do not apply to 3-4 plex, duplex, single-family attached dwellings, single-family detached residential unit, internal conversions, live/work dwelling and accessory dwelling unit Type I applications.

Finding: Applicable. The applicant has proposed development of a new building in the "GI" General Industrial zone, therefore, Chapter 17.62 is applicable.

17.62.035 - Minor site plan and design review.

This section provides for a Minor Site Plan and Design Review process. Minor Site Plan review is a Type I or Type II decision, as described in OCMC 17.62.035.A., subject to administrative proceedings described in OCMC 17.50 and may be utilized as the appropriate review process only when authorized by the Community Development Director. The purpose of this type of review is to expedite design review standards for uses and activities that require only a minimal amount of review, typical of minor modifications and/or changes to existing uses or buildings.

A. Type I Minor Site Plan and Design Review.

1. Applicability. Type I applications involve no discretion and are typically processed concurrently with a building permit application. The Type I process is not applicable for:

a. Any activity which is included with or initiates actions that require Type II-IV review.

b. Any increase in square footage of a conditional or nonconforming use (excluding nonconforming structures).

c. Any proposal in which nonconforming upgrades are required under OCMC 17.58.

d. Any proposal in which modifications are proposed under OCMC 17.62.015.

Finding: Not Applicable. The proposal includes modifications and initiates actions that require a Type III review, therefore, the development is not eligible for a Type I Minor Site Plan and Design Review process.

B. Type II Minor Site Plan and Design Review.

1. Type II Minor Site Plan and Design Review applies to the following uses and activities unless those uses and activities qualify for Type I review per OCMC 17.62.035.A.:

a. Modification of an office, commercial, industrial, institutional, public or multi-family structure that does not increase the interior usable space (for example covered walkways or entryways, addition of unoccupied features such as clock tower, etc.).

b. Modification to parking lot layout and landscaping, or the addition of up to five parking spaces.

c. A maximum addition of up to one thousand square feet to a commercial, office, institutional, public, multi-family, or industrial building provided that the addition is not more than thirty-five percent of the original building square footage.
d. Mobile food units in OCMC 17.54.115.
e. Other land uses and activities may be added if the Community Development Director makes written findings that the activity/use will not increase off-site impacts and is consistent with the type and/or scale of activities/uses listed above.
Finding: Applicable. The application includes a modification of an industrial structure that does not increase the interior usable space of the building, and parking lot layout modifications that do not result in the addition of more than five parking stalls, therefore, the application is being reviewed pursuant to the Type II Minor Site Plan and Design Review process.

17.62.040 – Items required.
Finding: Complies as Proposed. All required application materials have been submitted and the application was deemed complete on June 2, 2020.

17.62.050 - General Standards
All development shall comply with the following standards:
A. Landscaping.
1. Existing native vegetation is encouraged to be retained to the maximum extent practicable. All plants listed on the Oregon City Nuisance Plant List shall be removed from the site prior to issuance of a final occupancy permit for the building.
Finding: Complies as Proposed. The application includes retention of existing vegetation to the extent practicable. No nuisance plants have been identified onsite.

2. The amount of landscaping required is found in the standards for each underlying zone. Where the underlying zone does not contain and minimum landscaping standard, the minimum site landscaping shall be 15% of the total site area. Except as allowed elsewhere in Title 16 or 17 of this Code, all areas to be credited towards landscaping shall be installed with growing plant materials.
Finding: The applicant has requested a variance to this standard. Please refer to the variance findings in OCMC 17.60 of this report.

3. Pursuant to OCMC 17.49, landscaping requirements within the Natural Resource Overlay District, other than landscaping required for parking lots, may be met by preserving, restoring and permanently protecting native vegetation and habitat on development sites.
Finding: Not Applicable. The subject site is not located within the Natural Resource Overlay District.

4. A landscaping plan shall be prepared by a registered landscape architect for new or revised landscaped areas and parking lots. Landscape architect approval is not required for tree removal and/or installation if the species are chosen from an approved street tree list. A certified landscape designer, arborist, or nurseryman shall be acceptable in lieu of a landscape architect for projects with less than five hundred square feet of landscaping. All landscape plans shall include a mix of vertical (trees and shrubs) and horizontal elements (grass, groundcover, etc.) that within three years will cover one hundred percent of the landscape area. Plant species listed on the Oregon City Nuisance Plant list are prohibited and native species are encouraged. No mulch, bark chips, or similar materials shall be allowed at the time of landscape installation except under the canopy of shrubs and within two feet of the base of trees.
Finding: Complies with Condition. The applicant submitted a landscaping plan prepared by Registered Landscape Architect Daniel K. Chin, which includes vertical and horizontal elements. The landscaping

plan does not identify that no bark mulch shall be allowed except under the canopy of shrubs and within two feet of the base of trees. The landscaping plan does not identify that within three years of planting, landscaping will cover one hundred percent of the landscaped area. Prior to issuance of a building permit associated with the proposed development, the applicant shall submit a revised landscaping plan which identifies that within three years of planting, landscaping will cover one hundred percent of the landscaped area, and that no bark mulch shall be allowed except under the canopy of shrubs and within two feet of the base of trees. **Staff has determined that it is possible, likely and reasonable that the applicant can meet this standard through the Conditions of Approval.**

5. Landscaping shall be visible from public thoroughfares to the extent practicable.
Finding: Complies as Proposed. Existing and proposed landscaping is visible from Fir Street to the extent practicable.

6. The landscaping in parking areas shall not obstruct lines of sight for safe traffic operation and shall comply with all requirements of OCMC 10.32, Traffic Sight Obstructions.
Finding: Complies as Proposed. The proposed landscaping is located in locations which do not interfere with lines of sight and complies with the visibility requirements in OCMC 10.32.

B. Vehicular Access and Connectivity.
1. Parking areas shall be located behind the building façade that is closest to the street, below buildings, or on one or both sides of buildings.
Finding: The applicant has requested a variance to this standard. Please refer to the variance findings in OCMC 17.60 of this report.

2. Existing or future connections to adjacent sites through the use of vehicular and pedestrian access easements which provide connection from the right-of-way to the adjoining property shall be provided.
Finding: Not Applicable. Due to the industrial nature of surrounding uses and because most surrounding businesses include outdoor storage areas which are fenced off, there are not any opportunities for vehicular and pedestrian connections to adjacent sites.

3. Parcels larger than three acres shall provide streets as required in OCMC 16.12.
Finding: Applies. Please refer to the analysis in 16.12.

4. Parking garage entries shall not be more than half of the streetscape.
Finding: Complies as Proposed. Though the proposal includes a parking garage, it does not face the street, therefore, it is in compliance with this standard.

C. A well-marked, continuous and protected on-site pedestrian circulation system meeting the following standards shall be provided:
1. Pathways between all building entrances and the street are required. Pathways between the street and buildings fronting on the street shall be direct and not cross a drive aisle. Exceptions may be allowed by the director where steep slopes, a physically constrained site, or protected natural resources prevent a direct connection or where an indirect route would enhance the design and/or use of a common open space.
Finding: Complies as Proposed. The proposal includes a direct pedestrian connection between the main building entrance and Fir Street. Though the pathway crosses a drive aisle, the pedestrian crossing uses a different texture and material than the drive aisle alerting drivers of the pedestrian crossing. Due to the

existing siting of the building, there is no location where the pedestrian pathway connecting the main building entrance to Fir Street would not cross a drive aisle, therefore, the standard is met.

2. The pedestrian circulation system shall connect all main entrances, parking areas, bicycle parking, recreational areas, common outdoor areas, and any pedestrian amenities on the site. For buildings fronting on the street, the sidewalk may be used to meet this standard.
Finding: Complies as Proposed. The pedestrian circulation system includes proposal includes pedestrian connection from the main building entrance to the bicycle parking area and parking lot. The main entrance is the only entrance open to the public, therefore, pedestrian connections to other building entrances are not required and may create confusion for site visitors. There is an employee plaza on the east side of the building, however, it is located behind a gate, therefore a pedestrian connection is not required. Further, it is meant only for employees accessing the plaza from inside the building. Given the context of the site and building, all required pedestrian connections have been provided.

3. The pedestrian circulation system shall connect the principal building entrance to those of buildings on adjacent sites, except within industrial zoning designations.
Finding: Not Applicable. The subject site is within an industrial zoning designation, therefore, this standard is not applicable.

4. Elevated external stairways or walkways shall not extend beyond the building facade except for external stairways or walkways located in, or facing interior courtyard areas that are not visible from the street or a public access easement. This standard does not apply to sky-bridges or sky-ways.
Finding: Complies as Proposed. No elevated external stairways extending beyond the building façade visible from the public street are proposed.

5. On-site pedestrian walkways shall be hard surfaced, well drained and at least five feet wide. Surface material shall contrast visually to adjoining surfaces. When bordering parking spaces other than spaces for parallel parking, pedestrian walkways shall be a minimum of seven feet in width unless curb stops are provided. When the pedestrian circulation system is parallel and adjacent to an auto travel lane, the walkway shall be raised or separated from the auto travel lane by a raised curb, bollards, landscaping or other physical barrier. If a raised walkway is used, the ends of the raised portions shall be equipped with curb ramps for each direction of travel. Pedestrian walkways that cross drive isles or other vehicular circulation areas shall utilize a change in textual material or height to alert the driver of the pedestrian crossing area.
Finding: Complies as Proposed. All on-site pedestrian walkways are proposed to be at least five feet wide and contrasting with adjoining surfaces. The pedestrian walkway that crosses a drive aisle uses a change in textural material and color to alert drivers of the pedestrian crossing area. Additionally, bollards are proposed in the pedestrian plaza area in front of the building that is adjacent to the drive aisle.

D. All development shall maintain continuous compliance with applicable federal, state, and City standards.
Finding: Complies as Proposed. The applicant's narrative identified that the development proposal will maintain continuous compliance with applicable federal, state, and City standards.

E. Adequate public water and sanitary sewer facilities sufficient to serve the proposed or permitted level of development shall be provided pursuant to OCMC 16.12. The applicant shall demonstrate that adequate facilities and services are presently available or can be made available concurrent with development.

Service providers shall be presumed correct in the evidence, which they submit. All facilities shall be designated to City standards as set out in the City's facility master plans and public works design standards. A development may be required to modify or replace existing offsite systems if necessary to provide adequate public facilities. The City may require over sizing of facilities where necessary to meet standards in the City's facility master plan or to allow for the orderly and efficient provision of public facilities and services. Where over sizing is required, the developer may request reimbursement from the City for over sizing based on the City's reimbursement policy and fund availability, or provide for recovery of costs from intervening properties as they develop.
Finding: Please refer to the findings in OCMC 16.12.

F. If a transit agency, upon review of an application for an industrial, institutional, retail or office development, recommends that a bus stop, bus turnout lane, bus shelter, accessible bus landing pad, lighting, or transit stop connection be constructed, or that an easement or dedication be provided for one of these uses, consistent with an agency adopted or approved plan at the time of development, the review authority shall require such improvement, using designs supportive of transit use. Improvements at a major transit stop may include intersection or mid-block traffic management improvements to allow for crossings at major transit stops, as identified in the City's Transportation System Plan.
Finding: Complies as Proposed. Notice of this application was provided to Tri-Met, who did not comment on the proposal.

G. Screening of Mechanical Equipment: Commercial, mixed-use, institutional, and multi-family buildings shall include the following measures to screen or block views of mechanical equipment from adjacent streets according to the following requirements.
1. Rooftop mechanical equipment, including HVAC equipment and utility equipment that serves the structure, shall be screened from view from the adjacent street on all new buildings or building additions. Screening shall be accomplished through the use of parapet walls or a sight-obscuring enclosure around the equipment constructed of one of the primary materials used on the primary facades of the structure, and that is an integral part of the building's architectural design. The parapet or screen shall completely surround the rooftop mechanical equipment to an elevation equal to or greater than the highest portion of the rooftop mechanical equipment being screened from adjacent streets, as viewed from the sidewalk or future sidewalk location on the adjacent street at pedestrian level. In the event such parapet wall does not fully screen all rooftop equipment, then the rooftop equipment shall be enclosed by a screen constructed of one of the primary materials used on the primary facade of the building so as to achieve complete screening. Screening requirements do not apply to new or replacement equipment on existing buildings. New or replacement rooftop mechanical equipment on existing buildings shall be painted or powder-coated.
2. Wall-mounted mechanical HVAC and air conditioning equipment, and groups of multiple utility meters shall not be placed on the front facade of a building or on a facade that faces a right-of-way. Wall-mounted mechanical equipment, including air conditioning and groups of multiple utility meters, that extend six inches or more from the outer building wall shall be screened from view from adjacent streets; from residential, public, and institutional properties; and from public areas of the site or adjacent sites through the use of (a) sight-obscuring enclosures constructed of one of the primary materials used on the primary facade of the structure, (b) sight-obscuring fences, or (c) trees or shrubs that block at least eighty percent of the equipment from view or (d) painting the units to match the building. Wall-mounted mechanical equipment that extends six inches or less from the outer building wall shall be designed to blend in with the color and architectural design of the subject building. Vents which extend six inches or less from the outer building wall shall exempt from this standard if painted.

3. Ground-mounted above-grade mechanical equipment shall be screened by ornamental fences, screening enclosures, trees, or shrubs that block at least eighty percent of the view from the public right of way.

Finding: Complies with Condition. The applicant's narrative identified that the building's existing mechanical equipment will be reused with mechanical equipment being modified or replaced as needed, however, it is unclear if any mechanical units will be modified or replaced as part of the currently proposed development. Prior to issuance of any mechanical permits for installation or alteration of a mechanical unit associated with the proposed development, the applicant shall submit documentation demonstrating that the mechanical unit will comply with screening requirements in OCMC 17.62.050.G. **Staff has determined that it is possible, likely and reasonable that the applicant can meet this standard through the Conditions of Approval.**

4. This section shall not apply to the installation of solar energy panels, photovoltaic equipment, wind power generating equipment, dishes/antennas, pipes, vents, and chimneys.

Finding: Not Applicable. No solar energy panels, photovoltaic equipment, wind power generating equipment, dishes/antennas, pipes, vents, and chimneys are proposed.

H. Building Materials.

1. Prohibited Materials. The following materials shall be prohibited in visible locations from the right-of-way or a public access easement unless an exception is granted by the Community Development Director based on the integration of the material into the overall design of the structure.

i. Vinyl or plywood siding (including T-111 or similar plywood).

ii. Glass block or highly tinted, reflected, translucent or mirrored glass (except stained glass) as more than ten percent of the building facade.

iii. Corrugated fiberglass.

iv. Chain link fencing (except for temporary purposes such as a construction site, gates for a refuse enclosure, stormwater facilities, when excepted by 17.62.050.H.2.vii, or when located on properties within the General Industrial District).

v. Crushed colored rock/crushed tumbled glass.

vi. Non-corrugated and highly reflective sheet metal.

vii. Tarps, except for the protection of outside storage.

Finding: Complies as Proposed. No prohibited materials have been identified within the applicant's submittal. The subject site is within the General Industrial zone, therefore, chain link fencing is permitted.

2. Special Material Standards. The following materials are allowed if they comply with the requirements found below:

i. Concrete Block. When used for the front façade of any building, concrete blocks shall be split, rock- or ground-faced and shall not be the prominent material of the elevation. Plain concrete block or plain concrete may be used as foundation material if the foundation material is not revealed more than three feet above the finished grade level adjacent to the foundation wall.

ii. Metal Siding. Metal siding shall have visible corner moldings and trim and incorporate masonry or other similar durable/permanent material near the ground level (first two feet above ground level) except when used for a temporary structure.

iii. Exterior insulation and finish system (EIFS) and similar troweled finishes shall be trimmed in wood, masonry, or other approved materials and shall be sheltered from extreme weather by roof overhangs or other methods.

iv. Building surfaces shall be maintained in a clean condition and painted surfaces shall be maintained to prevent or repair peeling, blistered or cracking paint.
v. Membrane or fabric covered storage areas are permitted as temporary structures, excluding the use of tarps.
vi. Vinyl or powder coated chain link fencing is permitted for City-owned stormwater management facilities, reservoirs, and other public works facilities such as pump stations, maintenance yards, and storage yards not located within the General Industrial District.
vii. Chain link fencing is permitted in the following circumstances:
1. Within City-owned parks and recreational facilities
2. On any property when used for a baseball or softball backstop or dugout, track and field facility, or sports court.
Finding: The applicant has proposed metal siding without a durable/permanent material at the ground level. A modification to this standard is required. Please refer to the modifications findings in OCMC 17.62.015.

J. Development shall comply with requirements of the following Oregon City Municipal Code chapters, as applicable, including but not limited to:
1. 12.04 Streets, Sidewalks and Public Places
2. 12.08 Public and Street Trees
3. 13.04 Water Service System
4. 13.08 Sewer Regulations
5. 13.12 Stormwater Management
6. 16.12 Minimum Improvements and Design Standards for Development
7. 17.20 Residential Design Standards for ADU's, Cluster Housing, Internal Conversions, Live/Work Units, and Manufactured Home Parks
8. 17.40 Historic Overlay District
9. 17.41 Tree Protection Standards
10. 17.42 Flood Management Overlay District
11. 17.44 Geologic Hazards
12. 17.47 Erosion and Sediment Control
13. 17.48 Willamette River Greenway
14. 17.49 Natural Resource Overlay District
15. 17.50 Administration and Procedures
16. 17.52 Off-Street Parking and Loading
17. 17.54 Supplemental Zoning Regulations and Exceptions
18. 17.58 Lawful Nonconforming Uses, Structures, and Lots
19. 17.65 Master Plans and Planned Unit Development
Finding: Applies. The applicable chapters are included within this report.

17.62.055 –Institutional, office, multi-family, retail, and commercial building standards.
B. Applicability. This section applies to institutional, office, multi-family, retail and commercial buildings except accessory structures less than one thousand square feet and temporary structures.
Finding: The proposed building is an institutional building; therefore, these standards apply.

C. Conflicts. With the exception of standards for building orientation and building front setbacks, in the event of a conflict between a design standard in this section and a standard or requirement contained in the underlying zoning district, the standard in the zoning district shall prevail.
Finding: Not Applicable. No conflicts have been identified.

D. Siting of Structures. On sites with one hundred feet or more of frontage at least sixty percent of the site frontage width shall be occupied by buildings placed within five feet of the property line. For sites with less than one hundred feet of street frontage, at least fifty percent of the site frontage width shall be occupied by buildings placed within five feet of the property. Multi-family developments shall be placed no farther than twenty feet from the front property line. This section does not apply to properties with less than forty feet of frontage.

Finding: Not Applicable. The subject site includes an existing building that is not in compliance with this standard. This is a pre-existing legal non-conforming condition.

A larger front yard setback may be approved through site plan and design review if the setback area incorporates at least one element from the following list for every five feet of increased setback requested:

1. Tables, benches or other approved seating area.
2. Cobbled, patterned or paved stone or enhanced concrete.
3. Pedestrian scale lighting.
4. Sculpture/public art.
5. Fountains/Water feature.
6. At least twenty square feet of landscaping or planter boxes for each tenant facade fronting on the activity area.
7. Outdoor café.
8. Enhanced landscaping or additional landscaping.
9. Other elements, as approved by the Community Development Director, that can meet the intent of this section.

Finding: Complies with Condition. The subject site includes an existing building that is not in compliance with this standard. This is a pre-existing legal non-conforming condition, however, as part of the development the applicant has proposed to demolish two vestibule structures at the front of the building which results in an even larger front yard setback. In total, the building would have an approximately 74-foot front yard setback, or 69 feet more than the required maximum setback requiring fourteen pedestrian amenity elements from the list within this section. The applicant has proposed the following elements to mitigate the larger setback:

1. Enhanced concrete
2. Pedestrian scale lighting
3. Enhanced landscaping
   Though a variance is requested to total site landscaping, the landscaping provided in the increased setback area exceeds the code requirement.
4. Benches
5. Additional bicycle parking beyond the required bicycle parking
6. Bicycle repair station
7. Electric bike charging station
   Complies with Condition. The applicant's narrative identified that the bicycle repair station and electric bike charging station would be incorporated within the setback, however, these amenities were not identified in the applicant's plans.
8. Community information/bulletin board
9. Public art display
   Complies with Condition. The applicant identified that the community information/bulletin board and the public art display would be located within the building lobby area, however, the code specifically requires that the pedestrian amenities are incorporated within the setback between the building and the front property line.

10. Informational signage for stormwater facility

The applicant also identified the flag pole, monument sign, plant signage and ADA ramp as pedestrian amenities, however, the ADA ramp is required by the Building Division and the monument sign, plant signage and flag pole are not pedestrian amenities, therefore, these items were not counted as mitigation for the increased setback. Prior to issuance of a building permit associated with the proposed development, the applicant shall submit a revised site plan which includes the bicycle repair station, electric bike charging station, community information/bulletin board and public art display in the increased setback area located between the building and the front property line. Additionally, the applicant shall provide four additional pedestrian amenities from the list below for a total of fourteen pedestrian amenities:

- A minimum of two concrete planters or planter boxes within the plaza area between the building and bollards
- A minimum of two tree wells within the plaza area between the building and bollards
- Clock tower
- Drinking water fountain
- Garbage/recycling area for plaza visitors
- USPS drop-off mailbox
- Water feature
- Outdoor speakers for music within the plaza

E. Building Orientation. All buildings along the street frontage shall face the front most architecturally significant facade toward the street and have a functional primary entrance facing the street. Primary building entrances shall be clearly defined and recessed or framed by a sheltering element such as an awning, arcade or portico in order to provide shelter from the summer sun and winter weather.

Finding: Complies as Proposed. The most architecturally significant building façade faces Fir Street, and the primary building entranceway is framed by a clearly defined sheltering element.

F. Entryways. Entrances shall include a doorway and a minimum of four of the following elements:

1. Display windows;

Recesses or projections; Peaked roof or raised parapet over the door; Canopy of at least five feet in depth; Porch; Distinct materials; Architectural details such as tile work and moldings; Pedestrian amenities such as benches, planters or planter boxes; Landscape treatments integrating arbors, low walls, trellis work; or Similar elements. Trellises, canopies and fabric awnings may project up to five feet into front setbacks and public rights-of-way, provided that the base is not less than eight feet at the lowest point and no higher than ten feet above the sidewalk.

Finding: Complies as Proposed. The proposed entryway includes display windows, a canopy of at least five feet in depth, a projection framing the entryway, and distinct materials (concrete wall providing a textural change and material contrast).

G. Corner Lots.

For buildings located at the corner of intersections, the primary entrance of the building shall be located at the corner of the building or within twenty-five feet of the corner of the building. Additionally, one of the following treatments shall be required:

1. Incorporate prominent architectural elements, such as increased building height or massing, cupola, turrets, or pitched roof, at the corner of the building or within twenty-five feet of the corner of the building.

2. Chamfer the corner of the building (i.e. cut the corner at a forty-five degree angle and a minimum of ten feet from the corner) and incorporate extended weather protection (arcade or awning), special paving materials, street furnishings, or plantings in the chamfered area.
3. Standards 1 and 2 above do not apply to vertically attached 3-4 plexes, multi-family buildings or multi-family portions of residential mixed-use buildings.
Finding: Not Applicable. The site is not a corner lot.

H. Variation in Massing. For street facing facades greater than 120 feet in length a modulation is required which extends through all floors. Decks and roof overhangs may encroach up to three feet per side into the modulation. The modulation shall meet one of the following dimensional requirements:
1. A minimum depth of two percent of the length of the façade and a minimum width of thirty percent of the length of the façade; or
2. A minimum depth of four percent of the length of the façade and a minimum width of twenty percent of the length of the façade.
Finding: Complies as Proposed. The street-facing façade is 144 feet in length. The applicant has proposed a 4'2" deep modulation which is 45 feet. The proposed depth is more than 2% of the length of the façade (144*0.2 = 2.88), and the modulation's length is more than 30% of the length of the façade (144*0.3 = 43.2). The proposal is in compliance with option 1 of the variation in massing standards.

I. Building Design Elements.
1. All front and side facades shall provide a design element or architectural feature that add interest and detail such that there are no blank walls of thirty feet in length or more, measured horizontally. Features that can meet this requirement include:
a. Change in building material or texture;
b. Window or door;
c. Balcony; or
d. Pillar or post
Finding: Complies as Proposed. The front and side facades include windows/doors and changes in building material in increments such that there are no blank walls of 30 feet or more. The fleet maintenance/warehouse portion of the building is not in compliance with this standard, however, no changes are being proposed to that portion of the building, therefore, compliance with these standards is not triggered.

2. Street facing facades shall include additional design features. For every thirty feet of façade length, three of the following elements are required:
a. Decorative materials on more than ten percent of the total wall area (e.g., brick or stonework, shingles, wainscoting, ornamentation, and similar features);
b. Decorative cornice and/or roof line (e.g., for flat roofs);
c. Roof gable;
d. Recessed entry;
e. Covered canopy entry;
f. Cupola or tower;
g. Dormer;
h. Balcony;
i. Pillars or posts;
j. Repeating pattern of building materials;
k. A change in plane of at least two feet in width and six inches in depth;
l. Bay or oriel window; or

m. An alternative feature providing visual relief and detail as approved by the Community Development Director

Finding: Complies as Proposed. The façade length is 144 feet, therefore, there are five 30-foot sections. Each section includes windows, repeating pattern of building materials, and a sun shading device providing a change in plane of at least two feet in width and six inches in depth, or a covered canopy entry for the 30-foot section of the building which includes the entryway.

3. Building Detail Variation. Architectural features shall be varied on different buildings within the same development. At least two of the required features on each street-facing elevation shall be distinct from the street-facing elevations of other buildings within the same development.

Finding: Not Applicable. There are no additional buildings within the development.

J. Windows.

1. The minimum windows requirements are set forth in Table 17.62.055.J. Windows are measured in lineal fashion between 3.5 feet and six feet from the ground. For example, a one hundred foot long building elevation would be required to have at least sixty feet (sixty percent of one hundred feet) of windows in length between the height of 3.5 feet and six feet from the ground.

Table 17.62.055.J Minimum Windows				
Use	*Ground Floor: Front and Street Facing Facades*	*Upper floor(s): Front and Street Facing Facades*	*Ground Floor: Side(s) Facades*	*Upper Floor(s): Side(s) Facades*
Non-Multi-Family (or Portions of Buildings Thereof)	*60%*	*10%*	*30%*	*10%*
Proposed	88.5 feet of 144-foot façade (61%)	92.5 feet of 144-foot façade (64%)	See finding below	See finding below

Finding: Complies as Proposed. The front façade is in compliance with the window requirements. Though the side facades will have less than 10% windows, the existing building is not in compliance with this requirement and the proposal would increase the length of windows on both floors of the building. Though the side façade window standards are not met, the proposal brings the development closer to compliance with the requirement and improves the existing window conditions.

2.Reflective, glazed, mirrored or tinted glass is limited to ten percent of the lineal footage of windows on the street facing facade. Highly reflective or glare-producing glass with a reflective factor of one-quarter or greater is prohibited on all building facades. Any glazing materials shall have a maximum fifteen percent outside visual light reflectivity value. No exception shall be made for reflective glass styles that appear transparent when internally illuminated.

Finding: Complies as Proposed. The proposed development does not include the use of reflective, glazed, mirrored or tinted glass.

3. Side walls that face walkways may include false windows and door openings only when actual doors and windows are not feasible because of the nature of the use of the interior use of the building. False windows located within twenty feet of a right-of-way shall be utilized as display windows with a minimum display depth of thirty-six inches.

Finding: Not Applicable. The proposed development does not include any false windows or door openings.

4. Multi-family windows shall incorporate window trim at least four inches in width when surrounded by horizontal or vertical lap siding.
Finding: Not Applicable. The proposal does not include a multi-family development.

K. Roof Treatments. The maximum length of any continuous roofline on a street-facing façade shall be seventy-five feet without a cross gable or change in height of at least two feet.
Finding: Not Applicable. No changes to the building's existing roofline are proposed.

L. Drive-through facilities shall:
1. Be located at the side or rear of the building.
2. Be designed to maximize queue storage on site.
Finding: Not Applicable. No drive-through facilities are proposed.

M. Special development standards along transit streets.
1. Purpose. This section is intended to provide direct and convenient pedestrian access to retail, office and institutional buildings from public sidewalks and transit facilities and to promote pedestrian and transit travel to commercial and institutional facilities.
2. Applicability. Except as otherwise provide in this section, the requirements of this section shall apply to the construction of new retail, office and institutional buildings which front on a transit street.
3. Development Standards.
a. All buildings shall have at least one main building entrance oriented towards the transit street. A main building entrance is oriented toward a transit street if it is directly located on the transit street, or if it is linked to the transit street by an on-site pedestrian walkway that does not cross off-street parking or maneuvering areas.
i. If the site has frontage on more than one transit street, or on a transit street and a street intersecting a transit street, the building shall provide one main building entrance oriented to the transit street or to the corner where the two streets intersect.
ii. For building facades over three hundred feet in length on a transit street, two or more main building entrances shall be provided as appropriate and oriented towards the transit street.
b. In the event a requirement of this section conflicts with other requirements in Title 17, the requirements of this section shall control.
4. Exemptions. The following permitted uses are exempted from meeting the requirements of subsection 3. of this section:
a. Heavy equipment sales;
b. Motor vehicle service stations, including convenience stores associated therewith; or
c. Solid waste transfer stations.
Finding: Not Applicable. The subject site is not located on a transit route.

17.62.056 - Additional standards for large retail establishments.
Retail building(s) occupying more than ten thousand gross square feet of floor area shall contribute to the establishment or enhancement of community and public spaces by providing at least two of the following:
A. Patio/seating area;
B. Pedestrian plaza with benches;
C. Transportation center;
D. Window shopping walkway;
E. Outdoor playground area;
F. Kiosk area, water feature;

G. Clock tower; or
H. Other such deliberately shaped area and/or a focal feature or amenity that, in the judgment of the appropriate decision maker, adequately enhances such community and public spaces. Any such areas shall have direct access to the public sidewalk network and such features shall not be constructed of materials that are inferior to the principle materials of the building and landscape.
Finding: Not Applicable. The proposal does not include a large retail establishment.

17.62.057 - Multifamily Usable Open Space Requirements
Finding: Not Applicable. The development does not include a multi-family development.

17.62.059 - Cluster housing.
All cluster housing shall comply with the standards in Chapter 17.20.020 in addition to the standards in this chapter.
Finding: Not Applicable. The development does not include a cluster housing development.

17.62.065 - Outdoor lighting.
B. Applicability.
1. General.
a. All exterior lighting for any type of commercial, mixed-use, industrial, institutional, or multi-family development shall comply with the standards of this section, unless excepted in subsection B.3.
b. The City Engineer or Public Works Director shall have the authority to enforce these regulations on private property if any outdoor illumination is determined to present an immediate threat to the public health, safety and welfare.
Finding: Applicable. The proposal includes industrial development, therefore, this section is applicable.

2. Lighting Plan Requirement. All commercial, industrial, mixed-use, cottage housing and multi-family developments shall submit a proposed exterior lighting plan. The plan shall be submitted concurrently with the site plan. The exterior lighting plan shall include plans and specifications for streetlights, parking lot lights, and exterior building lights. The specifications shall include details of the pole, fixture height and design, lamp type, wattage, and spacing of lights.
Finding: Complies as Proposed. The applicant has submitted a photometric plan and details of proposed lighting fixtures.

3. Excepted Lighting. The following types of lighting are excepted from the requirements of this section.
a. Residential lighting for single-family attached and detached homes, and duplexes
b. Public street and right-of-way lighting.
c. Temporary decorative seasonal lighting provided that individual lamps have a light output of sixty watts or less.
d. Temporary lighting for emergency or nighttime work and construction.
e. Temporary lighting for theatrical, television, and performance areas, or for special public events.
f. Lighting for a special district, street, or building that, according to an adopted municipal plan or ordinance, is determined to require special lighting aesthetics as part of its physical character.
g. Lighting required and regulated by the Federal Aviation Administration.
Finding: Not Applicable. No excepted lighting has been proposed.

C. Design and Illumination Standards.
1. Outdoor lighting, if provided, shall be provided in a manner that enhances security, is appropriate for the use, avoids adverse impacts on surrounding properties, and the night sky through appropriate

shielding as defined in this section. Glare shall not cause illumination on other properties in excess of a measurement of 0.5 footcandles of light as measured at the property line.
Finding: Complies as Proposed. The applicant's lighting plan demonstrates that proposed lighting will not exceed 0.5 footcandles at the property line.

2. Lighting shall be provided in parking lots and vehicular circulation areas.
Finding: Complies with Condition. The submitted lighting plan identifies that some of the staff and parking areas have a footcandle level of 0. Prior to issuance of a building permit associated with the proposed development, the applicant shall submit a revised photometric plan which demonstrates that lighting is provided within all staff and visitor parking areas. **Staff has determined that it is possible, likely and reasonable that the applicant can meet this standard through the Conditions of Approval.**

3. Lighting shall be provided in pedestrian walkways, pedestrian plazas, and pedestrian circulation areas.
Finding: Complies as Proposed. The applicant's photometric plan demonstrates that lighting is provided within the pedestrian walkway and pedestrian plaza areas.

4. Lighting shall be provided at all building entrances.
Finding: Complies as Proposed. The applicant's photometric plan demonstrates that lighting is provided within the pedestrian walkway and pedestrian plaza areas.

5. With the exception of pedestrian scale lighting, all light sources shall be concealed or shielded with a full cut-off style fixture in order to minimize the potential for glare and unnecessary diffusion on adjacent property.
Finding: Complies as Proposed. All proposed light fixtures are shielded with a cut-off style fixture.

6. The maximum height of any lighting pole serving a multi-family residential use shall be twenty feet. The maximum height serving any other type of use shall be twenty-five feet, except in parking lots larger than five acres, the maximum height shall be thirty-five feet if the pole is located at least one hundred feet from any residential use.
Finding: Not Applicable. No new pole-mounted lighting is proposed as part of the development.

7. Floodlights shall not be utilized to light all or any portion of a building facade between 10 p.m. and 6 a.m.
Finding: Complies as Proposed. The applicant identified compliance with this standard.

8. Lighting on outdoor canopies shall be fully recessed into the canopy and shall not protrude downward beyond the ceiling of the canopy.
Finding: Complies as Proposed. The applicant's narrative identified that all canopy lighting will be fully recessed within the canopy.

9. All outdoor light not necessary for security purposes shall be reduced, activated by motion sensor detectors, or turned off during non-operating hours.
Finding: Complies as Proposed. The applicant identified compliance with this standard.

10. Light fixtures used to illuminate flags, statues, or any other objects mounted on a pole, pedestal, or platform shall use a narrow cone beam of light that will not extend beyond the illuminated object.

11. For upward-directed architectural, landscape, and decorative lighting, direct light emissions shall not be visible above the building roofline.
Finding: Complies as Proposed. The applicant has proposed narrow cone lights to illuminate the flagpole and freestanding sign and the narrative identified that the lighting will not extend beyond the object being illuminated.

12. No flickering or flashing lights shall be permitted, except for temporary decorative seasonal lighting.
Finding: Complies as Proposed. No flickering or flashing lights have been proposed.

13. Lighting for outdoor recreational uses such as ball fields, playing fields, tennis courts, and similar uses, are allowed a light post height up to eighty feet in height.
Finding: Not Applicable. The development does not include an outdoor recreational use.

14. Main building entrances shall be well lighted and visible from any transit street. The minimum lighting level for building entries fronting on a transit street shall be three foot-candles.
Finding: Not Applicable. The subject site is not located on a transit street.

17.62.085 - Refuse and recycling standards for commercial, industrial, office, institutional, and multi-family developments.
The purpose and intent of these provisions is to provide an efficient, safe and convenient refuse and recycling enclosure for the public as well as the local collection firm. All new development, change in property use, expansions or exterior alterations to uses, other than single-family or duplex residences, single-family attached dwellings, 3-4 plexes, internal conversions, or accessory dwelling units (ADUs), shall include a refuse and recycling enclosure. The area(s) shall be:
A. Fully enclosed and visually screened;
B. Located in a manner easily and safely accessible by collection vehicles;
C. Located in a manner so as not to hinder travel lanes, walkways, streets or adjacent properties;
D. On a level, hard surface designed to discharge surface water runoff and avoid ponding;
E. Maintained by the property owner;
F. Used only for purposes of storing solid waste and recyclable materials;
G. Designed in accordance with applicable sections of the Oregon City Municipal Code (including OCMC 8.20—Solid Waste Collection and Disposal) and city adopted policies.
Enclosures are encouraged to be sized appropriately to meet the needs of current and future tenants and designed with sturdy materials which are compatible to the primary structure(s).
Finding: Complies as Proposed. The applicant has proposed a refuse and recycling area which is fully enclosed and visually screened, located in a manner that is easily accessible and does not interfere with streets, travel lanes, or walkways, on a hard level surface and will be limited only to storage of solid waste and recyclable materials.

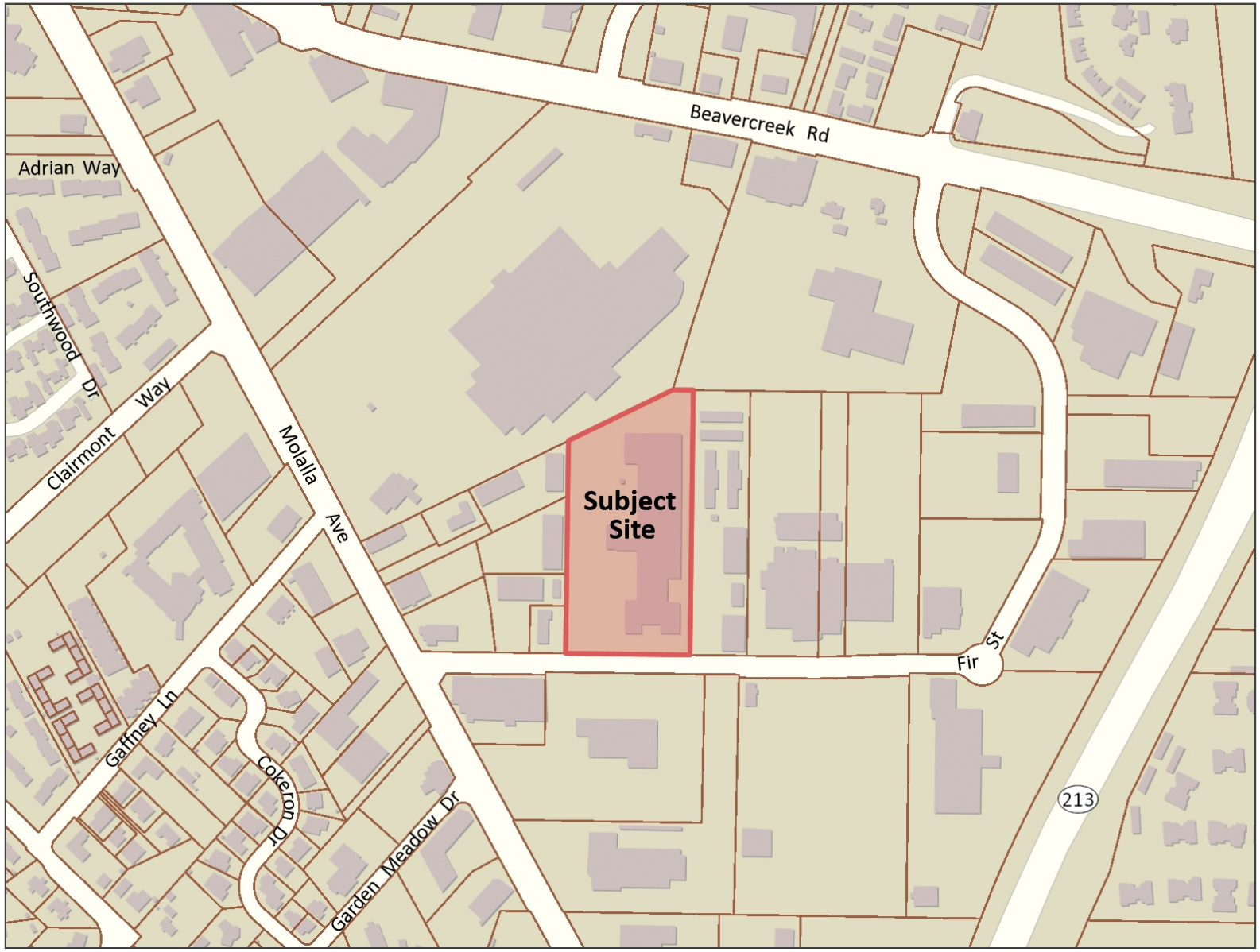
CONCLUSION AND DECISION:

Based on the analysis and findings as described above, Staff concludes that the proposed development located at 13895 Fir Street, Oregon City, Oregon 97045, identified as Clackamas County Map 3-2E-09B, Tax Lot 1101, can meet the requirements as described in the Oregon City Municipal Code by complying with the Conditions of Approval provided in this report. Therefore, the Community Development Director recommends that Planning Files GLUA-20-00016/SP-20-00034/VAR-20-00010/VAR-20-00011/VAR-20-00012 are approved with conditions, based upon the findings and exhibits contained in this staff report.

EXHIBITS:

1. Vicinity Map
2. Applicant's Narrative and Plans (On File)
3. Public Comments
4. Letter from John Replinger
5. Opportunity for Additional Landscaping in Industrial Landscape Buffer
6. Opportunity for Additional Site Landscaping

Oregon City GIS Map



Legend

- Taxlots
- Taxlots Outside UGB
- Unimproved ROW
- City Limits
- UGB
- Basemap

Notes

Overview Map

The City of Oregon City makes no representations, express or implied, as to the accuracy, completeness and timeliness of the information displayed. This map is not suitable for legal, engineering, surveying or navigation purposes. Notification of any errors is appreciated.

Map created 6/4/2020

N

0 400 800 Feet

1: 4,800

City of Oregon City
PO Box 3040
625 Center St
Oregon City
OR 97045
(503) 657-0891
www.orcity.org

OREGON CITY
Community Development – Planning
221 Molalla Ave. Suite 200 | Oregon City OR 97045
Ph (503) 722-3789 | Fax (503) 722-3880

LAND USE APPLICATION FORM

Type I (OCMC 17.50.030.A)	Type II (OCMC 17.50.030.B)	Type III / IV (OCMC 17.50.030.C)
❑ Compatibility Review	❑ Extension	❑ Annexation
❑ Lot Line Adjustment	❑ Detailed Development Review	❑ Code Interpretation / Similar Use
❑ Non-Conforming Use Review	❑ Geotechnical Hazards	❑ Concept Development Plan
❑ Natural Resource (NROD) Verification	❑ Minor Partition (<4 lots)	❑ Conditional Use
❑ Site Plan and Design Review	☒ Minor Site Plan & Design Review	❑ Comprehensive Plan Amendment (Text/Map)
	❑ Non-Conforming Use Review	❑ Detailed Development Plan
	❑ Site Plan and Design Review	❑ Historic Review
	❑ Subdivision (4+ lots)	❑ Municipal Code Amendment
	❑ Minor Variance	☒ Variance
	❑ Natural Resource (NROD) Review	❑ Zone Change

File Number(s): PA 20-03

Proposed Land Use or Activity: Type II Minor Site Plan & Design Review and Variance

Proposed building renovation and minor site improvements.

Project Name: Public Works Operations Center Number of Lots Proposed (If Applicable): _____

Physical Address of Site: 13895 Fir Street, Oregon City, OR 97045

Clackamas County Map and Tax Lot Number(s): Tax Lot: 1101 Tax Map: 3-2E-09B

Applicant(s):

Applicant(s) Signature: _____

Applicant(s) Name Printed: Brandon Dole, Scott Edwards Architecture Date: 04-10-2020

Mailing Address: 17404 Wake Robin Cir., Oregon City, OR 97045

Phone: (503) 539-4594 Fax: _____ Email: bdole@seallp.com

Property Owner(s):

Property Owner(s) Signature: _____

Property Owner(s) Name Printed: John Lewis, Oregon City Public Works Date: 4-13-2020

Mailing Address: 625 Center Street, Oregon City, OR 97045

Phone: (503) 657-0891 Fax: _____ Email: jmlewis@orcity.org

Representative(s):

Representative(s) Signature: _____

Representative (s) Name Printed: Gerard Mulrooney, PlanB Consultancy Date: _____

Mailing Address: 696 McVey Ave, Suite 202, Lake Oswego, OR 97034

Phone: (971) 337-3678 Fax: _____ Email: gmulrooney@planbconsult.net

All signatures represented must have the full legal capacity and hereby authorize the filing of this application and certify that the information and exhibits herewith are correct and indicate the parties willingness to comply with all code requirements.

OREGON CITY

Community Development – Planning

221 Molalla Ave. Suite 200 | Oregon City OR 97045
Ph (503) 722-3789 | Fax (503) 722-3880

Site Plan & Design Review Checklist

1. ☑ **A Completed Application Form with All Property Owner Signatures** *(P)*

2. ☑ **Narrative** *(P/DS)*
A complete and detailed narrative description of the proposed development and an explanation addressing all applicable approval criteria. A template is provided at the Pre-Application Conference.

3. ~~**Site Plan and Design Review Construction Cost Form** *(P)*~~

4. ☑ **Site Plan** *(P/DS)* INCLUDED W/ARCHITECTURAL DWGS
A detailed site development plan showing:
   - ☑ Vicinity information showing streets and access points, pedestrian and bicycle pathways, transit stops and utility locations
   - ☑ The site size, dimensions, and zoning, including dimensions and gross area of each lot or parcel and tax lot and assessor map designations for the proposed site and adjoining properties
   - ☑ Contour lines at 2 foot intervals for grades 0-10%, and 5-foot intervals for grades over 10%
   - ☐ ~~The location of natural hazard areas on and within 100 feet of the boundaries of the~~ site, ~~including areas within the following overlay districts:~~
     - ☐ Flood Management Overlay District
     - ☐ Geologic Hazards Overlay District
     - ☐ Flood Management Overlay
     - ☐ Historic Overlay District
   - ☐ ~~The location of inventoried historic or cultural resources on and within 100 feet of the site~~
   - ☑ The location, dimensions, and setback distances of all existing permanent structures, improvements and utilities on or within twenty-five feet of the site, and the current or proposed uses of the structures
   - ☑ The location, dimensions, square footage, building orientation and setback distances of proposed structure, improvements and utilities, and the proposed uses of the structures by square footage
   - ☑ ~~The location, dimension and names, as appropriate, of all existing and platted streets, other public ways, sidewalks, bike routes and bikeways, pedestrian/bicycle accessways and other pedestrian and bicycle ways, transit street and facilities, neighborhood activity centers, and easements on and within two hundred fifty feet of the boundaries of the site~~
   - ☑ ~~The location, dimension and names, as appropriate, of all proposed streets, other public ways, sidewalks, bike routes and bikeways, pedestrian/bicycle accessways and other pedestrian and bicycle ways, transit streets and facilities, neighborhood activity centers, and easements on and within two hundred fifty feet of the boundaries of the site~~
   - ☑ All parking, circulation, loading and servicing areas, including the locations of all carpool, vanpool and bicycle parking spaces as required
   - ☑ Site access points for automobiles, pedestrians, bicycles and transit
   - ☑ On-site pedestrian and bicycle circulation
   - ☑ ~~Outdoor common areas proposed as open space~~
   - ☑ Total impervious surface created (including buildings and hard ground surfaces)

5. ✓ **Landscaping Plan** *(P)* INCLUDED W/ARCHITECTURAL DWGS
A landscaping plan prepared by a registered landscape architect, drawn to scale, showing the location and types of existing trees (six inches or greater in caliper measured four feet above ground level) and vegetation proposed to be removed and to be retained on the site, the location and design of landscaped areas, the varieties, sizes and spacings of trees and plant materials to be planted on the site, other pertinent landscape features, and irrigation systems required to maintain plant materials.

5. ✓ **Tree Removal and Mitigation Plan** *(P)*
A tree removal and mitigation plan must include the setbacks, easements and the location and caliper of all trees as well as identification of the trees 6" DBH and greater prepared in accordance with OCMC 17.41. A plan shall also be submitted identifying the location, species and caliper of trees replanted onsite. The tree mitigation plan report shall be prepared by a certified arborist, horticulturalist or forester or other environmental professional with experience and academic credentials in forestry or arborculture.

6. ✓ **Street Tree Plan** *(P)* COMBINED W/ LANDSCAPE PLAN
A street tree plan, drawn to scale, identifying size and species of street trees, and location of trees, streetlights, and fire hydrants.

7. ✓ **Exterior Lighting Plan** *(P)* INCLUDED W/ARCHITECTURAL DWGS
Photometric Plan drawn to scale, showing type, height, and area of illumination.

8. ✓ **Architectural Drawings** *(P)*
Architectural drawings or sketches, drawn to scale and showing floor plans, elevations accurately reflected to grade, and exterior materials of all proposed structures and other improvements as they will appear on completion of construction.

9. ✓ **Erosion and Sediment Control Plan** *(DS)* INCLUDED W/ARCHITECTURAL DWGS
In accordance with the requirements of Chapter 17.47 and the Public Works Erosion and Sediment Control Standards, and a drainage plan developed in accordance with city drainage master plan requirements, Chapter 13.12 and the Public Works Stormwater and Grading Design Standards. The drainage plan shall identify the location of drainage patterns and drainage courses on and within one hundred feet of the boundaries of the site. Where development is proposed within an identified hazard area, these plans shall reflect concerns identified in the hydrological/geological/ geotechnical development impact statement.

10. ✓ **Materials Board** *(P)*
A materials board, no longer in size than eight and one-half inches by fourteen inches clearly depicting all building materials with specifications as to type, color and texture of exterior materials of proposed structures.

11. ✓ **Preliminary Storm Calculations if Water Quality Detention is Required** *(DS)* SEE PRELIM STORMWATER MANAGEMENT REPORT

12. ___ **Neighborhood Association Meeting** *(P)*
- ❑ A sign-in sheet of meeting attendees
- ❑ A summary of issues discussed
- ❑ A letter from the neighborhood association or CIC indicating that a neighborhood meeting was held.
- ❑ If the applicant held a separately noticed meeting, the applicant shall submit a copy of the meeting flyer, a sign in sheet of attendees and a summary of issues discussed.

13. ✓ **Pre-Application Conference Summary Sheet** *(P/DS)*

14. ✓ **Additional Information or Reports** *(P/DS)* TRAFFIC IMPACT ANALYSIS
If Required in Pre-Application Conference.

15. ✓ **A Current Preliminary Title Report or Trio for the Subject Property(ies)** *(P)*

16. ✓ **Mailing Labels for Owners within 300 Feet of the Subject Site or Fee for City-Provided Labels** *(P)*
The names and addresses of property owners within 300 feet of the site from a title company.

17. ___ **Copies** *(P)*
Two (2) copies of all information, reports, and drawings (full-sized and 8.5" by 11") pertaining to this application.

18. ___ **Electronic Version of All Application Materials** *(P/DS)*

19. ___ **All Required Application Fees** *(P)*

(P) = Contact the Planning Division at (503) 722.3789 with any questions regarding this item.
(DS) = Contact the Development Services Division at (503) 657.0891 with any questions regarding this item.
Incomplete applications will not be processed.

OREGON CITY

Community Development – Planning

221 Molalla Ave. Suite 200 | Oregon City OR 97045
Ph (503) 722-3789 | Fax (503) 722-3880

Variance Checklist

1. ✓ **A Completed Application Form with All Property Owner Signatures** *(P)*

2. ✓ **Narrative** *(P/DS)*
A complete and detailed narrative description of the proposed development and an explanation addressing all applicable approval criteria. A template is provided at the Pre-Application Conference.

3. ✓ **Site Plan Drawings** *(P)*
A scale-drawing of the property, displaying the dimensions and arrangements of the existing and proposed uses.

4. ✓ **Architectural Drawings** *(P)*
Building elevations and envelopes, if architectural work is proposed.

5. ___ **For Planning Commission Variances: Neighborhood Association Meeting** *(P)*
   - ❑ A sign-in sheet of meeting attendees
   - ❑ A summary of issues discussed
   - ❑ A letter from the neighborhood association or CIC indicating that a neighborhood meeting was held.
   - ❑ If the applicant held a separately noticed meeting, the applicant shall submit a copy of the meeting flyer, a sign in sheet of attendees and a summary of issues discussed.

6. ✓ **Pre-Application Conference Summary Sheet** *(P/DS)*

7. ✓ **Additional Information or Reports** *(P/DS)*
If Required in Pre-Application Conference.

8. ✓ **A Current Preliminary Title Report or Trio for the Subject Property(ies)** *(P)*

9. ✓ **Mailing Labels for Owners within 300 Feet of the Subject Site or Fee for City-Provided Labels** *(P)*
The names and addresses of property owners within 300 feet of the site from a title company.

10. ___ **Copies** *(P)*
Two (2) copies of all information, reports, and drawings (full-sized and 8.5” by 11”) pertaining to this application.

11. ✓ **Electronic Version of All Application Materials** *(P/DS)*

12. ___ **All Required Application Fees** *(P)*

(P) = Contact the Planning Division at (503) 722.3789 with any questions regarding this item.
(DS) = Contact the Development Services Division at (503) 657.0891 with any questions regarding this item.
Incomplete applications will not be processed.

OREGON CITY

Public Works – Engineering Development Services

625 Center Street | PO Box 3040 | Oregon City OR 97045
Ph (503) 657-0891 | Fax (503) 657-7892

CITY OF OREGON CITY
ENGINEERING COMPLETENESS CHECKLIST
FOR REVIEW FOR PUBLIC WORKS LAND USE DECISION

Project No. _____ Project Name Oregon City Public Works Facility

Date of Completeness Check :
_____
_____

LEGEND: X = O.K. blank = INCOMPLETE NA = NOT APPLICABLE

The Public Works Department, Division of Development Services, will deem a Land Use Application as Complete, when the following items are provided, where applicable :

X Preliminary Engineering Plans including preliminary site plan, grading plan, and utility plan

i. If in a Geohazard area, the Geohazard checklist should also be completed

X Preliminary Stormwater Report

i. The Stormwater Report should show that the site can mitigate or handle the Flow Control and Water Quality requirements of the Stormwater and Grading Design Standards

ii. For Land Use (A Report that includes as stated in section 9.1.1 :)

iii. X Vicinity Map

iv. X Site Assessment Map

v. X Preliminary Site Plan

vi. X Infiltration Test Results

vii. X Downstream Analysis

viii. X Seasonal Groundwater Depth Evaluation

ix. X BMP Sizing Tool Results

x. X Documentation of High Risk Site Uses

X Geotechnical Report

i. The report should show infiltration if being used. Otherwise, if in a Geohazard area, the Geohazard checklist should also be completed

X Answers to all Code on the template provided by Planning

i. N/A or Not Applicable is not an acceptable answer

a. If the code section is truly not applicable, describe why

ii. See plans is not an acceptable answer

a. If the plans provide the answer, describe how they do

OREGON CITY OPERATIONS COMPLEX

SITE PLAN & DESIGN REVIEW + VARIANCE APPLICATION

APRIL 10th, 2020

April 10, 2020

ATTN: Diliana Vassileva

Planning Division
City of Oregon City
698 Warner Parrott Road
Oregon City, OR 97045

RE: SITE PLAN & DESIGN REVIEW + VARIANCE

Dear: Diliana Vassileva,

It is with great pleasure and enthusiasm that we submit a request for Site Plan & Design Review including a Variance request for the development of the Oregon City Operations Complex. A pre-application has been completed as required for the proposed development. It is our understanding that the Site Plan and Design Review application will be reviewed under the Type III process due to the variances being requested. Included in our application material is the Oregon City Site Plan & Design Review Checklist used in preparing the submittal. Due to current COVID-19 pandemic we will be hosting a virtual Neighborhood Association presentation and will submit the necessary documentation within thirty days.

We understand Oregon City has recently adopted changes to the city's Municipal Code to which our OCMC Narrative has incorporated. The narrative includes responses to the applicable code sections including a modification request to requirements of OCMC 17.62.

We look forward to hearing from you and hope you are staying safe and healthy. Please, let us know if you require any additional information to begin processing the request.

Sincerely,

Brandon Dole
Project Manager

SCOTT | EDWARDS ARCHITECTURE, L.L.P.

(503) 896-5313 | bdole@seallp.com

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3 | PROJECT DESCRIPTION
4 | DESIGN DRAWINGS+ EXHIBITS
5 | OCMC STANDARDS
6 | APPENDIX

PROJECT | INFO

APPLICANT

Brandon Dole, Project Manager
Scott Edwards Architecture, LLP

2079 SE Ankeny St.
Portland, OR 97214

OWNER

Oregon City Public Works

122 S Center St.
Oregon City, OR 97045

REQUEST

Public Works Operations Center

The Oregon City Public Works Department proposes to renovate the existing office building and construct a new fleet vehicle maintenance facility within an existing warehouse. Minor site improvements are included.

LOCATION

13895 Fir Street
Oregon City, OR 97045

APN: 3-2E-09B-01101
Alt ID: 00869509
Map: 32E09B

ZONING

GI (General Industrial)
Comprehensive Plan: (i Industrial)

Gaffney Lane Neighborhood Association
Clairmont Acreage Tracts No. 3

Situs Address Detail Report

13895 FIR ST

Address Information

Site Address: 13895 FIR ST
OREGON CITY, OR 97045

In City? Y

In UGB? Y

Complex:

The following information was derived from the taxlot database and may not necessarily apply to the specific address location

Taxlot Description

APN: 3-2E-09B -01101

Alt ID: 00869509

Taxpayer: *Suppressed*

Address: *Suppressed*

Parcel Area (GIS - acres): 4.79

Parcel Area (GIS - sq. ft): 208,776

Twn/Rng/Sec: 3S 2E 9

Tax Map Reference: 32E09B (03_3s2e09b)

Year Built: Unknown or not recorded

Taxlot Values

Import Date: 04/04/2019

Land Value (Mkt): $1,455,151

Building Value (Mkt): $4,805,610

Total Value (Mkt): $6,260,761

Assessed Value: $4,125,841

Exempt Amount: $4,125,841

Taxlot Overlay Information

In Willamette Greenway? N

In Geologic Hazard? N

In High Water Table Area? Y

In Nat. Res. Overlay District (NROD)? N

In 1996/FEMA 100 Yr Floodplain? N

In FEMA Floodway? N

In Sewer Moratorium Area? N

In Thayer Rd Pond Fee Area? N

In Beavercreek Rd Access Plan Area? N

In Barlow Trail Corridor? N

In Enterprise Zone? Y

In SDC Discount Area? N

In Vert. House Dev. Zone? N

Taxlot Planning Designations

Zoning: GI

Comprehensive Plan: I

Subdivision: (277) CLAIRMONT ACREAGE TRACTS NO.3

PUD (if known):

Partition Plat: N/A

Neighborhood Assn: GAFFNEY LANE

Urban Renewal District: N/A

Concept Plan: N/A

Historic District: N/A

Historic Designated Structure? N/A

The City of Oregon City makes no representations, express or implied, as to the accuracy, completeness and timeliness of the information displayed. This map is not suitable for legal, engineering, surveying or navigation purposes. Notification of any errors is appreciated.

Report generated 8/19/2019 8:54 AM

City of Oregon City
PO Box 3040
625 Center St
Oregon City, OR 97045
(503) 657-0891
www.orcity.org

Ordinance No. 08-1014
Adopted July 1, 2009
Most recent Zoning update shown is Ordinance 18-1031 (effective date: 3/13/2019).
Also includes Ordinance 16-1003 (added 3/17/2020)

ZONING DESIGNATIONS

Low Density Residential Districts

R-10 [illegible] du/acre
R-8 [illegible] du/acre
R-6 5.8 - 7.3 du/acre

Medium Density Residential Districts

R-5 7 - 17.4 du/acre
R-3.5 10 - 21.8 du/acre

High Density Residential District

R-2 17.4 - 26.2 du/acre

Other Zoning Designations

MUC-1	Mixed Use Corridor 1
MUC-2	Mixed Use Corridor 2
MUD	Mixed Use Downtown
MUE	Mixed Use Employment
WFDD	Willamette Falls Downtown District
GC	General Commercial
HC	Historic Commercial
NC	Neighborhood Commercial
GI	General Industrial
CI	Campus Industrial
I	Institutional
County	County

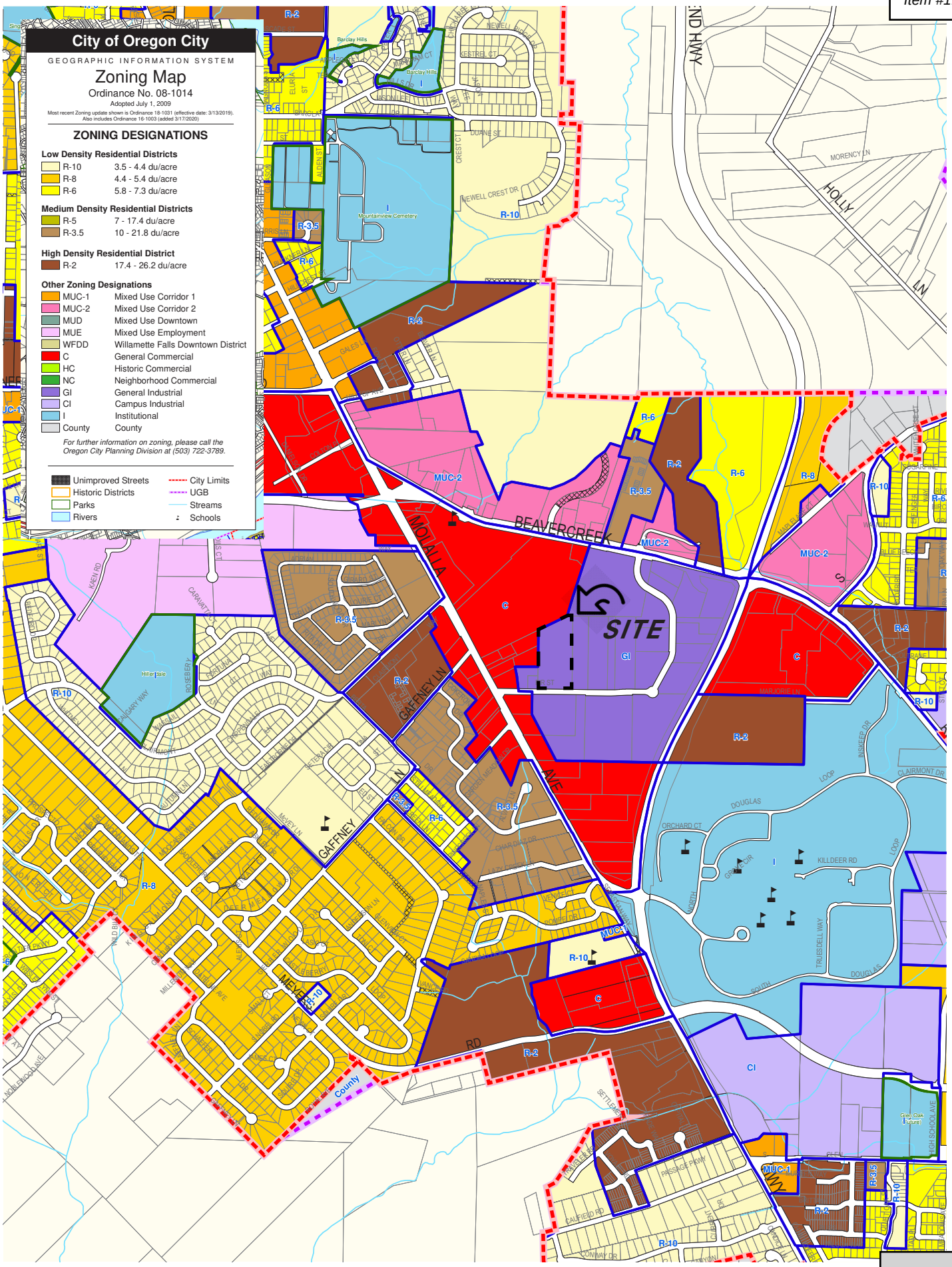
For further information on zoning, please call the Oregon City Planning Division at (503) 722-3789.

Unimproved Streets
Historic Districts
Parks
Rivers
City Limits
UGB
Streams
Schools

The City of Oregon City makes no representations, express

0.5 0.25 0 0.5 1 1.5 Miles

City of Oregon City
P.O. Box 3040
625 Center Street


City of Oregon City
GEOGRAPHIC INFORMATION SYSTEM
Zoning Map
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SITE
BEAVERCREEK
MOLALLA
GAFFNEY LN
GAFFNEY
MEYER
HOLLY
MORENCY LN
NEWELL CREST DR
DUANE ST
KILLDEER RD
DOUGLAS
CLAIRMONT DR
MARJORIE LN
CONWAY DR
FALFIELD RD
PASSAGE PKWY
Mountainview Cemetery
Barclay Hills
Glen Oak (future)

PROJECT | BACKGROUND

In 2018, the Oregon City Public Works Department (OCPW) purchased the property at 13895 Fir Street with the intention on developing a new Public Works Operations Complex. The new complex will be home to the following Oregon City Departments.

CITY DEPARTMENTS AT FIR STREET

- Engineering Department
- Public Works Operations
- Parks Department including Facilities

THE PROJECT PARCEL

The project parcel is a 4.79 acre site located within the GI General Industrial zone district. The former use was a private beverage distribution facility that included 16,000 sf of office area and 47,000 sf of storage and warehousing space. The site includes a 161,650 sf of separated secured fenced area (the north yard). The north yard includes landscaping, a loading dock, fueling station, trash/recycling area, parking, storage of unused/to-be preprocessed delivery trucks, and all back of house elements needed for the former operation of the distribution center. The unfenced open public area to the south includes street frontage along Fir Street, visitor, employee and accessible parking, landscape areas and other pedestrian amenities. The existing parking lots are distributed along the southerly boundary of the site between the building main entrance and Fir Street.

THE EXISTING BUILDINGS

There are three existing buildings on the project parcel. An office building, metal building that is used for warehousing, and a small fueling station shelter.

2
THE SURROUNDINGS

The surrounding neighbors consist of commercial and industrial uses that each have similar characteristics. Fir Street, the frontage along the southern boundary of the site, is not a transit street and has low pedestrian traffic with intermittent pedestrian walkways. Recent developments within the area are of similar office, industrial and storage uses include minor sidewalk improvements along Fir Street.

THE NEIGHBORS

To the North the adjacent use is a large box retailer. Both a landscape buffer and chain link security fence exists along the entire length of the property line. Maintaining the previous use, this area will be allocated towards the storage of OCPW fleet vehicles, large equipment and circulation through the site. Minor site improvements include replanting of the existing landscape buffer and new stripping.

EAST

EAST

To the East there are three adjacent properties ; a storage facility, auto shop, and industrial shop with a small retail space. A shared driveway is utilized to access the three establishments. A landscape buffer and chain link fence exists along the property line. The applicant proposes to replant the existing planting strip and install sight obscuring slats in the fence where replanting is not feasible.

EAST

To the South Fir Street runs parallel to the property line. Fir Street is not a transit street and has low pedestrian utilization.

To the West there are six adjacent properties consisting of office, retail, industrial and storage. The buildings on the adjacent lots are placed with shallow rear yards. The development proposes to improve the existing landscape area and construct new parking facilities for the storage of fleet vehicles and equipment.

SOUTH

WEST

SOUTH

PROJECT | DESCRIPTION

The new Oregon City Operations Complex will consolidate three city departments that are currently housed throughout the city, each with their own dedicated facility. The intent is to develop a modern, efficient and easily maintainable facility that is design for their current and future operational needs.

THE GOALS + OBJECTIVES

- Offices + Conference Rooms
- Fleet Maintenance Facility
- Fleet Vehicle + Equipment Parking
- Indoor Material Storage Areas
- 30 yrs of Growth + Expansion
- Seismic Resilience

The above goals and objectives are met while maintaining the existing building foot print and reusing as much of the existing facilities as possible.

THE OFFICE BUILDING

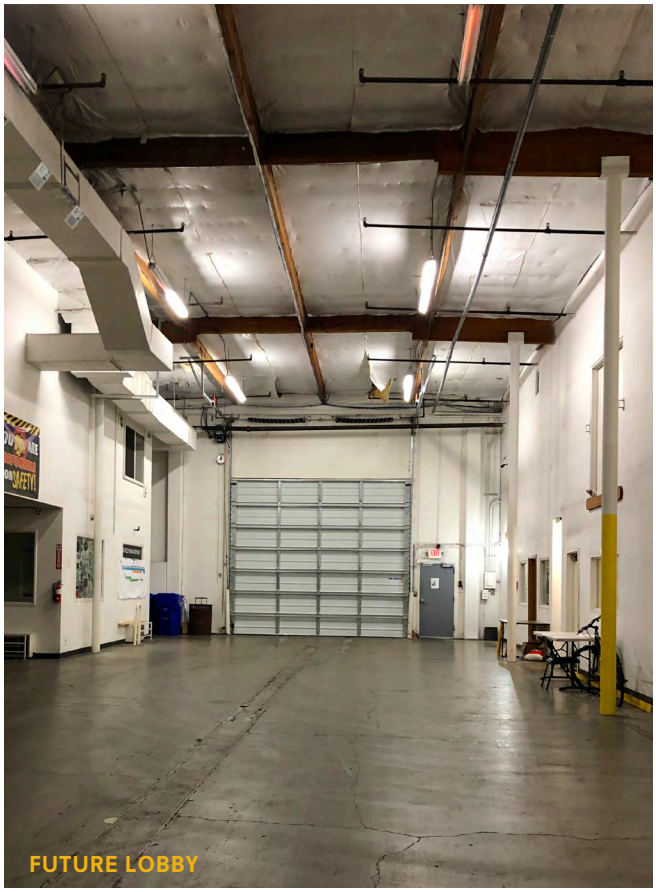
The existing office building will be fully renovated and provide 23,000 sf of modern office space that will house three city departments. The renovation will upgrade the existing building to a Seismic Category IV structure. This will ensure the OCPW's ability to perform their duties in the event of a major natural disaster or catastrophe. The new office building will include energy efficient assemblies, utilize natural daylight, and provide OCPW with a game plan to accommodate growth over the next 30 years.

Building amenities include departmental public counters, employee locker rooms, staff kitchen and lunchroom, conference rooms, offices and open work stations with adequate storage capacity throughout.

FLEET MAINTENANCE + SIGN SHOP

A new 5,000 sf fleet maintenance facility and sign shop will be constructed within the existing metal warehouse building. The maintenance facility will accommodate two service aisles, small parts/ equipment storage, restrooms and mechanics

offices. The remaining area and primary use of the warehouse will be for storage of small parts, tools, equipment, vehicles and misc items for the different OCPW Operations Divisions . Exterior building improvements will be minimal and limited to new openings to improve pedestrian and vehicle circulation around the site and through the warehouse. New lighting, misc electrical, mechanical and plumbing improvements will be made.


FUTURE LOBBY

THE SITE WORK.

The applicant proposes modifications to an existing parking lot; including the parking lot located between the office building and south property line. Improvements consist of the removal of an existing driveway allowing a new one-way drive aisle, landscape, storm water facilities and a pedestrian plaza to replace it. Site accessibility improvements are included enhancing the public's access to the different City departments.

Other site improvements include the expansion of the existing fleet vehicle and equipment storage facilities. Minor site grading, paving, utility improvements will be made, including, new storm water facilities. Other existing parking and landscape areas will be maintained as is.

THE YARD

SITE CHALLENGES

Due to the operational needs and uses of the Oregon City Public Works the applicant requests three variances for the proposed development to address a variety of site challenges.

The main challenge with the site is it's size...there's not enough area.

Similar public works facilities and previous analysis have shown the ideal parcel for a operations complex of this size is 8-10 acres. The proposed development is on 4.79 acres. Therefore, the OCPW need to maximize the site area using every space available for parking fleet equipment and vehicles. Their operational efficiencies require their crews and equipment be housed within one complex to where they can deploy at a moments notice.

The second challenge are the two allowable driveways...but three exist.

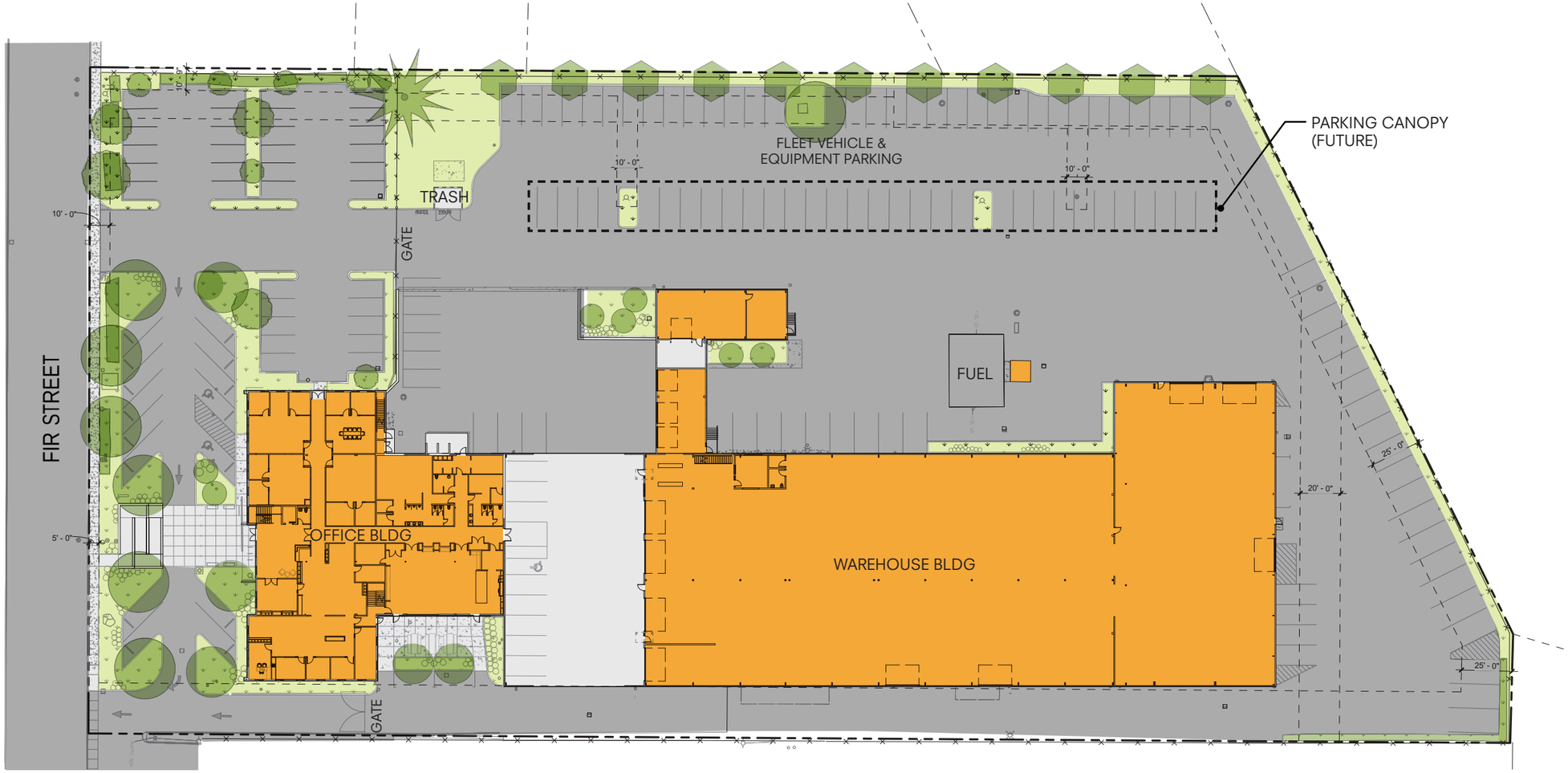
The site is accessed by three driveways, two of which provide the travel lane for vehicular circulation through the fenced yard; while the third serves a stand alone parking lot with eight spaces. It is important to note all parking areas served by the three driveways along the frontage are separated and tiered by landscape areas due to the slope of the site .

The applicant proposes to reconfigure the existing parking lots into a one-way drive aisle that will remove the mid driveway and parking lot. The new drive aisle will provide vehicle and pedestrian circulation between the two remaining driveways, ultimately connecting the east and west ends of the site. The proposed development will not only improve site circulation for pedestrians and vehicles, but provide a distinct vehicle circulation pattern for both public and fleet vehicles. In addition, the reconfiguration allows a public plaza to be established at the building's main entry.

FUTURE PLAZA

OCPW I OPERATIONS COMPLEX

DESIGN DRAWINGS + EXHIBITS



OREGON CITY PUBLIC WORKS COMPLEX
13895 FIR ST.
OREGON CITY, OR 97045
10 APRIL 2020 | PROJ. NO. 19112

PROPOSED SITE EXHIBIT

SCALE: 1" = 60'

0' 30' 60' 120'

OREGON CITY PUBLIC WORKS COMPLEX
13895 FIR ST.
OREGON CITY, OR 97045
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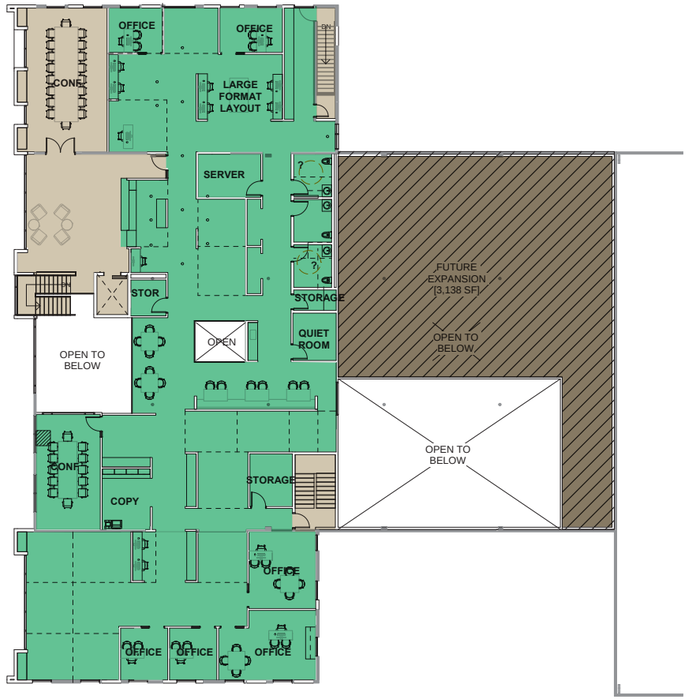
FLOOR PLAN
Office + Fleet Maintenance

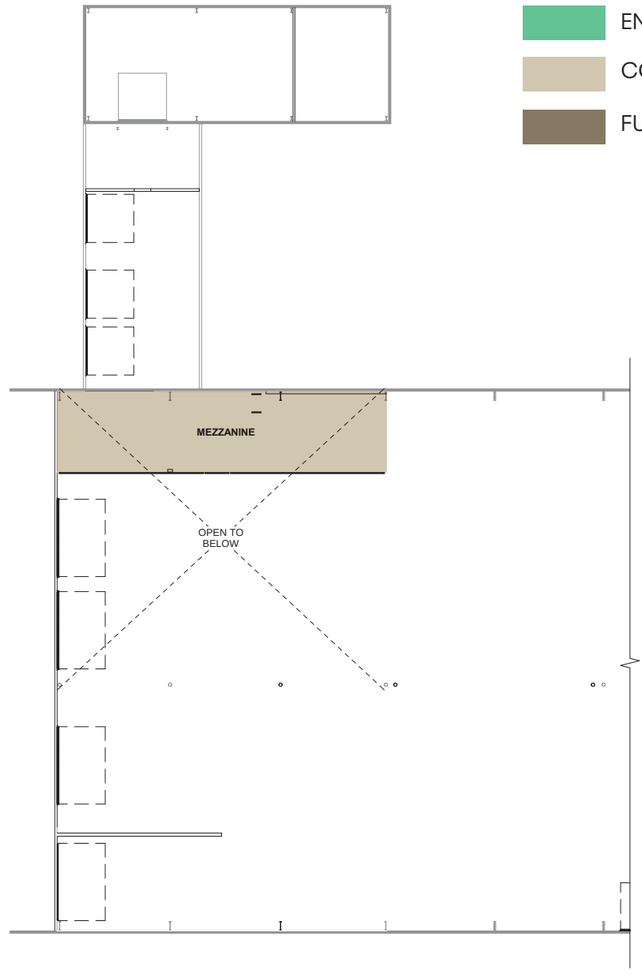
SCALE: NTS

SCOTT|EDWARDS A

LEGEND

- ENGINEERING
- COMMON AREAS & CIRCULATION
- FUTURE EXPANSION





OREGON CITY PUBLIC WORKS COMPLEX
13895 FIR ST.
OREGON CITY, OR 97045
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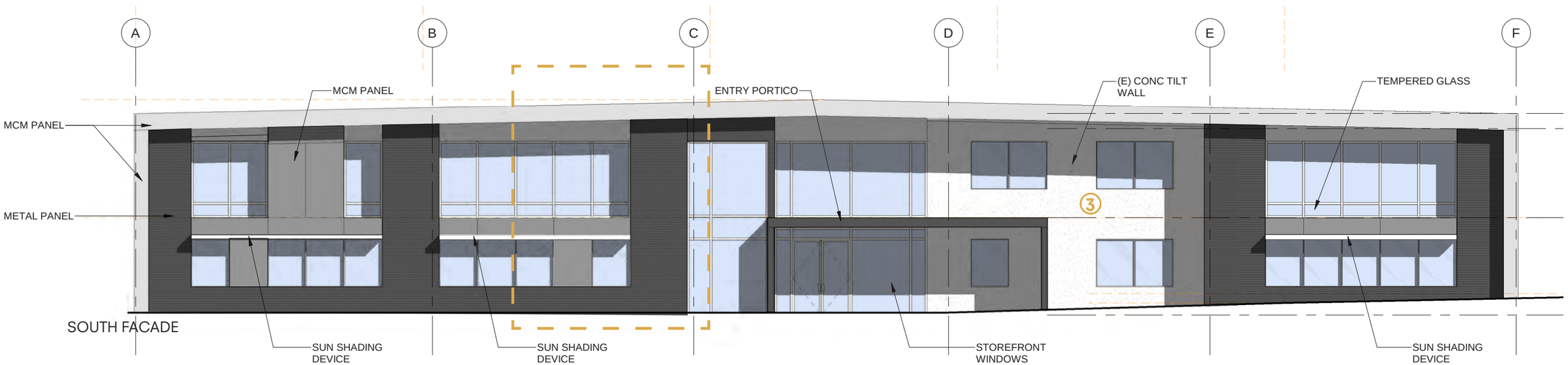
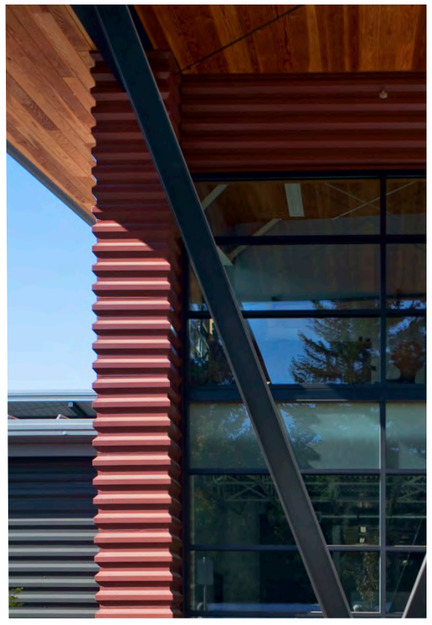
FLOOR PLAN
Office + Fleet Maintenance

SCALE: NTS

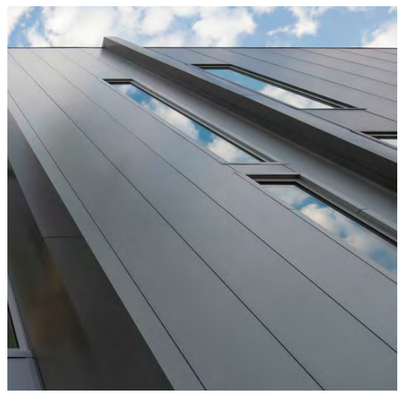


SOUTH FACADE

ENLARGED SOUTH FACADE

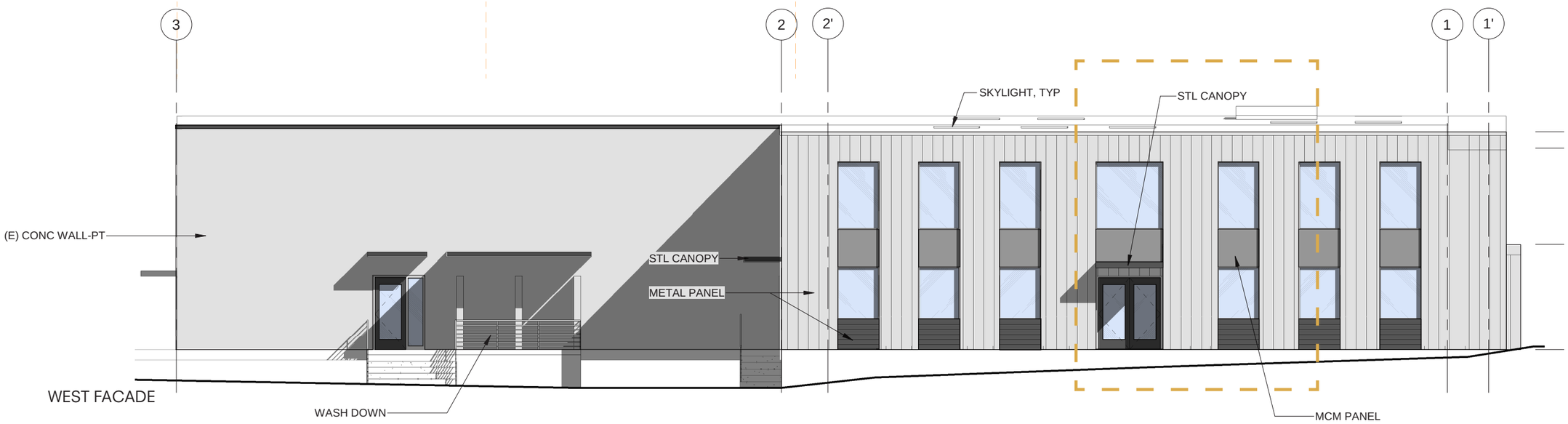


1 BOX RIB PANEL



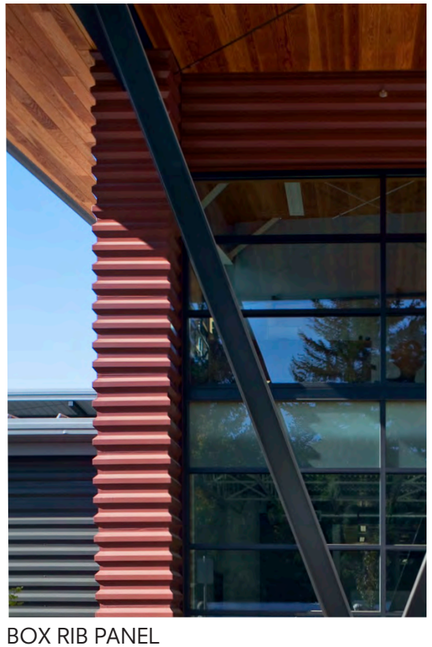
2 MCM PANEL

3 CONCRETE WALL

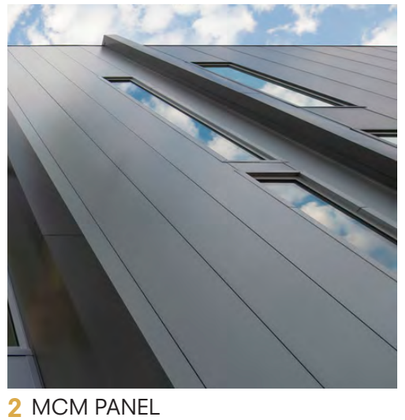


WEST FACADE

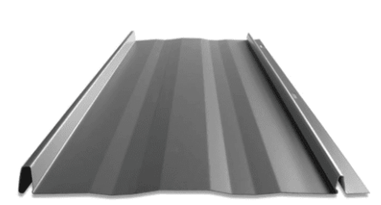
ENLARGED WEST FACADE

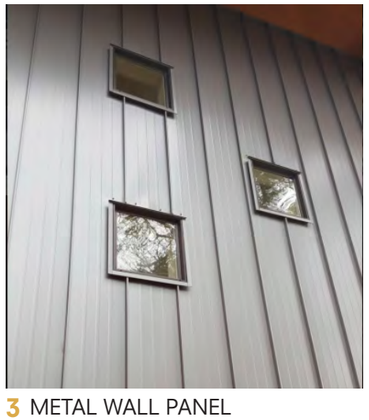


1 BOX RIB PANEL

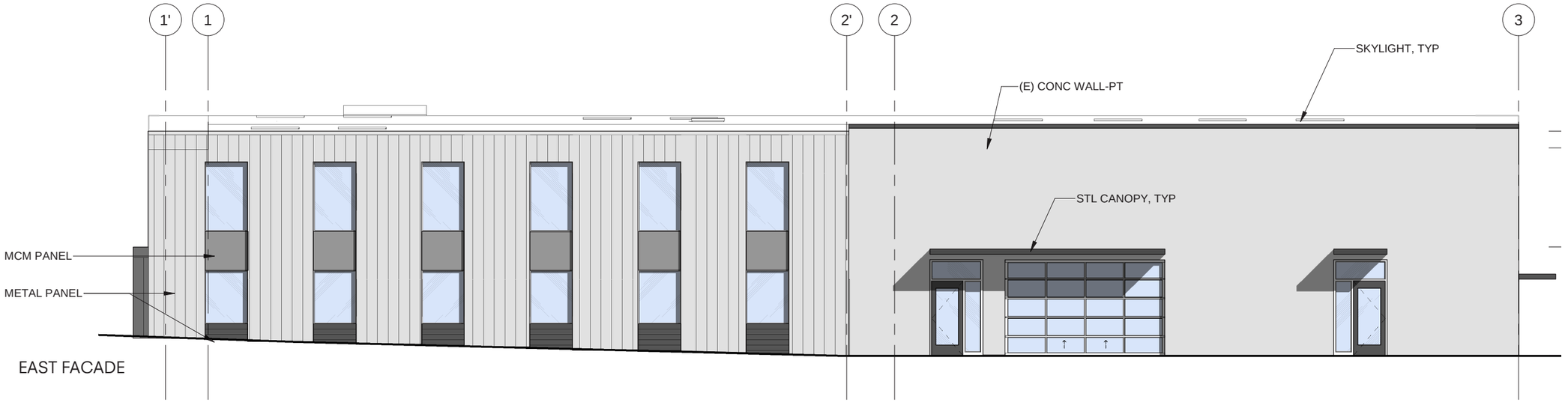


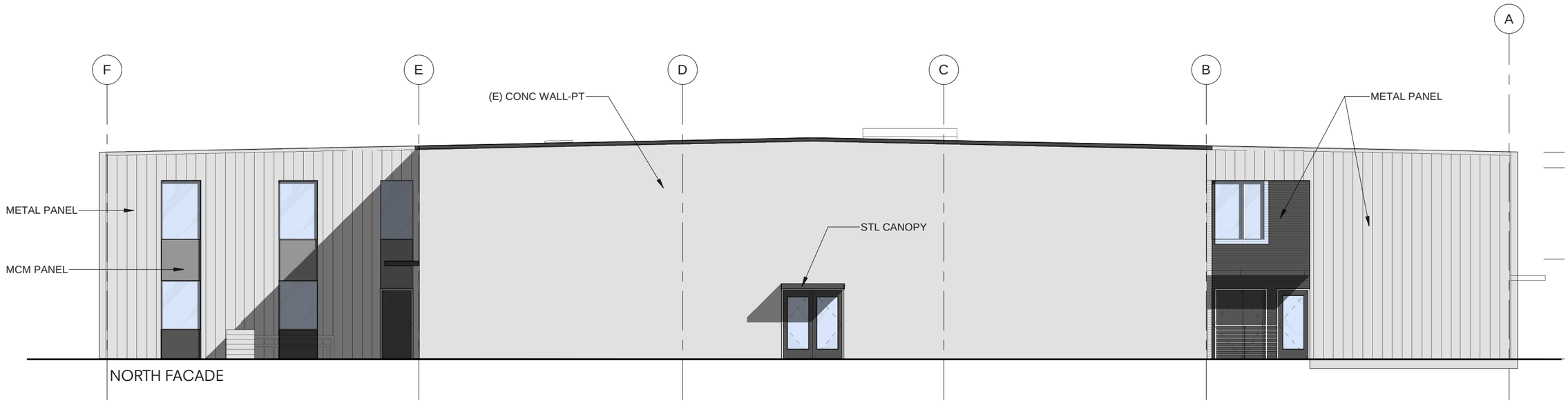
2 MCM PANEL





3 METAL WALL PANEL


1'
1
2'
2
3
SKYLIGHT, TYP
(E) CONC WALL-PT
STL CANOPY, TYP
MCM PANEL
METAL PANEL
EAST FACADE


A
F
E
D
C
B
(E) CONC WALL-PT
METAL PANEL
METAL PANEL
STL CANOPY
MCM PANEL
NORTH FACADE

LEGEND

PUBLIC TRANSIT ROUTE

ON-STREET BIKE LANE

OREGON CITY PUBLIC WORKS COMPLEX
13895 FIR ST.
OREGON CITY, OR 97045
10 APRIL 2020 | PROJ. NO. 19112

VICINITY SITE EXHIBIT

SCALE: 1″ = 60′

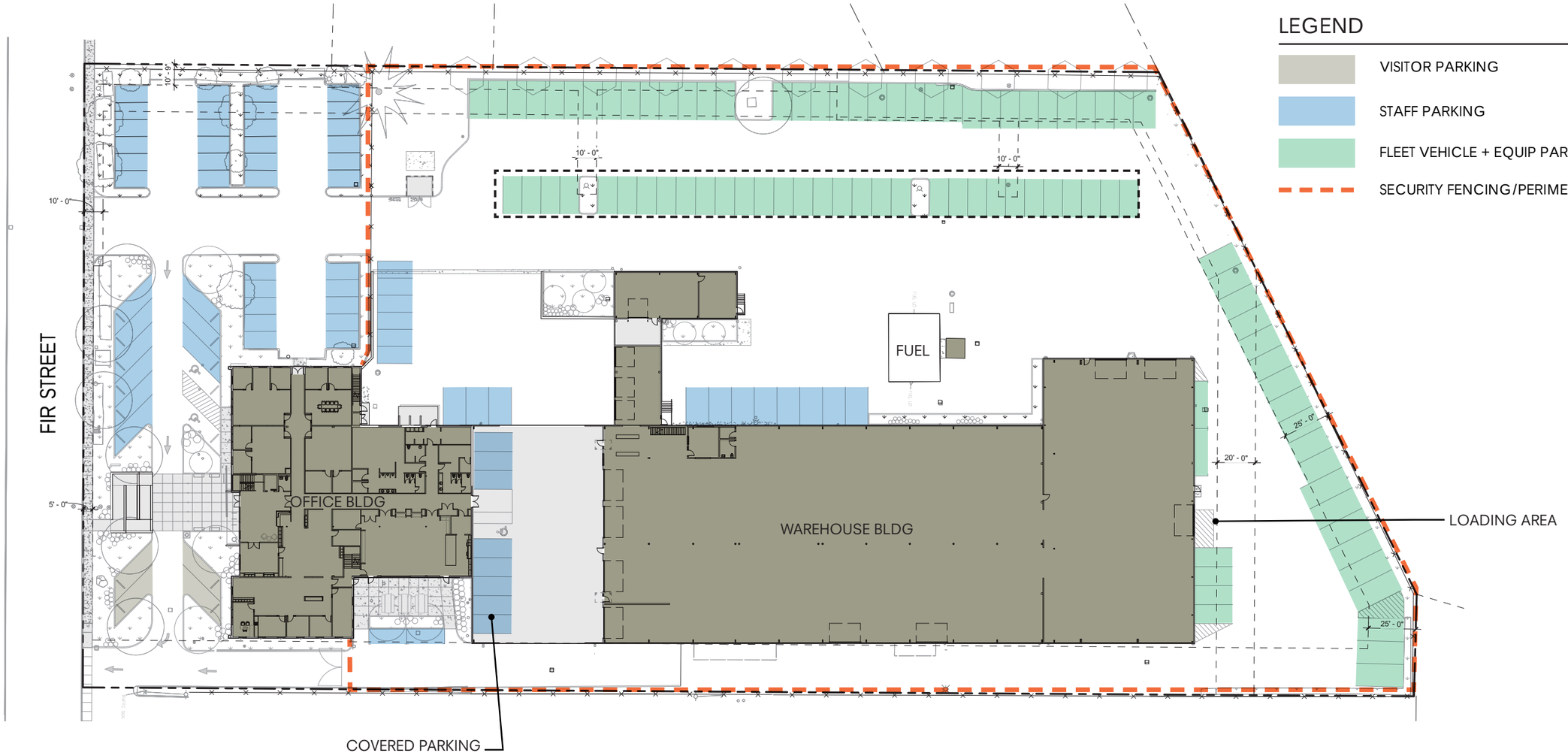
0′ 30′ 60′ 120′

PARKING SUMMARY

VISITOR PARKING	4
STAFF PARKING:	62
ACCESSIBLE PARKING:	3
PROPOSED PARKING SPACES:	69
*FLEET + EQUIP PARKING:	98

LEGEND

- VISITOR PARKING
- STAFF PARKING
- FLEET VEHICLE + EQUIP PARKING
- SECURITY FENCING/PERIMETER



OREGON CITY PUBLIC WORKS COMPLEX

13895 FIR ST.
OREGON CITY, OR 97045
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PARKING SITE EXHIBIT

SCALE: 1" = 60'

0' 30' 60' 120'

LEGEND

- EXISTING TREE
- NEW TREE
- PLANTING AREA
- STORMWATER FACILITY
- EXISTING CHAIN LINK FENCE

OREGON CITY PUBLIC WORKS COMPLEX

13895 FIR ST.
OREGON CITY, OR 97045
10 APRIL 2020 | PROJ. NO. 19112

SITE & PARKING LOT COVERAGE EXHIBIT

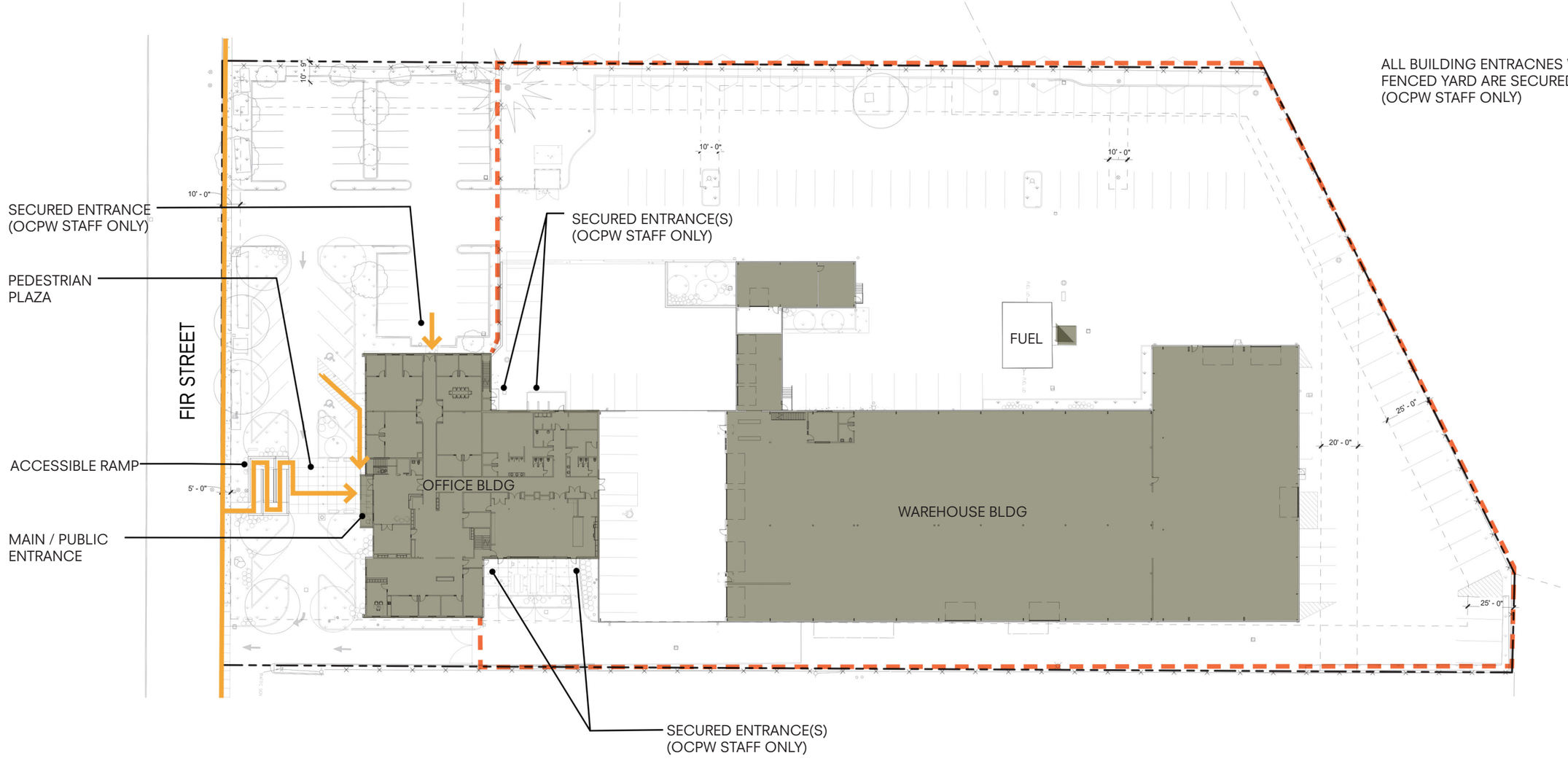
SCALE: 1" = 60'

0' 30' 60' 120'

LEGEND

EXISTING CHAIN LINK FENCE

PEDESTRIAN PATHWAY



ALL BUILDING ENTRACNES WITHIN THE FENCED YARD ARE SECURED ENTRANCE(S) (OCPW STAFF ONLY)

OREGON CITY PUBLIC WORKS COMPLEX

13895 FIR ST.
OREGON CITY, OR 97045
10 APRIL 2020 | PROJ. NO. 19112

PEDESTRIAN CIRCULATION EXHIBIT

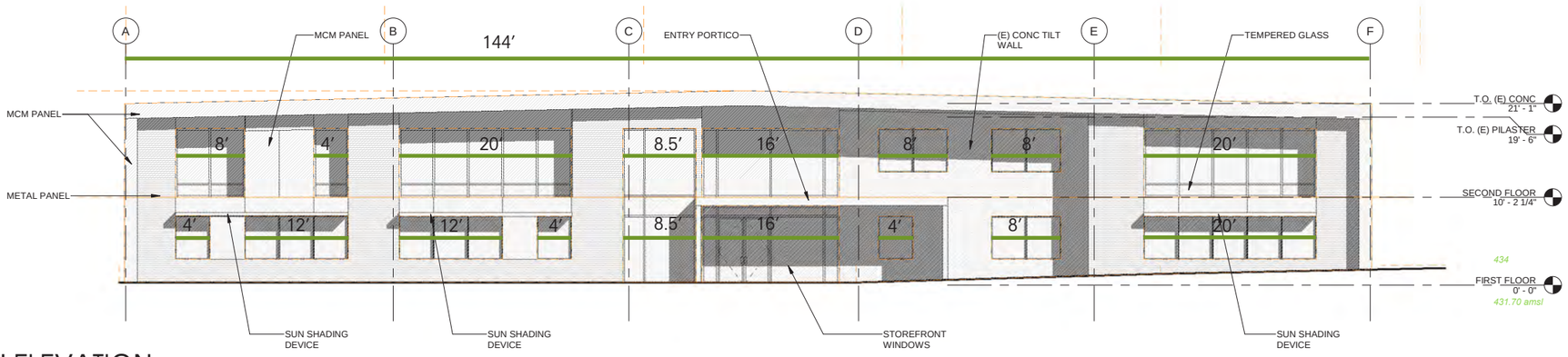
SCALE: 1" = 60'

0' 30' 60' 120'

SCOTT|EDWARDS A

LEGEND

LENGTH OF FACADE/GLAZING



SOUTH ELEVATION

SOUTH ELEVATION	FACADE LENGTH	GLAZING REQUIRED	PROPOSED GLAZING
LEVEL ONE:	144 lft	x.60 = 86.4 lft of glazing required	88.5 sf (61.5%)
LEVEL TWO:	144 lft	x.10 = 14.4 lft of glazing required	92.5 sf (64.2%)

OREGON CITY PUBLIC WORKS COMPLEX
13895 FIR ST.
OREGON CITY, OR 97045
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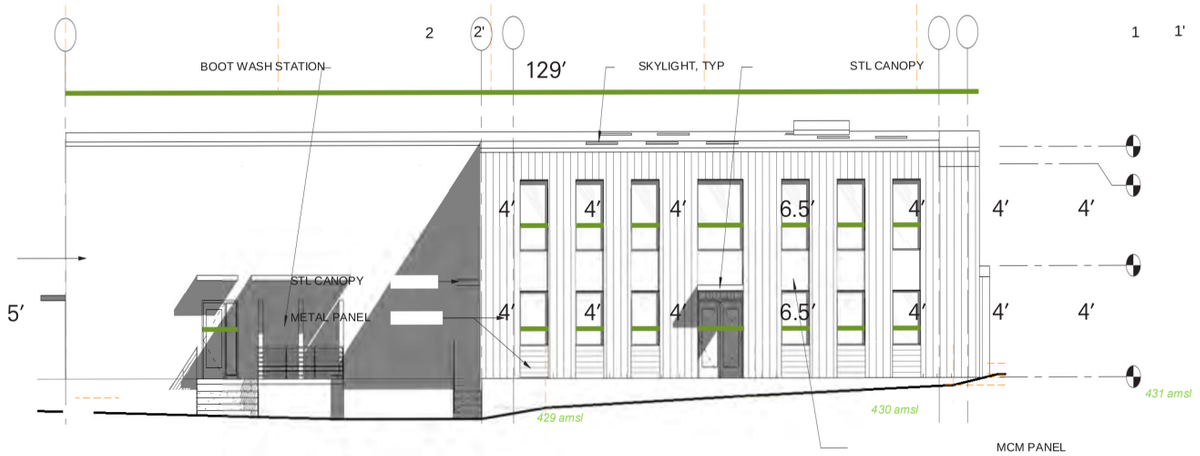
GLAZING EXHIBIT
SCALE: 1/8"= 1'-0"

0′ 4′ 8′ 16′

LEGEND



EVATION

GLAZING REQUIRED	PROPOSED GLAZING
x.30 = 38.7 lft of glazing required	35.5 lft (27.5%)
x.10 = 12.9 lft of glazing required	30.5 lft (23.6%)

ORKS COMPLEX GLAZING EXHIBIT

SCALE: 1/8"= 1'-0"

0' 4' 8' 16'

OREGON CITY

LEGEND

LENGTH OF FACADE/GLAZING

EAST ELEVATION

EAST ELEVATION	FACADE LENGTH	GLAZING REQUIRED	PROPOSED GLAZING
LEVEL ONE:	129 lft	x.30 = 38.7 lft of glazing required	53 lft (41%)
LEVEL TWO:	129 lft	x.10 = 12.9 lft of glazing required	24 lft (18.6%)

OREGON CITY PUBLIC WORKS COMPLEX
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10 APRIL 2020 | PROJ. NO. 19112

GLAZING EXHIBIT
SCALE: 1/8"= 1'-0"
0' 4' 8' 16'

INTENTIONALLY LEFT BL

INTENTIONALLY LEFT BL

OCMC | NARRATIVE

Municipal Code Standards and Requirements

The following sections of the Oregon City Municipal Code are applicable to this land use approval:

OCMC SECTIONS

- 12.04 Streets, Sidewalks and Public Spaces
- 12.08 Public and Street Trees
- 13.12 Stormwater Management
- 15.48 Grading, Filling and Excavating
- 16.12 Minimum Public Improvements and Design Standards
- 17.36 GI General Industrial District
- 17.41 Tree Preservation, Removal and Replanting Protection
- 17.50 Administration, Removal and Replanting Protection
- 17.52 Off-Street Parking and Loading
- 17.54 Supplemental Zoning Regulations and Exceptions
- 17.58 Lawful Nonconforming Uses, Structures or Lots
- 17.60 Variances
- 17.62 Site Plan and Design

The City Code Book is available on-line at

www.orcity.org

PERMITS AND APPROVALS:

The applicant is responsible for obtaining approval and permits from each applicable governmental agency and department at Oregon City including but not limited to the Engineering and Building Divisions.

OCMC | NARRATIVE

12.04 Streets, Sidewalks, and Public Places

12.04.005 - Jurisdiction and management of the public rights-of-way.

A. The City has jurisdiction and exercises regulatory management over all public rights-of-way within the City under authority of the City Charter and state law by issuing separate public works right-of-way permits or permits as part of issued public infrastructure construction plans. No work in the public right-of-way shall be done without the proper permit. Some public rights-of-way within the city are regulated by the State of Oregon Department of Transportation (ODOT) or Clackamas County and as such, any work in these streets shall conform to their respective permitting requirements.

C. The City has jurisdiction and exercises regulatory management over each public right-of-way whether the City has a fee, easement, or other legal interest in the right-of-way. The City has jurisdiction and regulatory management of each right-of-way whether the legal interest in the right-of-way was obtained by grant, dedication, prescription, reservation, condemnation, annexation, foreclosure or other means.

D. No person may occupy or encroach on a public right-of-way without the permission of the City. The City grants permission to use rights-of-way by franchises, licenses and permits.

E. The exercise of jurisdiction and regulatory management of a public right-of-way by the City is not official acceptance of the right-of-way, and does not obligate the City to maintain or repair any part of the right-of-way.

Applicant's Response:

The adjacent right-of-way is under the jurisdiction of Oregon City. The applicant will comply with Oregon City standards for all work in the right-of-way.

12.04.025 - Driveways.

Driveways shall be reviewed in accordance with OCMC 16.12.035. Driveway requirements may be modified through the procedures in OCMC 16.12.013.

Applicant's Response:

The applicant will comply with Oregon City standards and permitting for removal/reconstruction of the public sidewalk and curb to close the existing center driveway and sidewalk ADA accessibility upgrades.

12.04.170 - Street design—Purpose and general provisions.

All development shall be in conformance with the city's public facility master plans, public works policies, standard drawings and engineering specifications. All streets shall be reviewed and approved by the city engineer prior to construction. All streets and driveway connections to another jurisdiction's

facility or right-of-way must be reviewed by the appropriate jurisdiction as a condition of the preliminary plat or site planning and when required by law or intergovernmental agreement shall be approved by the appropriate jurisdiction.

Applicant's Response:

As part of a minor site plan review, the applicant is not required to perform public frontage improvements to build out the frontage per the City's Transportation System Plan (TSP). The applicant will comply with Oregon City design standards and specifications for driveway reconstruction and sidewalk repair as necessary.

12.04.270 - Standard construction specifications.

The workmanship and materials for any work performed under permits issued per this chapter shall be in accordance with the current edition of the "Oregon Standard Specifications for Construction" as prepared by the Oregon Department of Transportation (ODOT) and the Oregon Chapter of American Public Works Association (APWA) and as modified and adopted by the City in accordance with this ordinance, in effect at the time of application. The exception to this requirement is where this chapter and the Public Works Street Standard Drawings provide other design details, in which case the requirements of this chapter and the Public Works Street Standard Drawings shall control. In the case of work within ODOT or Clackamas County rights-of-way, work shall be in conformance with their respective construction standards.

Applicant's Response:
The applicant will comply with Oregon City design standards and specifications for driveway reconstruction and sidewalk repair as necessary.

OCMC | NARRATIVE

Chapter 12.08 Public and Street Trees

12.08.015 - Street tree selection, planting and maintenance requirements.
All development shall provide street trees adjacent to all street frontages. Species and locations of trees shall be selected based upon vision clearance requirements, but shall in all cases be selected from the Oregon City Street Tree List, an approved street tree list for a jurisdiction in the metropolitan region, or be approved by a certified arborist unless otherwise approved pursuant to this section. If a setback sidewalk has already been constructed or the Public Works Department determines that the forthcoming street design shall include a setback sidewalk, then all street trees shall be installed with a planting strip or within tree wells. If existing street design includes a curb-tight sidewalk, then all street trees shall be placed according to OCMC 12.08.035.C.

A. One street tree shall be planted for every thirty-five feet of property frontage. The tree spacing shall be evenly distributed throughout the total development frontage to meet the clearance distances required in subsection (B) below. The Community Development Director may approve an alternative street tree plan, or accept fee-in-lieu of planting pursuant to OCMC 12.08.035, if site or other constraints prevent meeting the required total number of tree plantings.

Applicant's Response:
The project fronts Fir Street. There are two existing street trees at the western portion of this frontage installed with prior development that are proposed to remain. Through the proposed development, the applicant is proposing to retain these two existing street trees and install five additional street trees in areas of improvement to comply with the applicable development standards. There is a Landscape Plan included in the plan set that indicates existing street trees and proposed street trees.

B. The following clearance distances shall be maintained when planting trees:
1. Fifteen feet from streetlights;
2. Five feet from fire hydrants;
3. Twenty feet from intersections;
4. Five feet from all public utilities (i.e. sewer, storm and water lines, utility meters, etc.);

Applicant's Response:
There is an existing public street light centrally located along the site's Fir Street frontage, as well as existing water, sanitary, and fire utility services. The proposed street tree spacing is at least fifteen feet from the streetlight and five feet from the existing utility services. There is no public intersection within the proximity of these clearances.

C. All street trees planted in conjunction with development shall be a minimum of two inches in caliper at six inches above the root crown and installed to city specifications. Larger caliper size trees may be approved if recommended by a certified arborist or registered landscape architect.

Applicant's Response:
As shown on the Landscape Plan, the street trees proposed are minimum 2-inches in caliper.

D. All established trees shall be pruned tight to the trunk to a height that provides adequate clearance for street cleaning equipment and ensures ADA complaint clearance for pedestrians.

Applicant's Response:
The applicant acknowledges their responsibility for maintaining the trees to the appropriate clearance standards for street cleaning and pedestrian/ADA compliance.

E. All trees planted within the right-of-way shall be planted with root barriers at least eighteen inches in depth adjacent to the sidewalk and curb to ensure proper root growth and reduce potential damage to sidewalks, curbs and gutters.

Applicant's Response:
The applicant will comply with root barrier installation adjacent to the public sidewalk in the areas of new street tree installation or sidewalk replacement.

F. All trees planted beneath powerlines shall be selected based on what is appropriate for the location. In addition, the tree species shall be approved by the associated franchise powerline utility company.

Applicant's Response:
As shown on the Landscape Plan, the street trees proposed are suitable for their location within the width of planting area and beneath the existing overhead utility lines.

G. Tree species, spacing and selection for stormwater facilities in the public right-of-way and in storm water facilities shall conform to requirements of OCMC 13.12 and the adopted Stormwater and Grading Design Standards and be approved by the City Engineer.

Applicant's Response:
There are no public stormwater management facilities proposed with this development.

H. Any public or street trees planted within the Natural Resource Overlay District shall conform to the applicable requirements of OCMC 17.49 - Natural Resources Overlay District (NROD).

Applicant's Response:
This project and proposal does not include work within the Natural Resources Overlay District (NROD).

12.08.025 - General tree maintenance.

Abutting property owners shall be responsible for the maintenance and replacement of street trees and planting strips. Topping of trees is prohibited, unless under recommendation of a certified arborist, or other qualified professional. Trees shall be trimmed appropriately. Maintenance shall include watering during dry periods, trimming of established trees to remove dead branches and dangerous limbs and to maintain a minimum seven-foot clearance above all sidewalks, eight-foot clearance in clear vision areas

pursuant to OCMC 10.32, and ten-foot clearance above the street. Planter strips shall be kept clear of weeds, obstructing vegetation and trash.

Applicant's Response:
The applicant acknowledges that they are responsible for maintaining the street trees and planting strips.

12.08.035 - Tree removal and replacement.

Existing street trees, trees in the right-of-way, and trees on public property shall be retained and protected during development unless removal is specified as part of a land use approval or in conjunction with a public capital improvement project, in accordance with OCMC 17.41. Tree removal shall be mitigated by the following:

A. A diseased or hazardous street tree, as determined by a registered arborist and approved by the City, may be removed, if replaced with one new tree for each diseased or hazardous tree. Hazardous trees which have raised the adjacent sidewalk in a manner which does not comply with the Americans with Disabilities Act may be removed and replaced without approval of an arborist.

B. A non-diseased, non-hazardous street tree that is removed shall be replaced in accordance with the Table 12.08.035. All replaced street trees shall have a minimum 1.5-inch caliper trunk measured six inches above the root crown.

Table 12.08.035

Replacement Schedule for Trees Determined to be Dead, Diseased or Hazardous by a Certified Arborist		*Replacement Schedule for Trees Not Determined to be Dead, Diseased or Hazardous by a Certified Arborist*	
Diameter of tree to be Removed (Inches of diameter at 4-ft height)	*Number of Replacement Trees to be Planted*	*Diameter of tree to be Removed (Inches of diameter at 4-ft height)*	*Number of Replacement Trees to be Planted*
Any Diameter	*1 Tree*	*Less than 6"*	*1 Tree*
		6" to 12"	*2 Trees*
		13" to 18"	*3 Trees*
		19" to 24"	*4 Trees*
		25" to 30"	*5 Trees*
		31" and over	*8 Trees*

C. For the purposes of this chapter, removed trees shall be replaced by trees within the right-of-way abutting the frontage subject to the clearance distances required under OCMC 12.08.015(B). If a sufficient location to replant tree(s) is not available, the Community Development Director may allow:

1. Off-site installation of replacement trees within the right-of-way or on public property;

2. Planting of replacement trees or designation of existing trees on the abutting property within ten feet of the right-of-way as street trees. Designated street trees shall be a minimum of two inches in caliper and shall comply with the requirements in section B. In order to assure protection and replacement of the trees on private property, a covenant shall be recorded identifying the tree(s) as subject to the protections and replacement requirements in this chapter; or

3. *If sufficient space to replant tree(s) is not available, the Community Development Director may allow a fee in-lieu of planting the tree(s) to be placed into a City fund dedicated to obtaining trees, planting trees and/or tree education in Oregon City.*

D. Trees that are listed as invasive or nuisance species as defined in OCMC 17.04.605 may be removed without replacement.

Applicant's Response:
The applicant proposes to remove one existing street tree which is planted too close to the existing street light. The applicant is proposing five new street trees to satisfy Oregon City street tree standards along the property's frontage.

OCMC | NARRATIVE

Chapter 13.12 Stormwater Management

13.12.050 - Applicability and exemptions.
This chapter establishes performance standards for stormwater conveyance, quantity and quality. Additional performance standards for erosion prevention and sediment control are established in OCMC 17.47.
A. Stormwater Conveyance. The stormwater conveyance requirements of this chapter shall apply to all stormwater systems constructed with any development activity, except as follows:
1. The conveyance facilities are located entirely on one privately owned parcel;
2. The conveyance facilities are privately maintained; and
3. The conveyance facilities receive no stormwater runoff from outside the parcel's property limits.
Those facilities exempted from the stormwater conveyance requirements by the above subsection will remain subject to the requirements of the Oregon Uniform Plumbing Code. Those exempted facilities shall be reviewed by the Building Official.

Applicant's Response:
A portion of the stormwater conveyance system is located within an easement and receives stormwater from outside the parcel's property limits; therefore, this section applies.

B. Water Quality and Flow Control. The water quality and flow control requirements of this chapter shall apply to the following proposed uses or developments, unless exempted under subsection C:
1. Activities located wholly or partially within water quality resource areas pursuant to OCMC 17.49 that will result in the creation of more than five hundred square feet of impervious surface within the NROD or will disturb more than one thousand square feet of existing impervious surface within the NROD as part of a commercial or industrial redevelopment project. These square footage measurements will be considered cumulative for any given five-year period; or
2. Activities that create or replace more than five thousand square feet of impervious surface, cumulated over any given five-year period.

Applicant's Response:
The proposed project will create/disturb over 5,000 sf of impervious area, therefore Section 13.12.050.B. applies to this development.

C. Exemptions. The following exemptions to subsection B of this section apply:
1. An exemption to the flow control requirements of this chapter will be granted when the development site discharges to the Willamette River, Clackamas River or Abernethy Creek; and either lies within the one hundred-year floodplain or is up to ten feet above the design flood elevation as defined in OCMC 17.42, provided that the following conditions are met:

a. The project site is drained by a conveyance system that is comprised entirely of manmade elements (e.g. pipes, ditches, culverts outfalls, outfall protection, etc.) and extends to the ordinary high water line of the exempt receiving water; and
b. The conveyance system between the project site and the exempt receiving water has sufficient hydraulic capacity and erosion stabilization measures to convey discharges from the proposed conditions of the project site and the existing conditions from non-project areas from which runoff is collected.
2. Projects in the following categories are generally exempt from the water quality and flow control requirements:
a. Stream enhancement or restoration projects approved by the City.
b. Farming practices as defined by ORS 30.960 and farm use as defined in ORS 214.000; except that buildings associated with farm practices and farm use are subject to the requirements of this chapter.
c. Actions by a public utility or any other governmental agency to remove or alleviate an emergency condition.
d. Road and parking area preservation/maintenance projects such as pothole and square cut patching, surface sealing, replacing or overlaying of existing asphalt or concrete pavement, provided the preservation/maintenance activity does not expand the existing area of impervious coverage above the thresholds in subsection B of this section.
e. Pedestrian and bicycle improvements (sidewalks, trails, pathways, and bicycle paths/lands) where no other impervious surfaces are created or replaced, built to direct stormwater runoff to adjacent vegetated areas.
f. Underground utility projects that replace the ground surface with in-kind material or materials with similar runoff characteristics.
g. Maintenance or repair of existing utilities.

Applicant's Response:
The project does not qualify for or seek an exemption to stormwater management requirements.

D. Uses Requiring Additional Management Practices. In addition to any other applicable requirements of this chapter, the following uses are subject to additional management practices, as defined in the Public Works Stormwater and Grading Design Standards:
1. Bulk petroleum storage facilities;
2. Above ground storage of liquid materials;
3. Solid waste storage areas, containers, and trash compactors for commercial, industrial, or multi-family uses;
4. Exterior storage of bulk construction materials;
5. Material transfer areas and loading docks;
6. Equipment and/or vehicle washing facilities;
7. Development on land with suspected or known contamination;
8. Covered vehicle parking for commercial or industrial uses;
9. Industrial or commercial uses locating in high traffic areas, defined as average daily count trip of two thousand five hundred or more trips per day; and
10. Land uses subject to DEQ 1200-Z Industrial Stormwater Permit Requirements.

Applicant's Response:
The project contains existing fueling and petroleum storage areas already permitted and monitored by DEQ that are proposed to remain.

13.12.060 - Abrogation and greater restrictions.

Where the provisions of this chapter are less restrictive or conflict with comparable provisions of other portions of this code, regional, state or federal law, the provisions that are more restrictive shall govern. Where this chapter imposes restrictions that are more stringent than regional, state or federal law, the provisions of this chapter shall govern. However, nothing in this chapter shall relieve any party from the obligation to comply with any applicable federal, state or local regulations or permit requirements. Compliance with this chapter and the minimum requirements, minimum standards, and design procedures as set forth in the City adopted Public Works Stormwater and Grading Design Standards does not relieve the designer, owner, or developer of the responsibility to apply conservative and sound professional judgment to protect the health, safety and welfare of the public. It is not the intent of this chapter to make the City a guarantor or protector of public or private property in regard to land development activity.

Applicant's Response:
The applicant acknowledges and understands the design standards and procedures set forth in the City adopted Public Works Stormwater and grading Design Standards does not receive the designer, owner, or developer of the responsibility to apply conservative and sound professional judgement to protect the health, safety and welfare of the public.

13.12.080 - Submittal requirements.
A. Applications subject to stormwater conveyance, water quality, and/or flow control requirements of this chapter shall prepare engineered drainage plans, drainage reports, and design flow calculation reports in compliance with the submittal requirements of the Public Works Stormwater and Grading Design Standards.
B. Each project site, which may be composed of one or more contiguous parcels of land, shall have a separate valid city approved plan and report before proceeding with construction.

Applicant's Response:
The subject development is a single parcel of land and provides engineered drainage plans, report and flow calculations in accordance with the Stormwater and Grading Design Standards (July 2019).

13.12.090 - Approval criteria for engineered drainage plans and drainage report.
An engineered drainage plan and/or drainage report shall be approved only upon making the following findings:
A. The plan and report demonstrate how the proposed development and stormwater facilities will accomplish the purpose statements of this chapter.
B. The plan and report meet the requirements of the Public Works Stormwater and Grading Design Standards adopted by resolution under OCMC 13.12.020.
C. The storm drainage design within the proposed development includes provisions to adequately control runoff from all public and private streets and roof, footing, and area drains and ensures future extension of the current drainage system.
D. Streambank erosion protection is provided where stormwater, directly or indirectly, discharges to open channels or streams.
E. Specific operation and maintenance measures are proposed that ensure that the proposed stormwater quantity control facilities will be properly operated and maintained.

Applicant's Response:
The Preliminary Stormwater Drainage Report details how this development will adhere to the requirements of the Stormwater and Grading Design Standards (July 2019). The report includes the methodology for the treatment, reduction, and flow control of stormwater for the site.

13.12.100 - Alternative materials, alternative design and methods of construction.
The provisions of this chapter are not intended to prevent the use of any material, alternate design or method of construction not specifically prescribed by this chapter or the Public Works Stormwater and Grading Design Standards, provided any alternate has been approved and its use authorized by the City Engineer. The City Engineer may approve any such alternate, provided that the City Engineer finds that the proposed design is satisfactory and complies with the intent of this chapter and that the material, method, or work offered is, for the purpose intended, at least the equivalent of that prescribed by this chapter in effectiveness, suitability, strength, durability and safety. The City Engineer shall require that sufficient evidence or proof be submitted to substantiate any claims that may be made regarding its use. The details of any action granting approval of an alternate shall be recorded and entered in the City files.

Applicant's Response:
This development is not proposing alternative materials, design or methods of construction as related to the site's stormwater management system.

13.12.110 - Transfer of engineering responsibility.
Project drainage plans shall always have a project engineer. If the project engineer is changed during the course of the work, the City shall be notified in writing and the work shall be stopped until the replacement engineer has agreed to accept the responsibilities of the project engineer. The new project engineer shall provide written notice of accepting project responsibility to the City within seventy-two hours of accepting the position as project engineer.

Applicant's Response:
The applicant acknowledges that they are responsible for retaining the project engineer and notification of any changes.

13.12.120 - Standard construction specifications.
The workmanship and materials shall be in accordance with the current edition of the "Standard Specifications for Public Works Construction," as prepared by the Oregon Chapter of American Public Works Association (APWA) and as modified and adopted by the City, in effect at the time of application. The exception to this requirement is where this chapter and the Public Works Stormwater and Grading Design Standards provide other design details, in which case the requirements of this chapter and the Public Works Stormwater and Grading Design Standards shall be complied with.

Applicant's Response:
The project's private stormwater management facilities will comply with the Public Works Stormwater and Grading Design Standards (July 2019).

13.12.140 - Maintenance of public stormwater facilities.
A. A stormwater facility that receives stormwater runoff from a public right-of-way shall be a public facility. Upon expiration of the warranty period and acceptance by the City as described below, the City shall be responsible for maintenance of those public stormwater facilities. Access for maintenance of the stormwater facilities shall be provided to the City through the granting of a stormwater easement or other means acceptable to the City.

Applicant's Response:
This project and property does not contain any public stormwater management facilities.

B. Responsibility for maintenance of stormwater facilities including all landscaping, irrigation systems, structures and appurtenances shall remain with the property owner/developer for two years (known as the warranty period). The owner/developer shall provide the City a separate two-year landscaping maintenance surety bond for one hundred ten percent of the landscaping cost. Transfer of maintenance of stormwater conveyance systems shall occur when the City accepts the stormwater conveyance system.

Applicant's Response:
The applicant acknowledges that they are responsible for maintaining the private stormwater management facilities including landscaping, irrigation, and structures, and will provide the appropriate bonding requirements.

C. The City will perform an inspection of the development's entire publicly maintained stormwater system approximately forty-five days before the two-year warranty period expires. The stormwater system shall be found to be in a clean, functional condition by the City engineer before acceptance of maintenance responsibility by the City.

Applicant's Response:
The project is not constructing or modifying any publicly maintained stormwater systems.

13.12.145 - Maintenance of private stormwater facilities.
A. An applicant shall submit an operation and maintenance plan for each proposed stormwater facilities, unless exempted in the Public Works Stormwater and Grading Design Standards. The information in the operation and maintenance plan shall satisfy the requirements of the Public Works Stormwater and Grading Design Standards.

Applicant's Response:
A proposed operation and maintenance plan is included in the preliminary stormwater management report for the private stormwater facilities per the Public Works Stormwater and Grading Design Standards (July 2019).

B. Private owners are required to inspect and maintain stormwater facilities on their property in accordance with an approved operation and maintenance plan. A maintenance log is required to document facility inspections and specific maintenance activities. The log shall be available to City inspection staff upon request.

Applicant's Response:
The applicant acknowledges that they are responsible for maintaining and documenting the private stormwater management facilities.

C. Failure to operate or maintain a stormwater facility according to the operation and maintenance plan may result in an enforcement action under Section 13.12.150.

Applicant's Response:
The applicant acknowledges that they are responsible for maintaining and documenting the private stormwater management facilities.

13.12.150 - Penalties and enforcement.

A. The City is authorized to make inspections and take such actions as required to enforce the provisions of this chapter. The City has the authority to enter onto land for the purpose of inspecting site development activities or resulting improvements. City staff will make an effort to contact the property owner before entering onto that property.
B. If the City Engineer determines a site has any unpermitted or illegal facilities placed, constructed or installed on the site, then the City Engineer shall notify the owner in writing directing the owner to submit a written plan (with construction drawings completed by a professional engineer, if otherwise required by this chapter) within ten calendar days. This plan (and drawings, if required) shall depict the restoration or stabilization of the site or correct the work that has adversely impacted adjacent or downstream property owners. The City Engineer shall review the plan (and drawings, if required) for compliance with City standards and issue comments for correction, if necessary, or issue an approval to the owner. The City shall establish a fee by resolution for such review, with all costs borne by the owner. If the required corrective work constitutes a grading permit, then the City shall collect the appropriate grading permit fee.
C. Any person, firm, corporation or entity violating any of the provisions of this chapter, whether they be the property owner, the applicant, the contractor or any other person acting with or without the authorization of the property owner or applicant, shall be subject to the code enforcement procedures of OCMC 1.16, 1.20 and 1.24.

Applicant's Response:
The applicant acknowledges that the City has authorization to enforce provisions of Chapter 13.12. No illegal or unpermitted facilities are proposed with this project.

13.12.160 - Hazardous conditions.
A. Determination and Notification. If the City Engineer determines that any excavation, embankment, erosion/sedimentation control or drainage facility is a safety hazard; endangers property; or adversely affects the safety, use or stability of a public way, water quality resource areas (pursuant to OCMC 17.49) or drainage course, the owner(s) of the subject property and/or the person or agent in control of the property shall be required to repair or eliminate the hazard in conformance with the requirements of this chapter and the Public Works Stormwater and Grading Design Standards. At the time that the City Engineer makes the determination that a hazardous condition exists, the property owner and/or person or agent in control of the property will be notified in writing that the hazard exists.
B. Order to Correct. The City Engineer will order the specific work to be undertaken or will order that an engineering design be submitted for review and approval by the City Engineer, and will specify the time periods within which the hazardous conditions be repaired or eliminated. In the event that the owner and/or the person or agent in control of the property fails to comply with this order, that person shall be subject to the code enforcement procedures of OCMC 1.16, 1.20, and 1.24.

Applicant's Response:
The applicant acknowledges that any hazardous conditions will be remedied by the Owner in conformance with the Public Works Stormwater and Grading Design Standards

13.12.170 - Permits from other jurisdictions.
A. The Oregon State Department of Environmental Quality (DEQ) currently issues NPDES 1200-C permits for projects that cover areas of one acre or greater. No permit shall be issued for projects of this size (or any other size as modified by DEQ) without a copy of said DEQ permit being on file with Oregon City. DEQ is responsible for policing its own permits; however, if City personnel observe conditions that are believed to be in violation of any such permit, and cannot get corrections made, the City will bring such conditions to the attention of the appropriate DEQ representatives.

Applicant's Response:
The applicant acknowledges that since disturbance exceeds one acre, a DEQ 1200-C permit will be obtained directly from DEQ and provided to City staff as reference.

B. Projects may require Oregon State Division of State Lands (DSL) and/or United States Army Corps of Engineers (USACE) permits. If such permits are required, no permission to construct will be granted until such a time as a copy of such permit is on file with the City or notice is received from those agencies that a permit is not required. DSL/USACE is responsible for enforcing its own permits; however, if City personnel observe conditions that are believed to be in violation of any such permit, and cannot get corrections made, the City will bring such conditions to the attention of the appropriate DSL/USACE representatives.

Applicant's Response:
This project does not require permitting from the Oregon State Division of State Lands (DSL) and/or United States Army Corps of Engineers (USACE).

C. Projects may require Oregon State Department of Fish and Wildlife (ODFW) permits. When ODFW permits are required, no work will be authorized until the receipt of a copy of the ODFW permit. ODFW is responsible for policing its own permits; however, if City personnel observe conditions that are believed to be in violation of any such permit, and cannot get corrections made, the City will bring such conditions to the attention of the appropriate ODFW representatives.

Applicant's Response:
This project does not require permitting from the Oregon State Department of Fish and Wildlife (ODFW).

OCMC | NARRATIVE

Chapter 15.48 Grading, Filling and Excavating

15.48.030 Applicability—Grading permit required.
A. A city-issued grading permit shall be required before the commencement of any of the following filling or grading activities:
1. Grading activities in excess of ten cubic yards of earth;
2. Grading activities which may result in the diversion of existing drainage courses, both natural and man-made, from their natural point of entry or exit from the grading site;
3. Grading and paving activities resulting in the creation of impervious surfaces greater than two thousand square feet or more in area;
4. Any excavation beyond the limits of a basement or footing excavation, having an unsupported soil height greater than five feet after the completion of such a structure; or
5. Grading activities involving the clearing or disturbance of one-half acres (twenty-one thousand seven hundred eighty square feet) or more of land.

Applicant's Response:
The proposed project will create grading activities that exceed ten cubic yards of earth, alters man-made drainage courses on-site, results in the creation of impervious surface greater than two-thousand square feet, and disturbs more than one-half acres of land. Therefore, a Grading permit is required and will be applied for during permitting.

15.48.090 Submittal requirements.
An engineered grading plan or an abbreviated grading plan shall be prepared in compliance with the submittal requirements of the Public Works Stormwater and Grading Design Standards whenever a city approved grading permit is required. In addition, a geotechnical engineering report and/or residential lot grading plan may be required pursuant to the criteria listed below.
A. Abbreviated Grading Plan. The city shall allow the applicant to submit an abbreviated grading plan in compliance with the submittal requirements of the Public Works Stormwater and Grading Design Standards if the following criteria are met:
1. No portion of the proposed site is within the flood management area overlay district pursuant to Chapter 17.42, the unstable soils and hillside constraints overlay district pursuant to Chapter 17.44, or a water quality resource area pursuant to Chapter 17.49; and
2. The proposed filling or grading activity does not involve more than fifty cubic yards of earth.
B. Engineered Grading Plan. The city shall require an engineered grading plan in compliance with the submittal requirements of the Public Works Stormwater and Grading Design Standards to be prepared by a professional engineer if the proposed activities do not qualify for abbreviated grading plan.
C. Geotechnical Engineering Report. The city shall require a geotechnical engineering report in compliance with the minimum report requirements of the Public Works Stormwater and Grading Design

Standards to be prepared by a professional engineer who specializes in geotechnical work when any of the following site conditions may exist in the development area:
1. When any publicly maintained facility (structure, street, pond, utility, park, etc.) will be supported by any engineered fill;
2. When an embankment for a stormwater pond is created by the placement of fill;
3. When, by excavation, the soils remaining in place are greater than three feet high and less than twenty feet wide.
D .Residential Lot Grading Plan. The city shall require a residential lot grading plan in compliance with the minimum report requirements of the Public Works Stormwater and Grading Design Standards to be prepared by a professional engineer for all land divisions creating new residential building lots or where a public improvement project is required to provide access to an existing residential lot.

Applicant's Response:
The project has included an engineered grading plan and geotechnical engineering report in compliance with the submittal requirements of the Public Works Stormwater and Grading Design Standards and prepared by a professional engineer with this land use submittal. A Grading permit meeting these requirements will be applied for during permitting.

Chapter 16.12 Minimum Public Improvements and Design Standards for Development

16.12.011 - Applicability.

A. Compliance with this chapter is required for all development including land divisions, site plan and design review, master plan, detailed development plan and conditional use applications and all public improvements. Minor Site Plan and Design Review applications shall not be subject to this chapter unless improvements are proposed within the right-of-way, or as otherwise provided in this chapter.

B. Compliance with this chapter is also required for new construction or additions which exceed fifty percent of the existing square footage of all 3-4 plexes, single and two-family dwellings living space. Garages, carports, sheds, and porches may not be included in the calculation if these spaces are not living spaces. Accessory dwelling units are not subject to compliance with this chapter. All applicable 3-4 plexes, single and two -family dwellings shall provide any necessary dedications, easements or agreements as identified in the transportation system plan and this chapter, subject to constitutional limitations. In addition, the street frontage shall be improved to include the following priorities for improvements:

1. Improve street pavement, construct curbs, gutters, sidewalks and planter strips; and

2. Plant street trees.

The cost of compliance with the standards identified in 16.12.011.B.1 and 16.12.011.B.2 is calculated based on the square footage valuation from the State of Oregon Building Codes Division and limited to ten percent of the total construction costs. The value of the alterations and improvements is based on the total construction costs for a complete project rather than costs of various project component parts subject to individual building permits. The entire proposed construction project cost includes engineering and consulting fees and construction costs. It does not include permit fees, recording fees, or any work associated with drafting or recording dedications or easements.

Applicant's Response:

This project is a minor site plan review and therefore is not subject to the requirements of Chapter 16.12, except 12.12.035 for the closing of the existing center driveway and reconstruction of the curb and sidewalk.

16.12.012 - Jurisdiction and management of the public rights-of-way.

The City has jurisdiction and exercises regulatory management over all public rights-of-way as defined and outlined within 12.04 of the Oregon City Municipal Code.

Applicant's Response:

The applicant acknowledges that the City has jurisdiction and exercises regulatory management over all public rights-of-way.

16.12.013 - Modifications.
The applicant may request and the review body may consider modification of the standards in this chapter resulting from constitutional limitations restricting the City's ability to require the dedication of property or for any other reason, based upon the criteria listed below and other criteria identified in the standard to be modified. All modifications shall be processed through a Type II Land Use application and may require additional evidence from a transportation engineer or others to verify compliance. Compliance with the following criteria is required:

Applicant's Response:
The proposed development does not include modifications to OCMC 16.12.

A. The modification meets the intent of the standard;

Applicant's Response:
The proposed development does not include modifications to OCMC 16.12.

B. The modification provides safe and efficient movement of pedestrians, motor vehicles, bicyclists and freight;

Applicant's Response:
The proposed development does not include modifications to OCMC 16.12.

C. The modification is consistent with an adopted transportation or utility plan; and

Applicant's Response:
The proposed development does not include modifications to OCMC 16.12.

D. The modification is complementary with a surrounding street design; or, in the alternative;

Applicant's Response:
The proposed development does not include modifications to OCMC 16.12.

E. If a modification is requested for constitutional reasons, the applicant shall demonstrate the constitutional provision or provisions to be avoided by the modification and propose a modification that complies with the state or federal constitution. The City shall be under no obligation to grant a modification in excess of that which is necessary to meet its constitutional obligations.

Applicant's Response:
The proposed development does not include modifications to OCMC 16.12.

16.12.014 - Administrative provisions.
An applicant shall submit the following items to the City and complete the following tasks prior to proceeding with construction of proposed development plans. These items include the following:

A. Pre-Design Meeting;
B. Final Engineering Plans, Stamped and Signed by an Oregon Licensed Professional Engineer;
C. Stormwater Report, Stamped and Signed by an Oregon Licensed Professional Engineer;
D. Geotechnical Report, Stamped and Signed by an Oregon Licensed Professional Engineer (if applicable);
E. Engineer's Preliminary and Final Cost Estimates (also may be known as engineer's opinion of probable construction cost);
F. Plan Check and Inspection Fees (as set by City resolution);
G. Certificate of Liability Insurance for city funded public projects contracted by the City (not less than one million dollars single incident and two million dollars aggregate);
H. Preconstruction Meeting Notes;
I. Financial Guarantee(s) per OCMC 17.50.140;
J. Applicable Approvals/Permits from other agencies or entities;
K. Developer/Engineer Agreement for public works improvements.
An applicant shall submit the following additional items to the City and complete the following tasks prior to completing construction of proposed development plans. These items include the following:
L. Project Engineer's Certificate of Completion;
M. Stormwater Operation and Maintenance Easement (if applicable);
N. Deed of Dedication (Bargain and Sale Deed);
O. Recorded Plat and/or Easements (if applicable);
P. Recorded Non-Remonstrance Covenant Agreement;
Q. Land Division Compliance Agreement (if applicable);
R. Permanent Stabilization and/or Restoration of the impact from the development;
S. Fulfillment of all Conditions of Approval;
T. Payment of all Outstanding Fees;
U. Maintenance Guarantee(s). per OCMC 17.50.141;
V. Indemnity Agreement (if applicable);
W. Completed Punchlist;
X. As-Built Drawings;

Applicant's Response: The applicable items are provided with this land use submittal.

16.12.015 - Street design—Generally.
Development shall be required to provide existing or future connections to adjacent sites through the use of vehicular and pedestrian access easements where applicable. Development shall provide any necessary dedications, easements or agreements as identified in the Transportation System Plan, Trails Master Plan, and/or Parks and Recreation Master Plan and this chapter, subject to constitutional limitations. The location, width and grade of street shall be considered in relation to: existing and planned streets, topographical conditions, public convenience and safety for all modes of travel, existing and identified future transit routes and pedestrian/bicycle accessways, overlay districts, and the proposed use of land to be served by the streets. The street system shall assure an adequate traffic circulation system with intersection angles, grades, tangents and curves appropriate for the traffic to be carried considering the terrain. To the extent possible, proposed streets shall connect to all existing or approved stub streets that abut the development site. The arrangement of streets shall either:
A. Provide for the continuation or appropriate projection of existing principal streets in the surrounding area and on adjacent parcels or conform to a plan for the area approved or adopted by the City to meet a particular situation where topographical or other conditions make continuance or conformance to existing streets impractical;

B. Where necessary to give access to or permit a satisfactory future development of adjoining land, streets shall be extended to the boundary of the development and the resulting dead-end street (stub) may be approved with a temporary turnaround as approved by the City Engineer. Notification that the street is planned for future extension shall be posted on the stub street until the street is extended and shall inform the public that the dead-end street may be extended in the future. Access control in accordance with OCMC 16.12.017 shall be required to preserve the objectives of street extensions.
C. Adequate right-of-way and improvements to streets, pedestrian ways, bike routes and bikeways, and transit facilities shall be provided and be consistent with the City's Transportation System Plan. Consideration shall be given to the need for street widening and other improvements in the area of the proposed development impacted by traffic generated by the proposed development. This shall include, but not be limited to, improvements to the right-of-way, such as installation of lighting, signalization, turn lanes, median and parking strips, traffic islands, paving, curbs and gutters, sidewalks, bikeways, street drainage facilities and other facilities needed because of anticipated vehicular and pedestrian traffic generation.

Applicant's Response:
This project does not propose any upgrades to the street design and does not proposed right-of-way dedication, or public utility improvements, therefore this section does not apply.

16.12.016 - Street design.
All development regulated by this chapter shall provide street improvements in compliance with the standards in Table 16.12.016 depending on the street classification set forth in the Transportation System Plan and the Comprehensive Plan designation of the adjacent property, unless an alternative plan has been adopted. The table implements the adopted Transportation System Plan and illustrates the maximum design standards. These standards may be reduced with an alternative street design which may be approved based on the modification criteria in OCMC 16.12.013. The steps for reducing the street design are found in the Transportation System Plan.

Applicant's Response:
This project does not propose any site frontage upgrades to the TSP standard design section, therefore this section does not apply.

Table 16.12.016 Street Design
Table 16.12.016 Street Design. To read the table select the road classification as identified in the Transportation System Plan and the Comprehensive Plan designation of the adjacent properties to find the maximum design standards for the road cross section. If the Comprehensive Plan designation for lands on either side of the street differs, the wider right-of-way standard shall apply.

Road Classification	*Comprehensive Plan Designation*	*Right-of-Way Width*	*Pavement Width*	*Public Access*	*Sidewalk*	*Landscape Strip*	*Bike Lane*	*Street Parking*	*Travel Lanes*	*Median*

Major Arterial	*Mixed Use, Commercial or Public/Quasi Public*	*116 ft.*	*94 ft.*	*0.5 ft.*	*10.5 ft. sidewalk including 5 ft. x 5 ft. tree wells*		*6 ft.*	*8 ft.*	*(5) 12 ft. Lanes*	*6 ft.*
	Industrial	*120 ft.*	*88 ft.*	*0.5 ft.*	*5 ft.*	*10.5 ft.*	*6 ft.*	*N/A*	*(5) 14 ft. Lanes*	*6 ft.*
	Residential	*126 ft.*	*94 ft.*	*0.5 ft.*	*5 ft.*	*10.5 ft.*	*6 ft.*	*8 ft.*	*(5) 12 ft. Lanes*	*6 ft.*

Road Classification	*Comprehensive Plan Designation*	*Right-of-Way Width*	*Pavement Width*	*Public Access*	*Sidewalk*	*Landscape Strip*	*Bike Lane*	*Street Parking*	*Travel Lanes*	*Median*
Minor Arterial	*Mixed Use, Commercial or Public/Quasi Public*	*116 ft.*	*94 ft.*	*0.5 ft.*	*10.5 ft. sidewalk including 5 ft. x 5 ft. tree wells*		*6 ft.*	*8 ft.*	*(5) 12 ft. Lanes*	*6 ft.*
	Industrial	*118 ft.*	*86 ft.*	*0.5 ft.*	*5 ft.*	*10.5 ft.*	*6 ft.*	*7 ft.*	*(5) 12 ft. Lanes*	*N/A*
	Residential	*100 ft.*	*68 ft.*	*0.5 ft.*	*5 ft.*	*10.5 ft.*	*6 ft.*	*7 ft.*	*(3) 12 ft. Lanes*	*6 ft.*

Road Classification	*Comprehensive Plan Designation*	*Right-of-Way Width*	*Pavement Width*	*Public Access*	*Sidewalk*	*Landscape Strip*	*Bike Lane*	*Street Parking*	*Travel Lanes*	*Median*
Collector	*Mixed Use, Commercial or Public/Quasi Public*	*86 ft.*	*64 ft.*	*0.5 ft.*	*10.5 ft. sidewalk including 5 ft. x 5 ft. tree wells*		*6 ft.*	*8 ft.*	*(3) 12 ft. Lanes*	*N/A*
	Industrial	*88 ft.*	*62 ft.*	*0.5 ft.*	*5 ft.*	*7.5 ft.*	*6 ft.*	*7 ft.*	*(3) 12 ft. Lanes*	*N/A*
	Residential	*85 ft.*	*59 ft.*	*0.5 ft.*	*5 ft.*	*7.5 ft.*	*6 ft.*	*7 ft.*	*(3) 11 ft. Lanes*	*N/A*

Road Classification	Comprehensive Plan Designation	Right-of-Way Width	Pavement Width	Public Access	Sidewalk	Landscape Strip	Bike Lane	Street Parking	Travel Lanes	Median
Local	Mixed Use, Commercial or Public/Quasi Public	62 ft.	40 ft.	0.5 ft.	10.5 ft. sidewalk including 5 ft. x 5 ft. tree wells		N/A	8 ft.	(2) 12 ft. Lanes	N/A
	Industrial	60 ft.	38 ft.	0.5 ft.	5 ft.	5.5 ft.	(2) 19 ft. Shared Space			N/A
	Residential	54 ft.	32 ft.	0.5 ft.	5 ft.	5.5 ft.	(2) 16 ft. Shared Space			N/A

1. Pavement width includes, bike lane, street parking, travel lanes and median.
2. Public access, sidewalks, landscape strips, bike lanes and on-street parking are required on both sides of the street in all designations. The right-of-way width and pavement widths identified above include the total street section.
3. A 0.5 foot curb is included in landscape strip or sidewalk width.
4. Travel lanes may be through lanes or turn lanes.
5. The 0.5 foot public access provides access to adjacent public improvements.
6. Alleys shall have a minimum right-of-way width of twenty feet and a minimum pavement width of sixteen feet. If alleys are provided, garage access shall be provided from the alley.
7. A raised concrete median or landscape median shall be utilized for roads identified to have access restrictions.

Applicant's Response:
This project does not propose site frontage upgrades to the TSP standard design section, therefore this section does not apply.

A. Sidewalks. The applicant shall provide for sidewalks on both sides of all public streets, on any private street if so required by the decision-maker, and in any special pedestrian way within the development. Both sidewalks and curbs are to be constructed to City standards and at widths set forth above, and according to plans and specifications provided by the City Engineer. Exceptions to this requirement may be allowed in order to accommodate topography, trees or some similar site constraint. In the case of major or minor arterials, the decision-maker may approve a development without sidewalks where sidewalks are found to be dangerous or otherwise impractical to construct or are not reasonably related to the applicant's development. The decision-maker may require the applicant to provide sidewalks concurrent with the issuance of the initial building permit within the area that is the subject of the development application. Applicants for partitions may be allowed to meet this requirement by providing the City with a financial guarantee per OCMC 16.12.110.

Applicant's Response:
The project will reconstruct a section of public sidewalk where the existing center driveway is closed and provide ADA compliance upgrades as necessary, but does not propose any additional upgrades to the sidewalk, therefore this section does not apply.

B. Pedestrian and Bicycle Accessways Routes. If deemed appropriate to extend pedestrian and bicycle routes, existing or planned, the decision-maker may require the installation of separate pedestrian and bicycle facilities.

Applicant's Response:
This project does not propose extensions of pedestrian or bicycle routes, therefore this section does not apply.

C. Street Name Signs and Traffic Control Devices. The applicant shall install street signs and traffic control devices as directed by the City Engineer. Street name signs and traffic control devices shall be in conformance with all applicable city regulations and standards.

Applicant's Response:
This project does not propose modifications or installations of public street signs or traffic control devices, therefore this section does not apply.

D. Street Lights. The applicant shall install street lights which shall be served from an underground source of supply. Street lights shall be in conformance with all City regulations.

Applicant's Response:
There is an existing street light proposed to remain that is located near the center of the property's Fir Street frontage. This project does not propose any new installation or upgrades to street lighting, therefore this section does not apply.

E. Any new street proposed with a pavement width of less than thirty-two feet shall be processed through OCMC 16.12.013 and meet minimum life safety requirements, which may include fire suppression devices as determined by the Fire Marshall to assure an adequate level of fire and life safety. The modified street shall have no less than a twenty-foot wide unobstructed travel lane.

Applicant's Response:
The existing pavement width is approximately forty feet, therefore this section does not apply.

F. All development shall include vegetated planter strips that are five feet in width or larger and located between the sidewalk and curb unless otherwise approved pursuant to this chapter. All development shall utilize the vegetated planter strip for the placement of street trees or place street trees in other acceptable locations, as prescribed by OCMC 12.08. Development proposed along a collector, minor arterial, or major arterial roads may place street trees within tree wells within a wider sidewalk in lieu of a planter strip. In addition to street trees per OCMC 12.08, vegetated planter strips shall include ground cover and/or shrubs spaced four feet apart and appropriate for the location. No invasive or nuisance plant species shall be permitted.

Applicant's Response:

This project does not propose a separated sidewalk and planter strip. Two existing public street trees are maintained and five public street trees are proposed behind the sidewalk per section 12.08.

G. Vehicle and pedestrian access easements may serve in lieu of streets when approved by the decision maker and only where dedication of a street is deemed impracticable.

Applicant's Response:
This project does not propose any vehicle and pedestrian access easements, therefore this section does not apply.

H. Vehicular and pedestrian easements shall allow for public access and shall comply with all applicable pedestrian access requirements.

Applicant's Response:
This project does not propose any vehicle and pedestrian access easements, therefore this section does not apply.

16.12.017 - Street design—Access control.
A. A street which is dedicated to end at the boundary of the development or in the case of half-streets dedicated along a boundary shall have an access control granted to the City as a City controlled plat restriction for the purposes of controlling ingress and egress to the property adjacent to the end of the dedicated street. The access control restriction shall exist until such time as a public street is created, by dedication and accepted, extending the street to the adjacent property.

Applicant's Response:
This project does not propose street endings or half-streets that require access control, therefore this section does not apply.

B. The City may grant a permit for the adjoining owner to access through the access control.

Applicant's Response:
No access control or adjacent owner access is required for this project, therefore this section does not apply.

C. The plat shall contain the following access control language or similar on the face of the map at the end of each street for which access control is required: "Access Control (See plat restrictions)."

Applicant's Response:
No access control or adjacent owner access is required for this project, therefore this section does not apply.

D. Said plats shall also contain the following plat restriction note(s): "Access to (name of street or tract) from adjoining tracts (name of deed document number[s]) shall be controlled by the City of Oregon City by the recording of this plat, as shown. These access controls shall be automatically terminated upon the

acceptance of a public road dedication or the recording of a plat extending the street to adjacent property that would access through those Access Controls."

Applicant's Response:
No access control or adjacent owner access is required for this project, therefore this section does not apply.

16.12.018 - Street design—Alignment.
The centerline of streets shall be:
A. Aligned with existing streets by continuation of the centerlines; or
B. Offset from the centerline by no more than five feet, provided appropriate mitigation, in the judgment of the City Engineer, is provided to ensure that the offset intersection will not pose a safety hazard.
C. Driveways that are at least twenty-four feet wide shall align with existing or planned streets on adjacent sites.

Applicant's Response:
This project does not propose any new street alignments or new driveway alignments, therefore this section does not apply.

16.12.019 - Traffic sight obstructions.
All new streets shall comply with the Traffic Sight Obstructions in Chapter 10.32.

Applicant's Response:
This project does not propose any new public streets. Clear vision sight line requirements are provided at the two existing driveway access locations. Per 12.32.030 the clear vision area contains no vegetation or fences or other artificial obstruction exceeding three feet in height measured from the top of the curb, except that trees exceeding this height may be located in this area provided all branches and foliage are removed to a height of eight feet above the grade.

16.12.020 - Street design—Intersection angles.
Except where topography requires a lesser angle, streets shall be laid out to intersect at angles as near as possible to right angles. In no case shall the acute angles be less than eighty degrees unless there is a special intersection design. An arterial or collector street intersecting with another street shall have at least one hundred feet of tangent adjacent to the intersection unless topography requires a lesser distance. Other streets, except alleys, shall have at least fifty feet of tangent adjacent to the intersection unless topography requires a lesser distance. All street intersections shall be provided with a minimum curb return radius of twenty-five feet for local streets. Larger radii shall be required for higher street classifications as determined by the City Engineer. Additional right-of-way shall be required to accommodate curb returns and sidewalks at intersections. Ordinarily, intersections should not have more than two streets at any one point.

Applicant's Response:
This project does not propose any new public streets, therefore this section does not apply.

16.12.021 - Street design—Grades and curves.
Grades and center line radii shall conform to standards approved by the City Engineer.

Applicant's Response:
This project does not propose any new public streets, therefore this section does not apply.

16.12.022 - Street design—Development abutting arterial or collector street.
Where development abuts or contains an existing or proposed arterial or collector street, the decision maker may require: access control; screen planting or wall contained in an easement or otherwise protected by a restrictive covenant in a form acceptable to the decision maker along the rear or side property line; or such other treatment it deems necessary to adequately protect residential properties or afford separation of through and local traffic. Reverse frontage lots with suitable depth may also be considered an option for residential property that has arterial frontage. Where access for development abuts and connects for vehicular access to another jurisdiction's facility then authorization by that jurisdiction may be required.

Applicant's Response:
This project fronts Fir Street (collector) however there are no abutting residential properties or access impacts to adjacent properties. Therefore this section does not apply.

16.12.023 - Street design—Pedestrian and bicycle safety.
Where deemed necessary to ensure public safety, reduce traffic hazards and promote the welfare of pedestrians, bicyclists and residents of the subject area, the decision maker may require that local streets be so designed as to discourage their use by nonlocal automobile traffic.
The City Engineer may require that crosswalks include a large vegetated or sidewalk area which extends into the street pavement as far as practicable to provide safer pedestrian crossing opportunities. These curb extensions can increase the visibility of pedestrians and provide a shorter crosswalk distance as well as encourage motorists to drive slower. The City Engineer may approve an alternative design that achieves the same standard for constrained sites.

Applicant's Response:
This project does not propose any public street improvements or contain any public pedestrian crossings, therefore this section does not apply.

16.12.024 - Street design—Half street.
Half streets, while generally not acceptable, may be approved where essential to the development, when in conformance with all other applicable requirements, and where it will not create a safety hazard. When approving half streets, the decision maker shall first determine that it will be practical to require the dedication of the other half of the street when the adjoining property is divided or developed. Where the decision maker approves a half street, the applicant shall construct a half street with at least twenty feet of pavement width and provide signage prohibiting street parking so as to make the half street safe until such time as the other half is constructed. Whenever a half street is adjacent to property capable of being divided or developed, the other half of the street shall be provided and improved when that adjacent property divides or develops. Access control may be required to preserve the objectives of half streets.

When the remainder of an existing half-street improvement is completed it shall include the following items: dedication of required right-of-way, construction of the remaining portion of the street including pavement, curb and gutter, landscape strip, sidewalk, street trees, lighting and other improvements as required for that particular street. It shall also include at a minimum the pavement replacement to the centerline of the street. Any damage to the existing street shall be repaired in accordance with the City's "Pavement Cut Standards" or as approved by the City Engineer.

Applicant's Response:
This project does not propose any new public half-streets, therefore this section does not apply.

16.12.025 - Street design—Cul-de-sacs and dead-end streets.
The City discourages the use of cul-de-sacs and permanent dead-end streets except where construction of a through street is found by the decision maker to be impracticable due to topography or some significant physical constraint such as geologic hazards, wetland, natural or historic resource areas, pre-existing dedicated open space, pre-existing development patterns, arterial access restrictions or similar situation as determined by the decision maker. This section is not intended to preclude the use of curvilinear eyebrow widening of a street where needed.
A. When permitted, access from new cul-de-sacs and permanent dead-end streets shall be limited to a maximum of twenty-five dwelling units.

Applicant's Response:
This project does not propose any new public cul-de-sacs or dead-end streets, therefore this section does not apply.

B. Cul-de-sacs and permanent dead-end streets shall include pedestrian/bicycle accessways to meet minimum block width standards as prescribed in OCMC 16.12.030.

Applicant's Response:
This project does not propose any new public cul-de-sacs or dead-end streets, therefore this section does not apply.

C. Cul-de-sacs shall have sufficient radius to provide adequate turn-around for emergency vehicles in accordance with fire district and city adopted street standards.

Applicant's Response:
This project does not propose any new public cul-de-sacs or dead-end streets, therefore this section does not apply.

D. Permanent dead-end streets shall provide public street right-of-way/easements sufficient to provide a sufficient amount of turn-around space complete with appropriate no-parking signs or markings to accommodate waste disposal, sweepers, emergency and other long vehicles in the form of a hammerhead or other design to be approved by the decision maker.

Applicant's Response:

This project does not propose any new public cul-de-sacs or dead-end streets, therefore this section does not apply.

E. In the case of dead-end stub streets that will connect to streets on adjacent sites in the future, notification that the street is planned for future extension shall be posted on the stub street until the street is extended and shall inform the public that the dead-end street may be extended in the future. A dead-end street shall include signage or barricade meeting Manual on Uniform Traffic Control Devices (MUTCD).

Applicant's Response:
This project does not propose any new public cul-de-sacs or dead-end streets, therefore this section does not apply.

16.12.026 - Street design—Alleys.
Alleys with public access easements on private property shall be provided in the Park Place and South End concept plan areas for the following districts R-5, R-3.5, R-2, MUC-1, MUC-2 and NC zones unless other permanent provisions for private access to off-street parking and loading facilities are approved by the decision maker. All alleys intended to provide access for emergency vehicles shall be a minimum width of twenty feet. The corners of alley intersections shall have a radius of not less than ten feet and shall conform to standards approved by the City Engineer. Access easements and maintenance agreements shall be recorded on affected properties.

Applicant's Response:
This project does not propose any new public alleyways, therefore this section does not apply.

16.12.027 - Street design—Off-site street improvements.
During consideration of the preliminary plan for a development, the decision maker shall determine whether existing streets impacted by, adjacent to, or abutting the development meet the applicable design or dimensional requirements. Where such streets fail to meet these requirements, the decision-maker shall require the applicant to make proportional improvements sufficient to achieve conformance with minimum applicable design standards required to serve the proposed development.

Applicant's Response:
This project does not propose sufficient proportional impacts to the transportation system network to warrant further public street improvements beyond the existing frontage improvements, therefore this section does not apply.

16.12.028 - Street design—Transit.
Streets shall be designed and laid out in a manner that promotes pedestrian and bicycle circulation. The applicant shall coordinate with transit agencies where the application impacts transit streets as identified in OCMC 17.04.1310. Pedestrian/bicycle access ways shall be provided as necessary to minimize the travel distance to transit streets and stops and neighborhood activity centers. The decision maker may require provisions, including easements, for transit facilities along transit streets where a need for bus stops, bus pullouts or other transit facilities within or adjacent to the development has been identified.

Applicant's Response:
This project does not propose any new streets or transit connections, therefore this section does not apply.

16.12.029 - Excavations—Restoration of pavement.
Whenever any excavation shall have been made in any pavement or other street improvement on any street or alley in the City for any purpose whatsoever under the permit granted by the engineer, it shall be the duty of the person making the excavation to restore the pavement in accordance with the City of Oregon City Public Works Pavement Cut Standards in effect at the time the permit is granted. The City Commission may adopt and modify the City of Oregon City Public Works Pavement Cut Standards by resolution as necessary to implement the requirements of this chapter.

Applicant's Response:
The applicant acknowledges that all public pavement restoration shall be per City of Oregon City Public Works Pavement Cut Standards.

16.12.030 - Blocks—Width.
The width of blocks shall ordinarily be sufficient to allow for two tiers of lots with depths consistent with the type of land use proposed. The length, width and shape of blocks shall take into account the need for adequate building site size, convenient motor vehicle, pedestrian, bicycle and transit access, control of traffic circulation, and limitations imposed by topography and other natural features.
All new streets shall be designed as local streets unless otherwise designated as arterials and collectors in the current adopted Transportation System Plan. The maximum block spacing between streets is 530 feet and the minimum block spacing between streets is 150 feet as measured between the right-of-way centerlines except in zones GI, CI, MUE, I, and WFDD where determining the appropriate street spacing will be determined by the City Engineer. If the maximum block size is exceeded, pedestrian accessways shall be provided every 330 feet. The spacing standards within this section do not apply to alleys.

Applicant's Response:
This project does not propose any new blocks or streets, therefore this section does not apply.

16.12.031 - Street design—Street names.
Except for extensions of existing streets, no street name shall be used which will duplicate or be confused with the name of an existing street. Street names shall conform to the established standards in the City and shall be subject to the approval of the City.

Applicant's Response:
This project does not propose any new streets or street names, therefore this section does not apply.

16.12.032 – Public off-street pedestrian and bicycle accessways.
Pedestrian/bicycle accessways are intended to provide direct, safe and convenient connections between residential areas, retail and office areas, institutional facilities, industrial parks, transit streets, neighborhood activity centers, rights-of-way, and pedestrian/bicycle accessways which minimize out-of-direction travel, and transit-orientated developments where public street connections for automobiles,

bicycles and pedestrians are unavailable. Pedestrian/bicycle accessways are appropriate in areas where public street options are unavailable, impractical or inappropriate. Pedestrian and bicycle accessways are required through private property or as right-of-way connecting development to the right-of-way at intervals not exceeding 330 feet of frontage; or where the lack of street continuity creates inconvenient or out of direction travel patterns for local pedestrian or bicycle trips.

Applicant's Response:
This project fronts only a single segment of right-of-way (Fir Street) and therefore cannot connect public rights-of-way to each other. The project does not propose any pedestrian or bicycle access ways, therefore this section does not apply.

A. Entry points shall align with pedestrian crossing points along adjacent streets and with adjacent street intersections.

Applicant's Response:
This project does not contain existing pedestrian crossing points (no legal crossings) or propose any new pedestrian crossing points, therefore this section does not apply.

B. Accessways shall be free of horizontal obstructions and have a nine foot six inch high vertical clearance to accommodate bicyclists. To safely accommodate both pedestrians and bicycles, accessway right-of-way widths shall be as follows:
1. Accessways shall have a fifteen- foot wide right-of-way with a seven-foot wide paved surface with a minimum four-foot planter strip on either side.
2. If an accessway also provides secondary fire access, the right-of-way width shall be at least twenty-four feet wide with a - sixteen foot paved surface between four-foot planter strips on either side.

Applicant's Response:
This project does not propose any pedestrian or bicycle accessways, therefore this section does not apply.

C. Accessways shall be direct with at least one end point of the accessway always visible from any point along the accessway. On-street parking shall be prohibited within fifteen feet of the intersection of the accessway with public streets to preserve safe sight distance and promote safety.

Applicant's Response:
This project does not propose any pedestrian or bicycle accessways, therefore this section does not apply.

D. To enhance pedestrian and bicycle safety, accessways shall be lighted with pedestrian-scale lighting. Accessway lighting shall be to a minimum level of one-half-foot-candles, a one and one-half foot-candle average, and a maximum to minimum ratio of seven-to-one and shall be oriented not to shine upon adjacent properties. Street lighting shall be provided at both entrances.

Applicant's Response:

This project does not propose any pedestrian or bicycle accessways, therefore this section does not apply.

E. Accessways shall comply with Americans with Disabilities Act (ADA).

Applicant's Response:
This project does not propose any pedestrian or bicycle accessways, therefore this section does not apply.

F. The planter strips on either side of the accessway shall be landscaped along adjacent property by installation of the following:
1. Either an evergreen hedge screen of thirty to forty-two inches high or shrubs spaced no more than four feet apart on average; and
2. Ground cover covering one hundred percent of the exposed ground. No bark mulch shall be allowed except under the canopy of shrubs and within two feet of the base of trees; and
3. A two-inch minimum caliper tree for every thirty-five -feet along the accessway. Trees may be planted on either side of the accessway, provided they are spaced no more than thirty-five feet apart; and
4. In satisfying the requirements of this section, evergreen plant materials that grow over forty-two inches in height shall be avoided. All plant materials shall be selected from the Oregon City Native Plant List.

Applicant's Response:
This project does not propose any pedestrian or bicycle accessways, therefore this section does not apply.

G. Accessways shall be designed to prohibit unauthorized motorized traffic. Curbs and removable, lockable bollards are suggested mechanisms to achieve this.

Applicant's Response:
This project does not propose any pedestrian or bicycle accessways, therefore this section does not apply.

H. Accessway surfaces shall be paved with all-weather materials as approved by the City. Pervious materials are encouraged. Accessway surfaces shall be designed to drain stormwater runoff to the side or sides of the accessway. Minimum cross slope shall be two percent.

Applicant's Response:
This project does not propose any pedestrian or bicycle accessways, therefore this section does not apply.

I. In parks, greenways or other natural resource areas, accessways may be approved with a five-foot wide gravel path with wooden, brick or concrete edgings.

Applicant's Response:
This project does not propose any pedestrian or bicycle accessways, therefore this section does not apply.

J. The decision maker may approve an alternative accessway design due to existing site constraints through the modification process set forth in OCMC 16.12.013.

Applicant's Response:
This project does not propose any pedestrian or bicycle accessways, therefore this section does not apply.

K. Ownership, liability and maintenance of accessways. To ensure that all pedestrian/bicycle accessways will be adequately maintained over time, the City Engineer shall require one of the following:
1. Dedicate the accessways to the public as public right-of-way prior to the final approval of the development; or
2. The developer incorporates the accessway into a recorded easement or tract that specifically requires the property owner and future property owners to provide for the ownership, liability and maintenance of the accessway.

Applicant's Response:
This project does not propose any pedestrian or bicycle accessways, therefore this section does not apply.

16.12.033 - Mobility standards.

Development shall demonstrate compliance with intersection mobility standards. When evaluating the performance of the transportation system, the City of Oregon City requires all intersections, except for the facilities identified in subsection E below, to be maintained at or below the following mobility standards during the two-hour peak operating conditions. The first hour has the highest weekday traffic volumes and the second hour is the next highest hour before or after the first hour. Except as provided otherwise below, this may require the installation of mobility improvements as set forth in the Transportation System Plan (TSP) or as otherwise identified by the City Engineer.
A. For intersections within the regional center, the following mobility standards apply:
1. During the first hour, a maximum v/c ratio of 1.10 shall be maintained. For signalized intersections, this standard applies to the intersection as a whole. For unsignalized intersections, this standard applies to movements on the major street. There is no performance standard for the minor street approaches.
2. During the second hour, a maximum v/c ratio of 0.99 shall be maintained at signalized intersections. For signalized intersections, this standard applies to the intersection as a whole. For unsignalized intersections, this standard applies to movements on the major street. There is no performance standard for the minor street approaches.
3. Intersections located on the Regional Center boundary shall be considered within the Regional Center.
B. For intersections outside of the Regional Center but designated on the Arterial and Throughway Network, as defined in the Regional Transportation Plan, the following mobility standards apply:
1. During the first hour, a maximum v/c ratio of 0.99 shall be maintained. For signalized intersections, this standard applies to the intersection as a whole. For unsignalized intersections, this standard applies to movements on the major street. There is no performance standard for the minor street approaches.

2. During the second hour, a maximum v/c ratio of 0.99 shall be maintained at signalized intersections. For signalized intersections, this standard applies to the intersection as a whole. For unsignalized intersections, this standard applies to movements on the major street. There is no performance standard for the minor street approaches.
C. For intersections outside the boundaries of the Regional Center and not designated on the Arterial and Throughway Network, as defined in the Regional Transportation Plan, the following mobility standards apply:
1. For signalized intersections:
a. During the first hour, LOS "D" or better will be required for the intersection as a whole and no approach operating at worse than LOS "E" and a v/c ratio not higher than 1.0 for the sum of the critical movements.
b. During the second hour, LOS "D" or better will be required for the intersection as a whole and no approach operating at worse than LOS "E" and a v/c ratio not higher than 1.0 for the sum of the critical movements.
2. For unsignalized intersections outside of the boundaries of the Regional Center:
a. For unsignalized intersections, during the peak hour, all movements serving more than twenty vehicles shall be maintained at LOS "E" or better. LOS "F" will be tolerated at movements serving no more than twenty vehicles during the peak hour.
D. For the intersection of OR 213 & Beavercreek Road, the following mobility standards apply:
1. During the first, second & third hours, a maximum v/c ratio of 1.00 shall be maintained. Calculation of the maximum v/c ratio will be based on an average annual weekday peak hour.
E. Until the City adopts new performance measures that identify alternative mobility targets, the City shall exempt proposed development that is permitted, either conditionally, outright, or through detailed development master plan approval, from compliance with the above-referenced mobility standards for the following state-owned facilities:
I-205/OR 99E Interchange
State intersections located within or on the Regional Center Boundaries
1. In the case of conceptual development approval for a master plan that impacts the above references intersections:
a. The form of mitigation will be determined at the time of the detailed development plan review for subsequent phases utilizing the Code in place at the time the detailed development plan is submitted; and
b. Only those trips approved by a detailed development plan review are vested.
2. Development which does not comply with the mobility standards for the intersections identified in OCMC 16.12.033 shall provide for the improvements identified in the Transportation System Plan (TSP) in an effort to improve intersection mobility as necessary to offset the impact caused by development. Where required by other provisions of the Code, the applicant shall provide a traffic impact study that includes an assessment of the development's impact on the intersections identified in this exemption and shall construct the intersection improvements listed in the TSP or required by the Code.

Applicant's Response:
This project does not propose any intersections or modify any existing intersections, therefore this section does not apply.

16.12.035 - Driveways.
A. All new development and redevelopment shall meet the minimum driveway spacing standards identified in Table 16.12.035.A.

Table 16.12.035.A Minimum Driveway Spacing Standards		
Street Functional Classification	*Minimum Driveway Spacing Standards*	*Distance*
Major Arterial Streets	*Minimum distance from a street corner to a driveway for all uses other than detached single and two-family dwellings*	*175 ft.*
Minor Arterial Streets	*Minimum distance from a street corner to a driveway for all uses other than detached single and two-family dwellings*	*175 ft.*
Collector Streets	*Minimum distance from a street corner to a driveway for all uses other than detached single and two-family dwellings*	*100 ft.*
Local Streets	*Minimum distance from a street corner to a driveway for all uses other than detached single and two-family dwellings*	*25 ft.*

The distance from a street corner to a driveway is measured along the right-of-way from the edge of the intersection (on the same side of the road) right-of-way to the nearest portion of the driveway and the distance between driveways is measured at the nearest portions of the driveway at the right-of-way.

Applicant's Response:
The existing western driveway for the site, to remain, is approximately 450 feet from the nearest street corner (S Molalla Avenue).

B. Nonresidential or multi-family residential driveways that generate high traffic volumes shall be treated as intersections and shall adhere to requirements of OCMC 16.12.020.

Applicant's Response:
This project does not propose generation of sufficient traffic volumes to be considered an intersection, therefore this section does not apply.

C. One driveway may be allowed per frontage, unless otherwise restricted. In no case shall more than two driveways be allowed for any single-family attached or detached residential property, duplex, 3-4 plex, or property developed with an ADU or internal conversion with multiple frontages, unless otherwise approved by the City Engineer.

Applicant's Response:
The existing site contains three driveway access points along its 326 LF of public frontage (Fir Street). The existing center driveway is proposed to be removed, leaving the existing western and eastern driveways to remain. The two driveways to remain are approximately 235 LF apart, which exceeds the 100 foot minimum spacing standard for a collector per 16.12.035 (when measured from a street corner). The two existing driveways are proposed to remain to provide a safe and efficient circulation pattern.

D. When a property fronts multiple roads, access shall be provided from the road with the lowest classification in the Transportation System Plan whenever possible to minimize points of access to arterials and collectors. At the discretion of the City Engineer, properties fronting a collector or arterial

road may be allowed a second driveway, for the creation of a circulation pattern that eliminates reverse maneuvers for vehicles exiting a property if applied for and granted through procedures in OCMC 16.12.013. All lots proposed with a driveway and lot orientation on a collector or minor arterial shall combine driveways into one joint access per two or more lots unless the City Engineer determines that:
1. No driveway access may be allowed since the driveway(s) would cause a significant traffic safety hazard; or
2. Allowing a single driveway access per lot will not cause a significant traffic safety hazard.

Applicant's Response:
This project fronts a single public roadway (Fir Street) and two existing driveways are proposed to remain to provide a safe and efficient circulation pattern.

E. All driveway approaches shall be limited to the dimensions identified in Table 16.12.035.D.

Table 16.12.035.D Driveway Approach Size Standards			
Property Use	*Minimum Driveway Approach Width*		*Maximum Driveway Approach Width*
Single-Family Attached	*10 feet*		*12 feet*
Single-Family Detached in R-5 & R-3.5	*10 feet*		*12 feet*
Single-Family Detached in R-10, R-8, & R-6	*12 feet*		*24 feet*
Duplexes	*12 feet*		*24 feet*
3-4 Plexes	*12 feet*		*24 feet*
Multi-Family	*18 feet*		*30 feet*
Commercial, Industrial, Office, Institutional, Mixed Use, and/or Nonresidential	*One-Way 12 feet*	*Two-Way 20 feet*	*40 feet*

Driveway widths shall match the width of the driveway approach where the driveway meets sidewalk or property line but may be widened onsite (for example between the property line and the entrance to a garage). Groups of more than four parking spaces shall be so located and served by driveways so that their use will not require backing movements or other maneuvering within a street right-of-way other than an alley.

Applicant's Response:
The existing western and eastern commercial driveways to remain are approximately thirty feet wide and twenty feet wide, respectively. This is in compliance with Table 16.12.035.D.

F. The City Engineer reserves the right to require a reduction in the number and size of driveway approaches as far as practicable for any of the following purposes:
1. To provide adequate space for on-street parking;
2. To facilitate street tree planting requirements;
3. To assure pedestrian and vehicular safety by limiting vehicular access points; and

4. To assure that adequate sight distance requirements are met.
a. Where the decision maker determines any of these situations exist or may occur due to the approval of a proposed development for non-residential uses or attached or multi-family housing, a shared driveway shall be required and limited to twenty-four feet in width adjacent to the sidewalk or property line.

Applicant's Response:
This project fronts a single public roadway (Fir Street) and two existing driveways are proposed to remain to provide a safe and efficient circulation pattern. These two driveway access points provide pedestrian crossing access, adequate sight distance and exceed the minimum driveway spacing standard for a collector per 16.12.035 (when measured from a street corner).

G. For all driveways, the following standards apply.
1. Each new or redeveloped curb cut shall have an approved concrete approach or asphalted street connection where there is no concrete curb and a minimum hard surface for at least ten feet back into the property as measured from the current edge of sidewalk or street pavement to provide for controlling gravel tracking onto the public street. The hard surface may be concrete, asphalt, or other surface approved by the City Engineer.
2. Any driveway approach built within public right-of-way shall be built and permitted per City requirements as approved by the City Engineer.
3. No driveway with a slope of greater than fifteen percent shall be permitted without approval of the City Engineer.

Applicant's Response:
The existing driveways are proposed to be reconstructed to meet current ADA accessibility standards and will be reconstructed with concrete approaches. There is asphalt pavement hard surface behind the driveways. Slopes are less than fifteen percent. The driveway reconstruction will be permitted and constructed per Oregon City standards.

H. Exceptions. The City Engineer reserves the right to waive these standards or not allow driveway access, if the driveway(s) would cause a significant traffic safety hazard. Narrower driveway widths may be considered where field conditions preclude use of recommended widths. When larger vehicles and trucks will be the predominant users of a particular driveway, turning templates may be utilized to develop a driveway width that can safely and expeditiously accommodate the prevalent type of ingress and egress traffic.

Applicant's Response:
The existing driveways to be rebuilt meet City design standards.

16.12.065 - Building site—Grading.
Grading of building sites shall conform to the State of Oregon Structural Specialty Code, Title 18, any approved grading plan and any approved residential lot grading plan in accordance with the requirements of OCMC 13.12,15.48, 16.12 and the Public Works Stormwater and Grading Design Standards, and the erosion control requirements of OCMC 17.47.

Applicant's Response:
The proposed site grading complies with the Public Works Stormwater and Grading Design Standards (July 2019) and follows erosion control design per DEQ 1200-C permitting requirements and City requirements. Reference the included preliminary grading plan.

16.12.085 - Easements.
The following shall govern the location, improvement and layout of easements:
A. Utilities. Utility easements shall be required where necessary as determined by the City Engineer. Insofar as practicable, easements shall be continuous and aligned from block-to-block within the development and with adjoining subdivisions or partitions. Specific utility easements for water, sanitary or storm drainage shall be provided based on approved final engineering plans.

Applicant's Response:
This project does not propose any new easements, therefore this section does not apply. Existing easements for stormwater drainage systems are already in place and are not modified.

B. Unusual Facilities. Easements for unusual facilities such as high voltage electric transmission lines, drainage channels and stormwater detention facilities shall be adequately sized for their intended purpose, including any necessary maintenance roads. These easements shall be shown to scale on the preliminary and final plats or maps. If the easement is for drainage channels, stormwater detention facilities or related purposes, the easement shall comply with the requirements of the Public Works Stormwater and Grading Design Standards.

Applicant's Response:
This project does not propose any unusual facilities, therefore this section does not apply.

C. Watercourses. Where a development is traversed or bounded by a watercourse, drainageway, channel or stream, a stormwater easement or drainage right-of-way shall be provided which conforms substantially to the line of such watercourse, drainageway, channel or stream and is of a sufficient width to allow construction, maintenance and control for the purpose as required by the responsible agency. For those subdivisions or partitions which are bounded by a stream of established recreational value, setbacks or easements may be required to prevent impacts to the water resource or to accommodate pedestrian or bicycle paths.

Applicant's Response:
This project does not contain any watercourses, drainageways, or streams, therefore this section does not apply.

D. Access. When easements are used to provide vehicular access to lots within a development, the construction standards, but not necessarily width standards, for the easement shall meet City specifications. The minimum width of the easement shall be 20 feet. The easements shall be improved and recorded by the applicant and inspected by the City Engineer. Access easements may also provide for utility placement.

Applicant's Response:

This project does not propose any access easements, therefore this section does not apply.

E. Resource Protection. Easements or other protective measures may also be required as the Community Development Director deems necessary to ensure compliance with applicable review criteria protecting any unusual significant natural feature or features of historic significance.

Applicant's Response:
This project does not contain any resource areas, therefore this section does not apply.

16.12.090 - Minimum improvements—Procedures.
In addition to other requirements, improvements installed by the applicant either as a requirement of these or other regulations, or at the applicant's option, shall conform to the requirements of this title and be designed to City specifications and standards as set out in the City's facility master plan and Public Works Stormwater and Grading Design Standards. The improvements shall be installed in accordance with the following procedure:
A. Improvement work shall not commence until construction plans have been reviewed and approved by the City Engineer and to the extent that improvements are located in County or State right-of-way, they shall be approved by the responsible authority. To the extent necessary for evaluation of the proposal, the plans may be required before approval of the preliminary plat of a subdivision or partition. Expenses incurred thereby shall be borne by the applicant and paid for prior to final plan review.
B. Improvements shall be constructed under the inspection and approval of the City Engineer. Expenses incurred thereby shall be borne by the applicant and paid prior to final approval. Where required by the City Engineer or other City decision-maker, the applicant's project engineer also shall inspect construction.
C. Erosion control or resource protection facilities or measures are required to be installed in accordance with the requirements of OCMC 17.47, 17.49 and the Public Works Erosion and Sediment Control Standards.
D. Underground utilities, waterlines, sanitary sewers and storm drains installed in streets shall be constructed prior to the surfacing of the streets. Stubs for service connections for underground utilities, such as, storm, water and sanitary sewer shall be placed beyond the ten-foot wide franchise utility easement within private property.
E. As-built construction plans and digital copies of as-built drawings shall be filed with the City Engineer upon completion of the improvements.
F. The City Engineer may regulate the hours of construction and access routes for construction equipment to minimize impacts on adjoining residences or neighborhoods.

Applicant's Response:
The applicant acknowledges the City's development improvement procedures.

16.12.095 - Minimum improvements—Public facilities and services.
The following minimum improvements shall be required of all applicants for a development, unless the decision-maker determines that any such improvement is not proportional to the impact imposed on the City's public systems and facilities:
A. Transportation System. Applicants and all subsequent lot owners shall be responsible for improving the City's planned level of service on all public streets, including alleys within the development and those portions of public streets adjacent to but only partially within development. Applicants are responsible

for designing and providing adequate vehicular, bicycle and pedestrian access to their developments and for accommodating future access to neighboring undeveloped properties that are suitably zoned for future development. Storm drainage facilities shall be installed and connected to off-site natural or man-made drainageways. Upon completion of the street improvement survey, the applicant shall reestablish and protect monuments of the type required by ORS 92.060 in monument boxes with covers at every public street intersection and all points or curvature and points of tangency of their center line, and at such other points as directed by the City Engineer.

Applicant's Response:
This project does not propose any public transportation, access, pedestrian, bicycle, or utility improvements, therefore this section does not apply.

B. Stormwater Drainage System. Applicants shall design and install drainage facilities within a development and shall connect the development's drainage system to the appropriate downstream storm drainage system as a minimum requirement for providing services to the applicant's development. The applicant shall obtain county or state approval when appropriate. Applicants are responsible for extending the appropriate storm drainage system to the development site and for providing for the connection of upgradient properties to that system. The applicant shall design the drainage facilities in accordance with City drainage master plan requirements, OCMC 13.12 and the Public Works Stormwater and Grading Design Standards.

Applicant's Response:
This project provides a stormwater management and drainage conveyance system per the City's Public Works Stormwater and Grading Design Standards (July 2019). See the included utility plan for preliminary stormwater utility connection design.

C. Sanitary Sewer System. The applicant shall design and install a sanitary sewer system to serve all lots or parcels within a development in accordance with the City's sanitary sewer design standards, and shall connect those lots or parcels to the City's sanitary sewer system, except where connection is required to the county sanitary sewer system as approved by the county. Applicants are responsible for extending the City's sanitary sewer system to the development site and through the applicant's property to allow for the future connection of neighboring undeveloped properties that are suitably zoned for future development. The applicant shall obtain all required permits and approvals from all affected jurisdictions prior to final approval and prior to commencement of construction. Design shall be approved by the City Engineer before construction begins.

Applicant's Response:
This project utilizes an existing sanitary sewer connection lateral to the City's public sanitary system. See the included utility plan for preliminary utility connection design.

D. Water System. The applicant shall design and install a water system to serve all lots or parcels within a development in accordance with the City public works water system design standards, and shall connect those lots or parcels to the City's water system. Applicants are responsible for extending the City's water system to the development site and through the applicant's property to allow for the future connection of neighboring undeveloped properties that are suitably zoned for future development.

Applicant's Response:
This project utilizes an existing water connection lateral to the City's public water system. See the included utility plan for preliminary utility connection design.

E. Street Trees. Refer to OCMC 12.08, Street Trees.

Applicant's Response:
The applicant proposes a street tree layout that meets City standards per section 12.08.

F. Bench Marks. At least one bench mark shall be located within the subdivision boundaries using datum plane specified by the City Engineer.

Applicant's Response:
This project does not propose any survey benchmarks, therefore this section does not apply.

G. Other Utilities. The applicant shall make all necessary arrangements with utility companies or other affected parties for the installation of underground lines and facilities. Existing and new electrical lines and other wires, including but not limited to communication, street lighting and cable television, shall be placed underground.

Applicant's Response:
This project does not propose modification to the existing overhead utilities including power, communications, etc. since it is a minor site plan review. All new services will be placed underground.

H. Oversizing of Facilities. All facilities and improvements shall be designed to City standards as set out in the City's facility master plan, public works design standards, or other City ordinances or regulations. Compliance with facility design standards shall be addressed during final engineering. A development may be required to modify or replace existing offsite systems if necessary to provide adequate public facilities. The City may require oversizing of facilities to meet standards in the City's facility master plan or to allow for orderly and efficient development. Where oversizing is required, the applicant may request reimbursement from the City for oversizing based on the City's reimbursement policy and funds available, or provide for recovery of costs from intervening properties as they develop.

Applicant's Response:
This project does not propose any public street facility improvements or oversizing of facilities, therefore this section does not apply.

I. Erosion Control Plan—Mitigation. The applicant shall be responsible for complying with all applicable provisions of OCMC 17.47 with regard to erosion control.

Applicant's Response:
The project will comply with all erosion control regulations through the DEQ 1200-C permit and the City's Public Works Stormwater and Grading Design Standards (July 2019).

16.12.100 - Same—Road standards and requirements.
A. The creation of a public street and the resultant separate land parcels shall be in conformance with requirements for subdivisions or partitions and the applicable street design standards of this Chapter. However, the decision-maker may approve the creation of a public street to be established by deed without full compliance with the regulations applicable to subdivisions or partitions where any of the following conditions exist:
1. The establishment of the public street is initiated by the City Commission and is declared essential for the purpose of general traffic circulation and the partitioning of land is an incidental effect rather than the primary objective of the street;
2. The tract in which the street is to be dedicated is within an isolated ownership either not over one acre or of such size and characteristics as to make it impossible to develop building sites for more than three dwelling units.

Applicant's Response:
This project does not propose any new public streets, therefore this section does not apply.

B. For any public street created pursuant to subsection A of this section, a copy of a preliminary plan and the proposed deed shall be submitted to the Community Development Director and City Engineer at least ten days prior to any public hearing scheduled for the matter. The plan, deed and any additional information the applicant may submit shall be reviewed by the decision-maker and, if not in conflict with the standards of Title 16 and Title 17, may be approved with appropriate conditions.

Applicant's Response:
This project does not propose any new public streets, therefore this section does not apply.

16.12.105 - Same—Timing requirements.
A. Prior to applying for final plat approval, the applicant shall either complete construction of all public improvements required as part of the preliminary plat approval or guarantee the construction of those improvements. Whichever option the applicant elects shall be in accordance with OCMC 17.50.140.
B. Construction. The applicant shall construct the public improvements according to approved final engineering plans and all applicable requirements of this Code, and under the supervision of the City Engineer. Under this option, the improvement shall be complete and accepted by the City Engineer prior to final plat approval.

Applicant's Response:
This project does not propose a platted development or new public streets, therefore this section does not apply.

16.12.110 -Public improvements—Financial guarantees.
To ensure construction of required public improvements, the applicant shall provide the City with a performance guarantee in accordance with OCMC 17.50.140.
After satisfactory completion of required public improvements and facilities, all public improvements not constructed by the City, shall be maintained and under warranty provided by the property owner or developer constructing the facilities until the City accepts the improvements at the end of the warranty period as prescribed in OCMC 17.50.141.

Applicant's Response:
This project does not propose any new public streets, therefore this section does not apply.

16.12.120 Waiver of Remonstrance
The review authority may require a property owner to sign a waiver of remonstrance against the formation of and participation in a local improvement district where it deems such a waiver necessary to provide needed improvements reasonably related to the impacts created by the proposed development. To ensure compliance with this chapter, the review authority may require an applicant to sign or accept a legal and enforceable covenant, contract, dedication, easement, performance guarantee, or other document, which shall be approved in form by the City Attorney.

Applicant's Response:
The applicant acknowledges it may be subject to sign a waiver of remonstrance to meet this standard and will comply.

16.12.125 - Violation—Penalty.
Any act or omission in violation of this chapter shall be deemed a nuisance. Violation of any provision of this chapter is subject to the code enforcement procedures of OCMC 1.16, 1.20 and 1.24.

Applicant's Response:
This application does not include a violation.

OCMC | NARRATIVE

Chapter 17.36 GI General Industrial District

17.36.020 - Permitted uses.

In the GI district, the following uses are permitted:

A. Manufacturing and/or fabrication;

B. Distributing, wholesaling and warehousing, excluding explosives and substances which cause an undue hazard to the public health, welfare and safety;

C. Heavy equipment service, repair, sales, rental or storage (includes but is not limited to construction equipment and machinery and farming equipment);

D. Veterinary or pet hospital, kennel;

E. Necessary dwellings for caretakers and watchmen (all other residential uses are prohibited);

F. Retail sales and services, including but not limited to eating establishments for employees (i.e. a cafe or sandwich shop) or marijuana , located in a single building or in multiple buildings that are part of the same development shall be limited to a maximum of twenty thousand square feet or five percent of the building square footage, whichever is less and the retail sales and services shall not occupy more than ten percent of the net developable portion of all contiguous industrial lands;

G. Emergency service facilities (police and fire), excluding correctional facilities;

H. Outdoor sales and storage;

I. Recycling center and solid waste facility;

J. Wrecking yards;

K. Public utilities, including sub-stations (such as buildings, plants and other structures);

L. Utilities: basic and linear facilities, such as water, sewer, power, telephone, cable, electrical and natural gas lines, not including major facilities such as sewage and water treatment plants, pump stations, water tanks, telephone exchanges and cell towers;

M. Storage facilities;

N. Transportation facilities;

O. Marijuana production, processing, wholesaling, and laboratories;

P. Mobile food units operating on a property for less than five hours in a twenty-four hour period.

Applicant's Response:

The proposed development is a permitted use within the General Industrial District. The development will be the new Public Works Department building in which they would service, repair, maintain, and store heavy equipment. In addition there will be office space to house all ADMIN and crew members.

17.36.030 - Conditional uses.

The following conditional uses are permitted in this district when authorized and in accordance with the standards contained in OCMC 17.56:

A. Any use in which more than half of the business is conducted outdoors;

B. Hospitals.

Applicant's Response:
The proposed development does not include either one of the programs stated in the conditional uses. Not applicable.

17.36.040 - Dimensional standards.
Dimensional standards in the GI district are:
A. Minimum lot area, minimum not required;

Applicant's Response:
The applicant acknowledges there are no minimum lot area required.

B. Maximum building height, three stories, not to exceed forty feet;

Applicant's Response:
The proposed development will not exceed three stories or forty feet in height.

C. Minimum required setbacks:
1. Front yard, ten feet minimum setback;

Applicant's Response:
The proposed development will have a front yard setback of approximately 80 feet, therefore, meeting the standard.

2. Interior side yard, no minimum setback;

Applicant's Response:
The applicant acknowledges there are no minimum side yard setbacks.

3. Corner side yard, ten feet minimum setback;

Applicant's Response:
The project parcel is located midblock, therefore, this standard is not applicable.

4. Rear yard, ten feet minimum setback;

Applicant's Response:
The proposed development will have a rear yard setback of approximately 56 feet, therefore, meeting the standard.

D. Buffer Zone. If a use in this zone abuts or faces a residential or commercial use, a yard of at least twenty-five feet shall be required on the side abutting or facing the adjacent residential use and

commercial uses in order to provide a buffer area, and sight obscuring landscaping thereof shall be subject to site plan review. The community development director may waive any of the foregoing requirements if he/she determines that the requirement is unnecessary in the particular case.

Applicant's Response:
The project parcel abuts commercial uses along it's north, east and west boundaries. The commercial uses vary and include a Fred Myers, Star Bright Finishes, Gleaners of Oregon City and Alpha Print and Design. A yard of at least 25 feet, chain link fencing and a landscape buffer exist along the north and west boundaries in addition to a portion to the eastern boundary. The project is to maintain the existing building footprint excluding some demolition to the street facing façade, keeping the existing buffers already in place. The applicant proposes to plant the missing landscape buffer and install vinyl sight obscuring slats in the chain link fencing along the easterly property line.

E. Outdoor storage within building or yard space other than required setbacks and such occupied yard space shall be enclosed by a sight-obscuring wall or fence of sturdy construction and uniform color or an evergreen hedge not less than six feet in height located outside the required yard, further provided that such wall or fence shall not be used for advertising purposes.

Applicant's Response:
The proposed development does not include any outdoor storage areas, therefore, this standard is not applicable.

F. Minimum required landscaping (including landscaping within a parking lot): Fifteen percent.

Applicant's Response:
The proposed development site includes two parking lot areas; A fenced yard used for OCPW fleet vehicles and equipment and limited staff parking. And an unfenced area dedicated to visitor and staff parking along the Fir Street and the southern property boundary. These two areas include landscaping areas that when combined meet the 15% landscaping requirements of OCMC 17.36.040.F.

Improvements proposed within the yard will reduce the landscape area to 8% of the overall site area. A reduction in the required landscape area is requested in addition to the following improvements proposed:

- **New plantings outside the fenced equipment yard are per OCMC standards. See Landscape and Parking Lot Landscape Exhibit.**
- **Provide a perimeter landscape buffer and/or sight obscuring slats in existing chain link fencing at equipment yard.**
- **Provide additional Stormwater facilities beyond code minimums.**

The reduction in landscape requirements within the fenced yard will increase OCPW's ability to maximize the capacity to consolidate vehicles and equipment essential to perform their daily duties.

Applicant has requested a variance to the OCMC17.36.040.F.

See the Site & Parking Lot Coverage Exhibit attached.

OCMC | NARRATIVE

Chapter 17.41 Tree Protection, Preservation, Removal and Replanting Standards

17.41.010 - Protection of trees—Intent.
The intent of this chapter is to ensure that new development is designed in a manner that preserves trees to the maximum extent practicable. As a requirement of any Type II land use application, the siting of structures, roadways and utility easements, shall provide for the protection of tree resources to the maximum extent practicable. This chapter applies to all Land Division and Site Plan and Design Review applications.
17.41.020 - Tree protection—Applicability.
1. Applications for development subject to OCMC 16.08 (Land Divisions) or OCMC 17.62 (Site Plan and Design Review) shall demonstrate compliance with these standards as part of the review proceedings for those developments. Compliance with this chapter is required from the date a land use application is filed until a land division is recorded or other development approval is final.
2. For public capital improvement projects, the City Engineer shall demonstrate compliance with these standards pursuant to a Type I process.
3. Tree canopy removal greater than twenty-five percent on areas with greater than twenty-five percent slope, unless exempted under OCMC 17.41.040, shall be subject to these standards.
4. A heritage tree or grove which has been designated pursuant to the procedures of OCMC 12.32 shall be subject to the standards of this section.
5. A tree that has been planted pursuant to this section shall remain or shall be replaced with a new tree if removed.

Applicant's Response:
The applicant understands and acknowledges the proposed development is subject to OCMC 17.62 (Site Plan and Design Review) and will be required to demonstrate compliance with tree protection standards of OCMC 17.41.

17.41.030 - Tree protection—Conflicting code provisions.
Except as otherwise specified in this section, where these standards conflict with adopted city development codes or policies, the provision which provides the greater protection for regulated trees or groves, as defined in OCMC 17.04, shall govern.

Applicant's Response:
The applicant acknowledges and understands that where conflicts between standards occur the regulation that provides the greater level of protection for trees or groves shall govern.

17.41.040 - Exemptions.
These regulations are not intended to regulate normal cutting, pruning and maintenance of trees on private property except where trees are located on lots that are undergoing development review or are otherwise protected within the Natural Resource Overlay District (NROD) of OCMC 17.49. These standards are not intended to regulate farm and forest practices as those practices are defined under ORS 30.930, for farm or forestlands. These regulations to not apply to the removal of trees that are considered invasive species. An applicant for development may claim exemption from compliance with these standards if the development site containing the regulated grove or trees was a designated farm or forest use, tree farm, Christmas tree plantation, or other approved timber use within one year prior to development application. "Forest practices" and "forestlands" as used in this subsection shall have the meaning as set out in ORS 30.930. The Community Development Director has the authority to modify or waive compliance in this case.

Applicant's Response:
The applicant acknowledges and understands that the regulations under 17.41 are not intended to regulate normal cutting, pruning and maintenance of trees on private property except where trees are located on lots that are undergoing development review or are otherwise protected within the Natural Resource Overlay District of OCMC 17.49. The applicant is not seeking exemption from compliance with these standards.

17.41.050 - Compliance options.
Applicants for review shall comply with these requirements through one or a combination of the following procedures:
A. Option 1—Mitigation. Retention and removal of trees, with subsequent mitigation by replanting pursuant to OCMC 17.41.060.
B. Option 2—Dedicated Tract. Protection of trees or groves by placement in a tract within a new subdivision or partition plat pursuant to OCMC 17.41.080; or
C. Option 3—Restrictive Covenant. Protection of trees or groves by recordation of a permanent restrictive covenant pursuant to OCMC 17.41.110; or
D. Option 4—Cash-in-lieu of planting pursuant to OCMC 17.41.120.

Applicant's Response:
The applicant elects to comply with Option 1-Mitigation for the retention and removal of trees.

17.41.060 - Tree removal and replanting—Mitigation (Option 1).
A. Applicants for development who select this option shall ensure that all healthy trees shall be preserved outside the construction area as defined in OCMC 17.04 to the extent practicable. Preserved trees are subject to Option 3 of this Chapter. Compliance with these standards shall be demonstrated in a tree mitigation plan report prepared by a certified arborist, horticulturalist or forester or other environmental professional with experience and academic credentials in forestry or arboriculture. Tree inventories for the purposes of mitigation calculations may be prepared by a licensed surveyor. At the applicant's expense, the City may require the report to be reviewed by a consulting arborist. The number of replacement trees required on a development site shall be calculated separately from, and in addition to, any public or street trees in the public right-of-way required under OCMC 12.08— Public and Street Trees, any required tree planting in parking lots, and any trees planted in pedestrian and bicycle accessways.

B. The applicant shall determine the number of trees to be mitigated on the site by counting all of the trees six-inch DBH (minimum four and one-half feet from the ground) or larger on the entire site and either:
1. Trees that are removed outside of the construction area shall be replanted with the number of trees specified in Column 1 of Table 17.41.060-1. Trees that are removed within the construction area shall be replanted with the number of replacement trees required in Column 2; or
2. Dying, diseased or hazardous trees, when the condition is verified by a certified arborist to be consistent with the definitions in OCMC 17.04, may be removed from the tree replacement calculation. Dead trees may also be removed from the calculation, with the condition of the tree verified either by the Community Development Director or by a certified arborist at the applicant's expense, when the Community Development Director cannot make a determination. To the extent that the Community Development Director determines that the dead, dying, hazardous or diseased condition of the tree is the result of intentional action, the removal of that tree shall require mitigation pursuant to Column 2 of Table 17.41.060-1.
Table 17.41.060-1
Tree Replacement Requirements

Size of tree removed (DBH)	*Column 1* *Number of trees to be planted. (If removed Outside of construction area)*	*Column 2* *Number of trees to be planted. (If removed Within the construction area)*
6 to 12"	*3*	*1*
13 to 18"	*6*	*2*
19 to 24"	*9*	*3*
25 to 30"	*12*	*4*
31 and over"	*15*	*5*

Steps for calculating the number of replacement trees:
1. Count all trees measuring six inches DBH (minimum four and one-half feet from the ground) or larger on the entire development site.
2. Designate the size (DBH) of all trees pursuant to accepted industry standards.
3. Document in a certified arborist report any trees that are currently dead, dying, diseased or hazardous.
4. Subtract the number of dead, dying, diseased or hazardous trees in step 3 from the total number of trees on the development site in step 1. The remaining number is the number of healthy trees on the site. Use this number to determine the number of replacement trees in steps 5 through 8.
5. Identify the construction area (as defined in OCMC 17.04.230).
6. Determine the number and diameter of trees to be removed within the construction area. Based on the size of each tree, use Column 2 to determine the number of replacement trees required.
7. Determine the number and diameter of trees to be removed outside of the construction area. Based on the size of each tree, use Column 1 to determine the number of replacement trees required.
8. Determine the total number of replacement trees from steps 6 and 7.

Applicant's Response:
The OCPW has procured the services of Teragan & Associates, Inc (Arboricultural Consultants) to develop a tree protection plan for the proposed development. The tree protection plan is included in

the application material and can be found in the Appendix. The tree protection plan and proposed tree removal and replanting mitigation is summarized below.

The project parcel includes a total of thirty-six trees inventoried with only eighteen of the existing trees exceeding a 6-inch caliper and therefore regulated by the City. The recommendations are to retain, protect and manage a 36-inch Douglas-fir that is good health, remove seven dead and/or dying trees, and plant a total of eleven trees resulting from the eight trees being removed as they are impacted by the proposed improvements.

A landscape plan is included in the application material indicating the final plant locations and selected plant species.

C. Planting area priority for mitigation.
Development applications which opt for removal of trees with subsequent replanting pursuant to OCMC 17.41.050.A. shall be required to mitigate for tree cutting by complying with the following priority for replanting standards below:
1. First Priority. Replanting on the development site.
2. Second Priority. Off-site replacement tree planting locations. If the Community Development Director determines that it is not practicable to plant the total number of replacement trees on-site, a suitable off-site planting location for the remainder of the trees may be approved that will reasonably satisfy the objectives of this section. Such locations may include either publicly owned or private land and shall be approved by the Community Development Director.

Applicant's Response:
All proposed planting and/or replanting is to occur on the development site, first priority. No off-site planting is proposed.

D. Replacement tree planting standards.
1. All replacement trees shall be either two-inch caliper deciduous or six-foot high conifer.
2. Replacement tree species shall be approved by a landscape architect or certified arborist or shall be found on the City's Native Plant or Street Tree lists.
3. Due to their diminishing range in the region, Oregon white oak (Quercus garryana) trees, if removed, shall be replaced by the same species.

Applicant's Response:
All proposed plantings have been specified by a registered landscape architect or are found on the Oregon City's Native Plant or Street Tree lists. All replacement trees will be two-inch caliper deciduous or a six-foot height conifer at the time of planting. The development site does not include any existing Oregon White Oak.

E. All existing tree(s) in the tract shall be protected by a permanent restrictive covenant or easement approved in form by the City.

Applicant's Response:
The applicant elects to comply with Option 1-Mitigation for the retention and removal of trees; therefore, this section is not applicable.

F. Alternative mitigation plan.
The Community Development Director may, subject to a Type II procedure, approve an alternative mitigation plan that adequately protects habitat pursuant to the standards for the Natural Resource Overlay District alternative mitigation plan in OCMC 17.49.190.

Applicant's Response:
The proposed development does not include an alternative mitigation plan nor is the development within the Natural Resource Overlay District.

17.41.080 - Tree preservation within subdivisions and partitions—Dedicated tract (Option 2).
A. An applicant for a new subdivision and partition may delineate and show the regulated trees or groves as either a separate tract or part of a larger tract that meets the requirements of subsection D. of this section. All existing tree(s) in the tract shall be protected by a permanent restrictive covenant or easement approved in form by the City.
B. The standards for land divisions subject to this section shall apply in addition to the requirements of the City land division ordinance and zoning ordinance, provided that the minimum lot area, minimum average lot width, and minimum average lot depth standards of the base zone may be superseded in order to allow for a reduction of dimensional standards pursuant to OCMC 17.41.080.F below.
C. Prior to preliminary plat approval, the regulated tree or grove area shall be shown either as a separate tract or part of a larger tract that meets the requirements of subsection D. of this section, which shall not be a part of any parcel used for construction of a dwelling. The size of the tract shall be the minimum necessary as recommended by a consulting arborist to adequately encompass the dripline of the tree, protect the critical root zone and ensure long term survival of the tree or grove.
D. Prior to final plat approval, ownership of the regulated tree or grove tract shall be identified to distinguish it from lots intended for sale. The tract may be identified as any one of the following:
1. Private open space held by the owner or a homeowner's association; or
2. For residential land divisions, private open space subject to an easement conveying stormwater and surface water management rights to the city and preventing the owner of the tract from activities and uses inconsistent with the purpose of this document; or
3. Public open space where the tract has been dedicated to the City or other governmental unit; or
4. Any other ownership proposed by the owner and approved by the Community Development Director.
E. Density transfers incentive for tree protection tracts.
1. The purpose of this section is to allow dimensional adjustments within a regulated tree protection tract to be transferred outside said tract to the remainder of the site. Density shall not be transferred beyond the boundaries of the development site.
2. Development applications for subdivisions and minor partitions that request a density transfer shall:
a. Provide a map showing the net buildable area of the tree protection tract;
b. Provide calculations justifying the requested dimensional adjustments;
c. Demonstrate that the minimum lot size requirements can be met based on an average of all lots created, including the tree protection tract created pursuant to this section;

d. Demonstrate that, with the exception of the tree protection tract, no parcels have been created which would be unbuildable in terms of minimum yard setbacks;
e. Meet all other standards of the base zone except as modified in this section.

Applicant's Response:
The proposed development does not include a new subdivision or partition; therefore, this section is not applicable.

3. The area of land contained in a tree protection tract may be excluded from the calculations for determining compliance with minimum density requirements of the zoning code.
F. Permitted modifications to dimensional standards.
1. An applicant proposing to protect trees in a dedicated tract may request, and the Community Development Director, pursuant to a Type II procedure, may grant a reduction to, the lot size, width, depth, and setbacks of the underlying zone district in approving a subdivision or partition if necessary to retain a regulated tree or grove in a tract, as long as the calculation of average lot size, including tree protection tracts, meet the minimum lot size for the zone. The applicant may choose to make the adjustments over as many lots as required. For example, the lot reduction could be spread across all the remaining lots in the proposed subdivision or partition or could be applied to only those needed to incorporate the area of the tree tract.

Applicant's Response:
The proposed development does not include a new subdivision or partition; therefore, this section is not applicable.

Table 17.41.080.A
Lot Size Reduction

ZONE	*Min. Lot Size [sq. feet]*	*Min. Lot Width*	*Min. Lot Depth*
R-10	*5,000 sq. feet*	*50'*	*65'*
R-8	*4,000 sq. feet*	*45'*	*60'*
R-6	*3,500 sq. feet*	*35'*	*55'*
R-5	*3,000 sq. feet*	*30'*	*50'*
R-3.5	*1,800 sq. feet*	*20'*	*45'*

Table 17.41.080.B
Reduced Dimensional Standards for Detached Single-Family Residential Units

Size of Reduced Lot	*Front Yard Setback*	*Rear Yard Setback*	*Side yard Setback*	*Corner Side*	*Lot Coverage*
8,000—9,999 square feet	*15 feet*	*20 feet*	*7/9 feet*	*15 feet*	*40%*

6,000—7,999 square feet	*10 feet*	*15 feet*	*5/7 feet*	*15 feet*	*40%*
4,000—5,999 square feet	*10 feet*	*15 feet*	*5/5 feet*	*10 feet*	*40%*
1,800—3,999 square feet	*5 feet*	*15 feet*	*5/5 feet*	*10 feet*	*55%*

Table 17.41.080.C
Reduced Dimensional Standards for Single-Family Attached or Two-Family Residential Units

Size of Reduced Lot	*Front Yard Setback*	*Rear Yard Setback*	*Side yard Setback*	*Corner Side*	*Lot Coverage*
3,500—7,000 square feet	*10 feet*	*15 feet*	*5/0* feet*	*10 feet*	*40%*
1,800—3,499 square feet	*5 feet*	*15 feet*	*5/0* feet*	*10 feet*	*55%*

**0 foot setback is only allowed on single-family attached units*

Applicant's Response:
The proposed development does not include new single-family attached or two-family residential units; therefore, this section is not applicable.

17.41.110 - Tree protection by restrictive covenant (Option 3).
Any regulated tree or grove which cannot be protected in a tract pursuant to Section 17.41.080 above shall be protected with a restrictive covenant in a format to be approved by the Community Development Director. Such covenant shall be recorded against the property deed and shall contain provisions to permanently protect the regulated tree or grove unless such tree or grove, as determined by a certified arborist and approved by the Community Development Director, are determined to be diseased or hazardous.
A. Permitted adjustments.
1. The Community Development Director, pursuant to a Type II procedure, may grant an adjustment to the side, front and rear yard setback standards by up to fifty percent if necessary to retain a Regulated Tree or Grove through a restrictive covenant pursuant to this section. In no case may the side yard setback be reduced to less than three feet. The adjustment shall be the minimum necessary to accomplish preservation of trees on the lot and shall not conflict with other conditions imposed on the property.
2. The Community Development Director, pursuant to a Type II procedure, may grant an adjustment to street standards, pursuant to adopted public works standards, in order to preserve a tree. This may include flexibility to redesign sidewalk and planter strip sizes and locations and allow placement of sidewalks and planter strips in an easement within private lots.
3. The Community Development Director, pursuant to a Type II procedure, may allow other adjustments in order to preserve any healthy tree that cannot be moved due to its size, but will contribute to the landscape character of the area and will not present a foreseeable hazard if retained.

Applicant's Response:
The applicant elects to comply with Option 1-Mitigation for the retention and removal of trees; therefore, this section is not applicable.

17.41.120 - Cash-in-lieu of planting (Option 4).
The applicant may choose this option in-lieu-of or in addition to Compliance Options 1 through 3. In this case, the Community Development Director may approve the payment of cash-in-lieu into a dedicated fund for the remainder of trees that cannot be replanted in the manner described above.
The cash-in-lieu payment per required mitigation tree shall be as listed on the adopted fee schedule and shall be adjusted annually based on the Consumer Price Index. The price shall include 150% of the cost of materials, transportation and planting.

Applicant's Response:
The applicant elects to comply with Option 1-Mitigation for the retention and removal of trees; therefore, this section is not applicable.

17.41.130 - Regulated tree protection procedures during construction.
A. No permit for any grading or construction of public or private improvements may be released prior to verification by the Community Development Director that regulated trees designated for protection or conservation have been protected according to the following standards. No trees designated for removal shall be removed without prior written approval from the Community Development Director.
B. Tree protection shall be as recommended by a qualified arborist or, as a minimum, to include the following protective measures:
1. Except as otherwise determined by the Community Development Director, all required tree protection measures set forth in this section shall be instituted prior to any development activities, including, but not limited to clearing, grading, excavation or demolition work, and such measures shall be removed only after completion of all construction activity, including necessary landscaping and irrigation installation, and any required plat, tract, conservation easement or restrictive covenant has been recorded.
2. Approved construction fencing, a minimum of four feet tall with steel posts placed no farther than ten feet apart, shall be installed at the edge of the tree protection zone or dripline, whichever is greater. An alternative may be used with the approval of the Community Development Director.
3. Approved signs shall be attached to the fencing stating that inside the fencing is a tree protection zone, not to be disturbed unless prior approval has been obtained from the Community Development Director.
4. No construction activity shall occur within the tree protection zone, including, but not limited to; dumping or storage of materials such as building supplies, soil, waste items; nor passage or parking of vehicles or equipment.
5. The tree protection zone shall remain free of chemically injurious materials and liquids such as paints, thinners, cleaning solutions, petroleum products, and concrete or dry wall excess, construction debris, or run-off.

6. No excavation, trenching, grading, root pruning or other activity shall occur within the tree protection zone unless directed by an arborist present on site and approved by the Community Development Director.
7. No machinery repair or cleaning shall be performed within ten feet of the dripline of any trees identified for protection.
8. Digging a trench for placement of public or private utilities or other structure within the critical root zone of a tree to be protected is prohibited. Boring under or through the tree protection zone may be permitted if approved by the Community Development Director and pursuant to the approved written recommendations and on-site guidance and supervision of a certified arborist.
9. The Community Development Director may require that a certified arborist be present during any construction or grading activities that may affect the dripline of trees to be protected.
10. The Community Development Director may impose conditions to avoid disturbance to tree roots from grading activities and to protect trees and other significant vegetation identified for retention from harm. Such conditions may include, if necessary, the advisory expertise of a qualified consulting arborist or horticulturist both during and after site preparation, and a special maintenance/management program to provide protection to the resource as recommended by the arborist or horticulturist.
C. Changes in soil hydrology due to soil compaction and site drainage within tree protection areas shall be avoided. Drainage and grading plans shall include provision to ensure that drainage of the site does not conflict with the standards of this section. Excessive site run-off shall be directed to appropriate storm drainage facilities and away from trees designated for conservation or protection.

Applicant's Response:
The applicant acknowledges and understands the required tree protection measures to be implemented during construction. The applicant will not perform any development activities, including tree removal, until the required protection measures have been put into place and written approval from the Community Development Director has been received.

Tree protection measures are to be implemented as described in OCMC 17.41.130 and the Tree Protection Plan as completed by Teragan & Associates, Inc. The protection measures include notifying and ensuring all contractors comply with the tree protection procedures. Additional guidelines for protective measures during and after construction can be found in the Tree Protection Plan.

OCMC | NARRATIVE

Chapter 17.50 Administration and Procedures

17.50.010 - Purpose.

This chapter provides the procedures by which Oregon City reviews and decides upon applications for all permits relating to the use of land authorized by ORS 92, 197 and 227. These permits include all form of land divisions, land use, limited land use and expedited land division and legislative enactments and amendments to the Oregon City Comprehensive Plan and Titles 16 and 17 of this code. Pursuant to ORS 227.175, any applicant may elect to consolidate applications for two or more related permits needed for a single development project. Any grading activity associated with development shall be subject to preliminary review as part of the review process for the underlying development. It is the express policy of the City of Oregon City that development review not be segmented into discrete parts in a manner that precludes a comprehensive review of the entire development and its cumulative impacts.

17.50.030 - Summary of the City's decision-making processes.

The following decision-making processes chart shall control the City's review of the indicated permits:

Table 17.50.030: PERMIT APPROVAL PROCESS

PERMIT TYPE	*I*	*II*	*III*	*IV*	*Expedited Land Division*
Annexation				*X*	
Compatibility Review for Communication Facilities	*X*				
Compatibility Review for the Willamette River Greenway Overlay District			*X*		
Code Interpretation			*X*		
Master Plan/Planned Unit Development - General Development Plan			*X*		
Master Plan/Planned Unit Development - General Development Plan Amendment	*X*	*X*	*X*		
Conditional Use			*X*		
Detailed Development Plan [1]	*X*	*X*	*X*		
Extension	*X*				
Final Plat	*X*				
Geologic Hazards		*X*			
Historic Review	*X*		*X*		

Lot Line Adjustment and Abandonment	*X*				
Manufactured Home Park Review (New or Modification)		*X*			
Placement of a Single Manufactured Home on Existing Space or Lot within a Park	*X*				
Minor Partition		*X*			
Nonconforming Use, Structure and Lots Review	*X*	*X*			
Plan or Code Amendment				*X*	
Revocation				*X*	
Site Plan and Design Review	*X*	*X*			
Subdivision		*X*			*X*
Variance		*X*	*X*		
Zone Change				*X*	
Natural Resource Overlay District Exemption	*X*				
Natural Resource Overlay District Review		*X*	*X*		
Live/Work Dwelling Review		*X*			
Cluster Housing Development Review		*X*			
Residential Design Standards Review for Single Family Attached, Single Family Detached, Duplexes, 3-4 Plexes, Internal Conversions and Accessory Dwelling Units	*X*				
Modification of Residential Design Standards		*X*			

1 If any provision or element of the Master Plan/Planned Unit Development requires a deferred Type III procedure, the Detailed Development Plan shall be processed through a Type III procedure.
A. Type I decisions do not require interpretation or the exercise of policy or legal judgment in evaluating approval criteria. Because no discretion is involved, Type I decisions do not qualify as a land use, or limited land use, decision. The decision-making process requires no notice to any party other than the applicant. The Community Development Director's decision is final and not appealable by any party through the normal City land use process.
B. Type II decisions involve the exercise of limited interpretation and discretion in evaluating approval criteria, similar to the limited land use decision-making process under state law. Applications evaluated through this process are assumed to be allowable in the underlying zone, and the inquiry typically focuses on what form the use will take or how it will look. Notice of application and an invitation to comment is mailed to the applicant, recognized active neighborhood association(s) and property owners within three hundred feet. The Community Development Director accepts comments for a minimum of fourteen days and renders a decision. The Community Development Director's decision is appealable to the City Commission, by any party who submitted comments in writing before the expiration of the comment period. Review by the City Commission shall be on the record pursuant to OCMC 17.50.190 under ORS ORS 197.195(5). The City Commission decision is the City's final decision and is subject to review by the Land Use Board of Appeals (LUBA) within twenty-one days of when it becomes final.

C. Type III decisions involve the greatest amount of discretion and evaluation of subjective approval standards, yet are not required to be heard by the City Commission, except upon appeal. In the event that any decision is not classified, it shall be treated as a Type III decision. The process for these land use decisions is controlled by ORS 197.763. Notice of the application and the Planning Commission or the Historic Review Board hearing is published and mailed to the applicant, recognized neighborhood association(s) and property owners within three hundred feet. Notice shall be issued at least twenty days pre-hearing, and the staff report shall be available at least seven days pre-hearing. At the evidentiary hearing held before the Planning Commission or the Historic Review Board, all issues are addressed. The decision of the Planning Commission or Historic Review Board is appealable to the City Commission, on the record pursuant to OCMC 17.50.190. The City Commission decision on appeal from is the City's final decision and is subject to review by LUBA within twenty-one days of when it becomes final, unless otherwise provided by state law.

D. Type IV decisions include only quasi-judicial plan amendments and zone changes. These applications involve the greatest amount of discretion and evaluation of subjective approval standards and shall be heard by the City Commission for final action. The process for these land use decisions is controlled by ORS 197.763. Notice of the application and Planning Commission hearing is published and mailed to the applicant, recognized neighborhood association(s) and property owners within three hundred feet. Notice shall be issued at least twenty days pre-hearing, and the staff report shall be available at least seven days pre-hearing. At the evidentiary hearing held before the Planning Commission, all issues are addressed. If the Planning Commission denies the application, any party with standing (i.e., anyone who appeared before the Planning Commission either in person or in writing within the comment period) may appeal the Planning Commission denial to the City Commission. If the Planning Commission denies the application and no appeal has been received within fourteen days of the issuance of the final decision, then the action of the Planning Commission becomes the final decision of the City. If the Planning Commission votes to approve the application, that decision is forwarded as a recommendation to the City Commission for final consideration. In either case, any review by the City Commission is on the record and only issues raised before the Planning Commission may be raised before the City Commission. The City Commission decision is the City's final decision and is subject to review by LUBA within twenty-one days of when it becomes final.

E. The expedited land division (ELD) process is set forth in ORS 197.360 to 197.380. To qualify for this type of process, the development shall meet the basic criteria in ORS 197.360(1)(a) or (b). While the decision-making process is controlled by state law, the approval criteria are found in this code. The Community Development Director has twenty-one days within which to determine whether an application is complete. Once deemed complete, the Community Development Director has sixty-three days within which to issue a decision. Notice of application and opportunity to comment is mailed to the applicant, recognized neighborhood association and property owners within one hundred feet of the subject site. The Community Development Director will accept written comments on the application for fourteen days and then issues a decision. State law prohibits a hearing. Any party who submitted comments may call for an appeal of the Community Development Director's decision before a hearings referee. The referee need not hold a hearing; the only requirement is that the determination be based on the evidentiary record established by the Community Development Director and that the process be "fair." The referee applies the City's approval standards, and has forty-two days within which to issue a decision on the appeal. The referee is charged with the general objective to identify means by which the application can satisfy the applicable requirements without reducing density. The referee's decision is appealable only to the court of appeals pursuant to ORS 197.375(8) and 36.355(1).

F. Decisions, completeness reviews, appeals, and notices in this Chapter shall be calculated according to OCMC 1.04.070 and shall be based on calendar days, not business days.

Applicant's Response:
The proposed development requires and application for Minor Site Plan and Design review and Variance Request. The applications are to be reviewed concurrently under the Type III permit review process. All required application material have been provide along with the Oregon City checklists used to compile the application material.

17.50.055 - Neighborhood association meeting.
Neighborhood Association Meeting. The purpose of the meeting with the recognized neighborhood association is to inform the affected neighborhood association about the proposed development and to receive the preliminary responses and suggestions from the neighborhood association and the member residents.
A. Applicants applying for annexations, zone change, comprehensive plan amendments, conditional use, Planning Commission variances, subdivision, or site plan and design review (excluding minor site plan and design review), general development master plans or detailed development plans applications shall schedule and attend a meeting with the City-recognized neighborhood association in whose territory the application is proposed no earlier than one year prior to the date of application. Although not required for other projects than those identified above, a meeting with the neighborhood association is highly recommended.
B. The applicant shall request via email or regular mail a request to meet with the neighborhood association chair where the proposed development is located. The notice shall describe the proposed project. A copy of this notice shall also be provided to the chair of the Citizen Involvement Committee.
C. A meeting shall be scheduled within thirty days of the date that the notice is sent. A meeting may be scheduled later than thirty days if by mutual agreement of the applicant and the neighborhood association. If the neighborhood association does not want to, or cannot meet within thirty days, the applicant shall host a meeting inviting the neighborhood association, Citizen Involvement Committee, and all property owners within three hundred feet to attend. This meeting shall not begin before six p.m. on a weekday or may be held on a weekend and shall occur within the neighborhood association boundaries or at a City facility.
D. If the neighborhood association is not currently recognized by the City, is inactive, or does not exist, the applicant shall request a meeting with the Citizen Involvement Committee.
E. To show compliance with this section, the applicant shall submit a copy of the email or mail notice to the neighborhood association and CIC chair, a sign-in sheet of meeting attendees, and a summary of issues discussed at the meeting. If the applicant held a separately noticed meeting, the applicant shall submit a copy of the meeting flyer, postcard or other correspondence used, and a summary of issues discussed at the meeting and submittal of these materials shall be required for a complete application.

Applicant's Response:
The applicant will be issuing a notice and hosting a neighborhood association meeting for the proposed development. Due to current COVID 19 conditions a virtual neighborhood association meeting will be hosted by the applicant. The intent is for the meeting to be completed with all application material submitted within 30 day application completeness review.

17.50.070 - Completeness review and one hundred twenty-day rule.
C. Once the Community Development Director determines the application is complete enough to process, or the applicant refuses to submit any more information, the City shall declare the application complete.

Pursuant to ORS 227.178, the City will reach a final decision on an application within one hundred twenty calendar days from the date that the application is determined to be or deemed complete unless the applicant agrees to suspend the one hundred twenty calendar day time line or unless State law provides otherwise. The one hundred twenty-day period, however, does not apply in the following situations:
1. Any hearing continuance or other process delay requested by the applicant shall be deemed an extension or waiver, as appropriate, of the one hundred twenty-day period.
2. Any delay in the decision-making process necessitated because the applicant provided an incomplete set of mailing labels for the record property owners within three hundred feet of the subject property shall extend the one hundred twenty-day period for the amount of time required to correct the notice defect.
3. The one hundred twenty-day period does not apply to any application for a permit that is not wholly within the City's authority and control.
4. The one hundred twenty-day period does not apply to any application for an amendment to the City's comprehensive plan or land use regulations nor to any application for a permit, the approval of which depends upon a plan amendment.
D. A one-hundred day period applies in place of the one-hundred-twenty day period for affordable housing projects where:
1. The project includes five or more residential units, including assisted living facilities or group homes;
2. At least 50% of the residential units will be sold or rented to households with incomes equal to or less than 60% of the median family income for Clackamas County or for the state, whichever is greater; and
3. Development is subject to a covenant restricting the owner and successive owner from selling or renting any of the affordable units as housing that is not affordable for a period of 60 years from the date of the certificate of occupancy.
E. The one hundred twenty-day period specified in OCMC 17.50.070.C or D may be extended for a specified period of time at the written request of the applicant. The total of all extensions may not exceed two hundred forty-five calendar days.
F. The approval standards that control the City's review and decision on a complete application are those which were in effect on the date the application was first submitted.

Applicant's Response:

The Applicant acknowledges and understands the required time period needed for a final decision on the application.

17.50.080 - Complete application—Required information.
Unless stated elsewhere in OCMC 16 or 17, a complete application includes all the materials listed in this subsection. The Community Development Director may waive the submission of any of these materials if not deemed to be applicable to the specific review sought. Likewise, within thirty days of when the application is first submitted, the Community Development Director may require additional information, beyond that listed in this subsection or elsewhere in Titles 12, 14, 15, 16, or 17, such as a traffic study or other report prepared by an appropriate expert. In any event, the applicant is responsible for the completeness and accuracy of the application and all of the supporting documentation, and the City will not deem the application complete until all information required by the Community Development Director is submitted. At a minimum, the applicant shall submit the following:
A. One copy of a completed application form that includes the following information:
1. An accurate address and tax map and location of all properties that are the subject of the application;

2. Name, address, telephone number and authorization signature of all record property owners or contract owners, and the name, address and telephone number of the applicant, if different from the property owner(s);
B. A complete list of the permit approvals sought by the applicant;
C. A complete and detailed narrative description of the proposed development;
D A discussion of the approval criteria for all permits required for approval of the development proposal that explains how the criteria are or can be met or are not applicable, and any other information indicated by staff at the pre-application conference as being required;
E. One copy of all architectural drawings and site plans shall be submitted for Type II-IV applications. One paper copy of all application materials shall be submitted for Type I applications;
F. For all Type II – IV applications, the following is required:
1. An electronic copy of all materials.
2. Mailing labels or associated fee for notice to all parties entitled under OCMC 17.50.090 to receive mailed notice of the application. The applicant shall use the names and addresses of property owners within the notice area indicated on the most recent property tax rolls;
3. Documentation indicating there are no liens favoring the City on the subject site.
4. A receipt from the county assessor's office indicating that all taxes for the lot or parcels involved are paid in full for the preceding tax year.
5. A current preliminary title report or trio for the subject property(ies);
G. All required application fees;
H. Annexation agreements, traffic or technical studies (if applicable);
I. Additional documentation, as needed and identified by the Community Development Director.

Applicant's Response:

The Applicant acknowledges and agrees to submit all documentation and material as described to be deemed as a complete application by the City.

17.50.090 - Public notices.
All public notices issued by the City announcing applications or public hearings of quasi-judicial or legislative actions, shall comply with the requirements of this section.
A. Notice of Type II Applications. Once the Community Development Director has deemed a Type II application complete, the City shall prepare and send notice of the application, by first class mail, to all record owners of property within three hundred feet of the subject property and to any city-recognized neighborhood association whose territory includes the subject property. The applicant shall provide or the City shall prepare for a fee an accurate and complete set of mailing labels for these property owners and for posting the subject property with the City-prepared notice in accordance with OCMC 17.50.100. The City's Type II notice shall include the following information:
1. Street address or other easily understood location of the subject property and city-assigned planning file number;
2. A description of the applicant's proposal, along with citations of the approval criteria that the City will use to evaluate the proposal;
3. A statement that any interested party may submit to the City written comments on the application during a fourteen-day comment period prior to the City's deciding the application, along with instructions on where to send the comments and the deadline of the fourteen-day comment period;
4. A statement that any issue which is intended to provide a basis for an appeal shall be raised in writing during the fourteen-day comment period with sufficient specificity to enable the City to respond to the issue;

5. A statement that the application and all supporting materials may be inspected, and copied at cost, at city hall during normal business hours;
6. The name and telephone number of the planning staff person assigned to the application or is otherwise available to answer questions about the application.
7. The notice shall state that a City-recognized neighborhood association requesting an appeal fee waiver pursuant to OCMC 17.50.290.C must officially approve the request through a vote of its general membership or board at a duly announced meeting prior to the filing of an appeal.
B. Notice of Public Hearing on a Type III or IV Quasi-Judicial Application. Notice for all public hearings concerning a quasi-judicial application shall conform to the requirements of this subsection. At least twenty days prior to the hearing, the City shall prepare and send, by first class mail, notice of the hearing to all record owners of property within three hundred feet of the subject property and to any City-recognized neighborhood association whose territory includes the subject property. The City shall also publish the notice on the City website within the City at least twenty days prior to the hearing. Pursuant to OCMC 17.50.080H., the applicant is responsible for providing an accurate and complete set of mailing labels for these property owners and for posting the subject property with the City-prepared notice in accordance with OCMC 17.50.100. Notice of the application hearing shall include the following information:
1. The time, date and location of the public hearing;
2. Street address or other easily understood location of the subject property and city-assigned planning file number;
3. A description of the applicant's proposal, along with a list of citations of the approval criteria that the City will use to evaluate the proposal;
4. A statement that any interested party may testify at the hearing or submit written comments on the proposal at or prior to the hearing and that a staff report will be prepared and made available to the public at least seven days prior to the hearing;
5. A statement that any issue which is intended to provide a basis for an appeal to the City Commission shall be raised before the close of the public record. Issues must be raised and accompanied by statements or evidence sufficient to afford the City and all parties to respond to the issue;
6. The notice shall state that a City-recognized neighborhood association requesting an appeal fee waiver pursuant to OCMC 17.50.290C. must officially approve the request through a vote of its general membership or board at a duly announced meeting prior to the filing of an appeal.
7. A statement that the application and all supporting materials and evidence submitted in support of the application may be inspected at no charge and that copies may be obtained at reasonable cost at the Planning Division offices during normal business hours; and
8. The name and telephone number of the planning staff person responsible for the application or is otherwise available to answer questions about the application.
C. Notice of Public Hearing on a Legislative Proposal. At least twenty days prior to a public hearing at which a legislative proposal to amend or adopt the City's land use regulations or Comprehensive Plan is to be considered, the Community Development Director shall issue a public notice that conforms to the requirements of this subsection. Notice shall be sent to affected governmental entities, special districts, providers of urban services, including Tri-Met, Oregon Department of Transportation and Metro, any affected recognized neighborhood associations and any party who has requested in writing such notice. Notice shall also be published on the City website. Notice issued under this subsection shall include the following information:
1. The time, date and location of the public hearing;
2. The City-assigned planning file number and title of the proposal;
3. A description of the proposal in sufficient detail for people to determine the nature of the change being proposed;

4. A statement that any interested party may testify at the hearing or submit written comments on the proposal at or prior to the hearing; and
5. The name and telephone number of the planning staff person responsible for the proposal and who interested people may contact for further information.

Applicant's Response:
The Applicant acknowledges and agrees to comply with the public notices guidelines as stated.

17.50.100 - Notice posting requirements.
Where this chapter requires notice of a pending or proposed permit application or hearing to be posted on the subject property, the requirements of this section shall apply.
A. City Guidance and the Applicant's Responsibility. The City shall supply all of the notices which the applicant is required to post on the subject property and shall specify the dates the notices are to be posted and the earliest date on which they may be removed. The City shall also provide a statement to be signed and returned by the applicant certifying that the notice(s) were posted at the correct time and that if there is any delay in the City's land use process caused by the applicant's failure to correctly post the subject property for the required period of time and in the correct location, the applicant agrees to extend the applicable decision-making time limit in a timely manner.
B. Number and Location. The applicant shall place the notices on each frontage of the subject property. If the property's frontage exceeds six hundred feet, the applicant shall post one copy of the notice for each six hundred feet or fraction thereof. Notices do not have to be posted adjacent to alleys or unconstructed right-of-way. Notices shall be posted within ten feet of the street and shall be visible to pedestrians and motorists. Notices shall not be posted within the public right-of-way or on trees. The applicant shall remove all signs within ten days following the event announced in the notice.

Applicant's Response:
The Applicant acknowledges and agrees to the notice posting agreements as stated.

OCMC | NARRATIVE

Chapter 17.52 Off-Street Parking and Loading

17.52.010 - Applicability.

The construction of a new structure or parking lot, or alterations to the size or use of an existing structure, parking lot or property use shall require site plan review approval and compliance with this chapter. This chapter does not apply to single-family attached, detached residential dwellings and duplexes.

Applicant's Response:

The applicant acknowledges and understands the proposed development will require site plan review approval and compliance with OCMC 17.52.

17.52.015 - Planning commission adjustment of parking standards.

A. Purpose: The purpose of permitting a Planning Commission adjustment to parking standards is to provide for flexibility in modifying parking standards in all zoning districts, without permitting an adjustment that would adversely impact the surrounding or planned neighborhood. Adjustments provide flexibility to those uses which may be extraordinary, unique, or provide greater flexibility for areas that can accommodate a denser development pattern based on existing infrastructure and ability to access the site by means of walking, biking or transit. An adjustment to a minimum parking standard may be approved based on a determination by the Planning Commission that the adjustment is consistent with the purpose of this Code, and the approval criteria can be met.

B. Procedure: A request for a Planning Commission parking adjustment shall be initiated by a property owner or authorized agent by filing a land use application. The application shall be accompanied by a site plan, drawn to scale, showing the dimensions and arrangement of the proposed development and parking plan, the extent of the adjustment requested along with findings for each applicable approval criteria. A request for a parking adjustment shall be processed as a Type III application as set forth in Chapter 17.50.

Applicant's Response:

The applicant acknowledges and understands the purpose and procedure for an adjustment to the minimum parking standards. The OCPW is not requesting an adjustment to the minimum parking standard, therefore, this section is not applicable.

C. Approval criteria for the adjustment are as follows:

1. Documentation: The applicant shall document that the individual project will require an amount of parking that is different from that required after all applicable reductions have been taken.

Applicant's Response:
The OCPW is not requesting an adjustment to the minimum parking standard, therefore, this section is not applicable.

2. *Parking analysis for surrounding uses and on-street parking availability: The applicant shall show that there is a continued fifteen percent parking vacancy in the area adjacent to the use during peak parking periods and that the applicant has permission to occupy this area to serve the use pursuant to the procedures set forth by the Community Development Director.*
    a. *For the purposes of demonstrating the availability of on street parking as defined in OCMC 17.52.020.B.3., the applicant shall undertake a parking study during time periods specified by the Community Development Director. The time periods shall include those during which the highest parking demand is anticipated by the proposed use. Multiple observations during multiple days shall be required. Distances are to be calculated as traversed by a pedestrian that utilizes sidewalks and legal crosswalks or an alternative manner as accepted by the Community Development Director.*
    b. *The onsite parking requirements may be reduced based on the parking vacancy identified in the parking study. The amount of the reduction in onsite parking shall be calculated as follows:*
        i. *Vacant on-street parking spaces within three hundred feet of the site will reduce onsite parking requirements by 0.5 parking spaces; and*
        ii. *Vacant on-street parking spaces between three hundred and six hundred feet of the site will reduce onsite parking requirements by 0.2 parking spaces.*

Applicant's Response:
The OCPW is not requesting an adjustment to the minimum parking standard, therefore, this section is not applicable.

3. *Function and Use of Site: The applicant shall demonstrate that modifying the amount of required parking spaces will not significantly impact the use or function of the site and/or adjacent sites.*

Applicant's Response:
The OCPW is not requesting an adjustment to the minimum parking standard, therefore, this section is not applicable.

4. *Compatibility: The proposal is compatible with the character, scale and existing or planned uses of the surrounding neighborhood.*

Applicant's Response:
The OCPW is not requesting an adjustment to the minimum parking standard, therefore, this section is not applicable.

5. *Safety: The proposal does not significantly impact the safety of adjacent properties and rights-of-way.*

Applicant's Response:
The OCPW is not requesting an adjustment to the minimum parking standard, therefore, this section is not applicable.

6. *Services: The proposal will not create a significant impact to public services, including fire and emergency services.*

Applicant's Response:
The OCPW is not requesting an adjustment to the minimum parking standard, therefore, this section is not applicable.

17.52.020 - Number of automobile spaces required.

A. *The number of parking spaces shall comply with the minimum and maximum standards listed in Table 17.52.020. The parking requirements are based on spaces per one thousand square feet net leasable area unless otherwise stated.*

Table 17.52.020		
LAND USE	*PARKING REQUIREMENTS*	
	MINIMUM	*MAXIMUM*
Multifamily Residential	*1.00 per unit*	*2.5 per unit*
3-4 Plex Residential	*2.00*	*4*
Hotel, Motel	*1.0 per guest room*	*1.25 per guest room*
Correctional Institution	*1 per 7 beds*	*1 per 5 beds*
Senior housing, including congregate care, residential care and assisted living facilities; nursing homes and other types of group homes	*1 per 7 beds*	*1 per 5 beds*
Hospital	*2.00*	*4.00*
Preschool Nursery/Kindergarten	*2.00*	*3.00*
Elementary/Middle School	*1 per classroom*	*1 per classroom + 1 per administrative employee + 0.25 per seat in auditorium/assembly room/stadium*
High School, College, Commercial School for Adults	*0.20 per # staff and students*	*0.30 per # staff and students*
Auditorium, Meeting Room, Stadium, Religious Assembly Building, movie theater,	*.25 per seat*	*0.5 per seat*
Retail Store, Shopping Center, Restaurants	*4.10*	*5.00*
Office	*2.70*	*3.33*

Medical or Dental Clinic	*2.70*	*3.33*
Sports Club, Recreation Facilities	*Case Specific*	*5.40*
Storage Warehouse, Freight Terminal	*0.30*	*0.40*
Manufacturing, Wholesale Establishment	*1.60*	*1.67*
Light Industrial, Industrial Park	*1.3*	*1.60*

1. *Multiple Uses. In the event several uses occupy a single structure or parcel of land, the total requirements for off-street parking shall be the sum of the requirements of the several uses computed separately.*

Applicant's Response:
The proposed development includes multiple uses that are used to calculate the allowable parking spaces. The following calculation is used to determine the min and max. parking space quantities.

Office: 23,700 Min 62 Max 77
Light Industrial: 5,638 Min 7 Max 8

Total: Min 69 Max 85 (permitted at 110)

Total Proposed: 69 staff & visitor spaces

The proposed 69 parking spaces indicated above are considered staff and visitor parking. In addition, the development will provide 98 of fleet vehicle and equipment parking spaces that are to be contained within the existing secured fenced area. In the GI General Industrial zone, fleet vehicle and equipment parking are not included in the allowed parking space quantities.

2. *Requirements for types of buildings and uses not specifically listed herein shall be determined by the Community Development Director, based upon the requirements of comparable uses listed.*

Applicant's Response:
The applicant acknowledges and understands that the Community Development Director may determine parking requirements for buildings not indicated in Table 17.52.020.

3. *Where calculation in accordance with the above list results in a fractional space, any fraction less than one-half shall be disregarded and any fraction of one-half or more shall require one space.*

Applicant's Response:
Any resulting fractions from the parking calculation were rounded up or down per the standard.

4. *Fleet vehicle parking shall be accommodated within the maximum parking ratio, except that in GI, CI, and MUE zones, fleet vehicle parking may be included in a parking lot in addition to the maximum number of permitted parking spaces.*

Applicant's Response:
Based on the needs and uses of the OCPW the provided parking summary will include parking dedicated to OCPW equipment and vehicles that are essential to the city's daily operations. The indicated fleet parking is understood to be in addition to the MIN and MAX parking requirements.

5. *A change in use within an existing habitable building located in the MUD Design District or the Willamette Falls Downtown District is exempt from additional parking requirements. Additions to an existing building and new construction are required to meet the minimum parking requirements for the areas as specified in Table 17.52.020 for the increased square footage.*

Applicant's Response:
The proposed development is not located with the MUD Design District, therefore, this standard is not applicable.

B. Parking requirements can be met either onsite, or offsite by meeting one or multiple of the following conditions:

1. Parking may be located on the same site as the associated use which it is supporting.

Applicant's Response:
The proposed development will meet the parking requirements onsite. No offsite parking is proposed.

2. Mixed Uses. If more than one type of land use occupies a single structure or parcel of land, the total requirements for off-street automobile parking shall be the sum of the requirements for all uses, unless it can be shown that the peak parking demands are actually less (e.g. the uses operate on different days or at different times of the day). In that case, the total requirements shall be reduced accordingly, up to a maximum reduction of fifty percent, as determined by the Community Development Director.

Applicant's Response:
Based on the provided parking summary and site plans office, industrial and warehouse use factors have been used to calculate the minimum and maximum parking quantities allowed.

3. *Shared Parking. Required parking facilities for two or more uses, structures, or parcels of land may be satisfied by the same parking facilities used jointly, to the extent that the owners or operators show that the need for parking facilities does not materially overlay (e.g., uses primarily of a daytime versus nighttime nature), that the shared parking facility is within one thousand feet of the potential uses, and provided that the right of joint use is evidenced by a recorded deed, lease, contract, or similar written instrument authorizing the joint use.*

Applicant's Response:
The proposed development does not include shared parking, therefore, the standard is not applicable.

4. *On-Street Parking. On-street parking may be counted toward the minimum standards when it is on the street face abutting the subject land use. An on-street parking space shall not obstruct a required clear vision area and it shall not violate any law or street standard. On-street parking for commercial uses shall conform to the following standards:*
   a. *Dimensions. The following constitutes one on-street parking space:*
      1. *Parallel parking: twenty-two feet of uninterrupted and available curb;*
      2. *Forty-five and/or sixty-degree diagonal parking: Fifteen feet of curb;*
      3. *Ninety-degree (perpendicular) parking: Twelve feet of curb.*
      4. *Public Use Required for Credit. On-street parking spaces counted toward meeting the parking requirements of a specific use may not be used exclusively by that use, but shall be available for general public use at all times. Signs or other actions that limit general public use of on-street spaces are prohibited.*

Applicant's Response:
The proposed development does not include on-street parking in the calculations used to determine the minimum and maximum parking quantities allowed.

C. *Reduction of the Number of the Minimum Automobile Spaces Required. Any combination of the reductions below is permitted unless otherwise noted.*
   1. *Downtown Parking Overlay. The minimum required number of parking stalls is reduced within the Downtown Parking Overlay by fifty percent.*
   2. *Transit Oriented Development. For projects not located within the Downtown Parking Overlay District, the minimum required number of parking stalls is reduced up to twenty-five percent when:*
      a. *In a commercial center (sixty thousand square feet or greater of retail or office use measured cumulatively within a five hundred foot radius) or*
      b. *When adjacent to multi-family development with over eighty units or*
      c. *Within 1,320 feet of an existing or planned public transit street and within 1,320 feet of the opposite use (commercial center or multi-family development with over eighty units).*

Applicant's Response:
The applicant is not requesting a reduction in the number of required automobile spaces required, therefore, this standard is not applicable.

3. *Tree Preservation. The Community Development Director may grant an adjustment to any standard of this requirement provided that the adjustment preserves a designated heritage tree or grove so that the reduction in the amount of required pavement can help preserve existing healthy trees in an undisturbed, natural condition.*

Applicant's Response:
The applicant acknowledges and understands the Community Development Director may grant an adjustment to any standard of this requirement provided the intent is to preserve a designated heritage or grove. The project parcel does not include a designated tree or grove nor is the OCPW requesting an adjustment to the standard, therefore, this section is not applicable.

4. *Transportation Demand Management. The Community Development Director shall reduce the required number of parking stalls up to twenty-five percent when a parking-traffic study prepared by a traffic engineer demonstrates alternative modes of transportation, including transit, bicycles, and walking, and/or special characteristics of the customer, client, employee or resident population will reduce expected vehicle use and parking space demand for this development, as compared to standard Institute of Transportation Engineers vehicle trip generation rates and further that the transportation demand management program promotes or achieves parking utilization lower than minimum city parking requirements.*

   A transportation demand management (TDM) program shall be developed to include strategies for reducing vehicle use and parking demand generated by the development and will be measured annually. If, at the annual assessment, the City determines the plan is not successful, the plan may be revised. If the City determines that no good-faith effort has been made to implement the plan, the City may take enforcement actions.

Applicant's Response:
The applicant is not requesting a reduction in the number of required automobile spaces required, therefore, this standard is not applicable.

5. *The minimum required number of stalls may be reduced by up to ten percent when the subject property is adjacent to an existing or planned fixed public transit route or within one thousand feet of an existing or planned transit stop.*

Applicant's Response:
The applicant is not requesting a reduction in the number of required automobile spaces required, therefore, this standard is not applicable.

17.52.030 - Standards for automobile parking.

A. *Access. Ingress and egress locations on public thoroughfares shall be located in the interests of public traffic safety and meet requirements of OCMC 16.12.035. Groups of more than four parking spaces shall be so located and served by driveways so that their use will require no backing movements or other maneuvering within a street right-of-way other than an alley.*

Applicant's Response:
All proposed parking areas of four or more spaces are located and served by driveways so that use of them require no backing movements or other maneuvering within a street right-of-way. Ingress and egress locations on Fir Street meet the requirements of OCMC 16.12.035.

B. Surfacing. Required off-street parking spaces and access aisles shall have paved surfaces adequately maintained. The use of pervious asphalt/concrete and alternative designs that reduce storm water runoff and improve water quality pursuant to the City's stormwater and low impact development design standards are encouraged.

Applicant's Response:
Due to the poor infiltration abilities of the existing soils composition the proposed development does not include any use of pervious asphalt/concrete or alternative stormwater designs.

C. Drainage. Drainage shall be designed in accordance with the requirements of OCMC 13.12 and the City public works stormwater and grading design standards.

Applicant's Response:
The proposed development's stormwater management and implementation is designed in accordance with the requirements of the OCMC 13.12 and the City public works stormwater and grading design standards.

D. Dimensional Standards.

1. Requirements for parking developed at varying angles are according to the table included in this section. A parking space shall not be less than seven feet in height when within a building or structure, and shall have access by an all-weather surface to a street or alley. Parking stalls in compliance with the American with Disabilities Act may vary in size in order to comply with the building division requirements. Up to thirty-five percent of the minimum required parking may be compact, while the remaining required parking stalls are designed to standard dimensions. The Community Development Director may approve alternative dimensions for parking stalls in excess of the minimum requirement which comply with the intent of this chapter.

Applicant's Response:
All proposed parking spaces meet the dimensional standards of the jurisdiction.

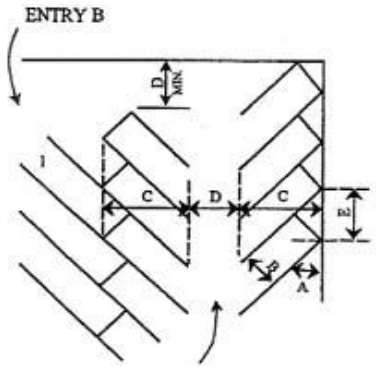
2. Alternative parking/plan. Any applicant may propose an alternative parking plan. Such plans are often proposed to address physically constrained or smaller sites, however innovative designs for larger sites may also be considered. In such situations, the Community Development Director may approve an alternative parking lot plan with variations to parking dimensions of this section. The alternative shall be consistent with the intent of this chapter and shall create a safe space for automobiles and pedestrians while providing landscaping to the quantity and quality found within parking lot landscaping requirements.

Applicant's Response:
The proposed development does not require an alternative parking plan.

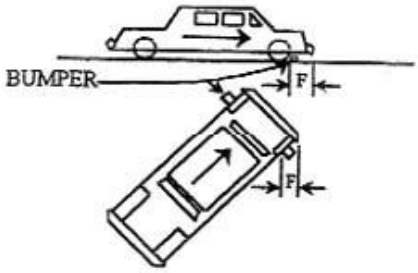
PARKING STANDARD
PARKING ANGLE SPACE DIMENSIONS

A Parking Angle		*B Stall Width*	*C Stall to Curb*	*D Aisle Width*	*E Curb Length*	*F Overhang*
0 degrees		*8.5*	*9.0*	*12*	*20*	*0*
30 degrees	*Standard* *Compact*	*9'* *8'*	*17.3'* *14.9'*	*11'* *11'*	*18'* *16'*	
45 degrees	*Standard* *Compact*	*8.5* *8.5*	*19.8'* *17.0'*	*13'* *13'*	*12.7'* *11.3'*	*1.4*
60 degrees	*Standard* *Compact*	*9'* *8'*	*21'* *17.9'*	*18'* *16'*	*10.4'* *9.2'*	*1.7*
90 degrees	*Standard* *Compact*	*9'* *8'*	*19.0'* *16.0'*	*24'* *22'*	*9'* *8'*	*1.5*

All dimensions are to the nearest tenth of a foot.



TYPICAL PARKING LAYOUT
ENTRY A



NOTE: SPACE 1 CONTINGENT UPON ENTRY B
OVERHANG
NOTE: Overhang dimensions are intended to indicate possible location from parking area edge for location of bumpers.

Applicant's Response:
The parking space dimensions above are used in configuring the proposed parking areas. There are no compact spaces proposed at this time.

E. Carpool and Vanpool Parking. New developments with seventy-five or more parking spaces, excluding projects where seventy-five percent or more of the total floor area is residential , and new hospitals, government offices, group homes, nursing and retirement homes, schools and transit park-and-ride facilities with fifty or more parking spaces, shall identify the spaces available for employee, student and commuter parking and designate at least five percent, but not fewer than two, of those spaces for exclusive carpool and vanpool parking. Carpool and vanpool parking spaces shall be located closer to the main employee, student or commuter entrance than all other employee, student or commuter parking spaces with the exception of ADA accessible parking spaces. The carpool/vanpool spaces shall be clearly marked "Reserved - Carpool/Vanpool Only."

Applicant's Response:

The applicant requests exception from this standard as the total floor area of the project is city government.

17.52.040 - Bicycle parking standards.

A. Purpose-Applicability. To encourage bicycle transportation to help reduce principal reliance on the automobile, and to ensure bicycle safety and security, bicycle parking shall be provided in conjunction with all uses other than exclusively residential use with less than five dwellings onsite (excluding cluster housing).

Applicant's Response:

The OCPWD encourages and is an active supporter of alternate methods of transportation. Electric bicycles are used by OCPW staff when traveling between city facilities and project sites. Bicycle parking will be provided for city owned bicycles, staff and visitors.

B. Number of Bicycle Spaces Required. For any use not specifically mentioned in Table A, the bicycle parking requirements shall be the same as the use which, as determined by the Community Development Director, is most similar to the use not specifically mentioned. Calculation of the number of bicycle parking spaces required shall be determined in the manner established in OCMC 17.52.020 for determining automobile parking space requirements. Modifications to bicycle parking requirements may be made through the site plan and design, conditional use, or master plan review process.

*TABLE A Required Bicycle Parking Spaces**

Where two options for a requirement are provided, the option resulting in more bicycle parking applies. Where a calculation results in a fraction, the result is rounded up to the nearest whole number.

USE	*MINIMUM BICYCLE PARKING*	*MINIMUM BICYCLE PARKING - COVERED - The following percentage of bicycle parking is required to be covered*
Multi-family (five or more units)	*1 per 10 units (minimum of 2)*	*50% (minimum of 1)*
Correctional institution	*1 per 15 auto spaces (minimum of 2)*	*30% (minimum of 1)*

Nursing home or care facility	*1 per 30 auto spaces (minimum of 2)*	*30% (minimum of 1)*
Hospital	*1 per 20 auto spaces (minimum of 2)*	*30% (minimum of 1)*
Park-and-ride lot	*1 per 5 auto spaces (minimum of 2)*	*50% (minimum of 1)*
Transit center	*1 per 5 auto spaces (minimum of 2)*	*50% (minimum of 1)*
Parks and open space	*1 per 10 auto spaces (minimum of 2)*	*0%*
Public parking lots	*1 per 10 auto spaces (minimum of 2)*	*50% (minimum of 1)*
Automobile parking structures	*1 per 10 auto spaces (minimum of 4)*	*80% (minimum of 2)*
Religious institutions, movie theater, auditorium or meeting room	*1 per 10 auto spaces (minimum of 2)*	*30% (minimum of 1)*
Libraries, museums	*1 per 5 auto spaces (minimum of 2)*	*30% (minimum of 1)*
Preschool, nursery, kindergarten	*2 per classroom (minimum of 2)*	*50% (minimum of 1)*
Elementary	*4 per classroom (minimum of 2)*	*50% (minimum of 1)*
Junior high and High school	*2 per classroom (minimum of 2)*	*50% (minimum of 2)*
College, business/commercial schools	*2 per classroom (minimum of 2)*	*50% (minimum of 1)*
Swimming pools, gymnasiums, ball courts	*1 per 10 auto spaces (minimum of 2)*	*30% (minimum of 1)*
Retail stores and shopping centers	*1 per 20 auto spaces (minimum of 2)*	*50% (minimum of 2)*
Retail stores handling exclusively bulky merchandise such as automobile, boat or trailer sales or rental	*1 per 40 auto spaces (minimum of 2)*	*0%*
Bank, office	*1 per 20 auto spaces (minimum of 2)*	*50% (minimum of 1)*
Medical and dental clinic	*1 per 20 auto spaces (minimum of 2)*	*50% (minimum of 1)*
Eating and drinking establishment	*1 per 20 auto spaces (minimum of 2)*	*0%*

Gasoline service station	*1 per 10 auto spaces (minimum of 2)*	*0%*

* *Covered bicycle parking is not required for developments with two or fewer parking stalls.*

Applicant's Response:
The following calculation is used to determine the required number of bicycles parking spaces.

Office 69 office spaces x 1/20 = 4 (3.45) required spaces

C. Design Standards.

1. Bicycle parking facilities shall be in the form of a lockable enclosure onsite, secure room in a building onsite, a covered or uncovered rack onsite, or within the adjacent right-of-way.

Applicant's Response:
The applicant proposes to install covered and uncovered bicycle racks onsite.

2. Bicycle parking areas shall be clearly marked or visible from on-site buildings or the street. If a bicycle parking area is not plainly visible from the street or main building entrance, a sign shall be posted indicating the location of the bicycle parking area. Indoor bicycle parking areas shall not require stairs to access the space. If sites have more than one building, bicycle parking shall be distributed as appropriate to serve all buildings.

Applicant's Response:
The proposed bicycle racks are located near the main office entrance. They are clearly visible from pedestrian pathways and the public right of way. They are easily accessible without the use of stairs.

3. All bicycle racks shall be designed so that:

a. The bicycle frame is supported horizontally at two or more places.
b. The frame and at least one wheel of the bicycle can be locked to the rack with a standard U-type lock.
c. The user is not required to lift the bicycle onto the bicycle rack.
d. Each bicycle parking space is accessible without moving another bicycle.
e. It is a minimum of thirty inches tall and eighteen inches wide between the two points of contact.
f. Provides an area of six feet by two feet per bicycle.
g. All bicycle racks and lockers shall be securely anchored to the ground or to a structure.

Applicant's Response:
The proposed bicycle to be installed are racks designed and manufactured to be used as such. The racks will be installed per manufacturer's instructions or standard construction practices. An area not less than six feet by two feet will be provided per parking space with each area configured in a manner that does not require a user to lift the bicycle onto the rack. Each parking space will be accessible with without requiring the moving of another bicycle attached to the rack.

17.52.060 - Parking lot landscaping.

Purpose. The purpose of this code section includes the following:

1. *To enhance and soften the appearance of parking lots;*
2. *To limit the visual impact of parking lots from sidewalks, streets and particularly from residential areas;*
3. *To shade and cool parking areas;*
4. *To reduce air and water pollution;*
5. *To reduce storm water impacts and improve water quality; and*
6. *To establish parking lots that are more inviting to pedestrians and bicyclists.*

A. Applicability. Unless otherwise specified, construction of new parking lots and alterations of existing parking lots shall comply with parking lot landscaping standards. Parking lot landscaping requirements within this section do not apply to parking structures or parking garages, except landscaping as required in OCMC 17.62.

Applicant's Response:

The applicant acknowledges and understands that the parking lot alterations included in the proposed development will require compliance with OCMC 17.52.060- Parking Lot Landscaping.

The proposed development site includes two parking lot areas or categories; A fenced yard used for OCPW fleet vehicles and equipment and staff and an unfenced area dedicated to visitor and staff parking only.

Applicant request variance to the required parking lot landscaping requirements applicable to improvements being proposed within the existing fenced yard. The proposed development within the yard will increase the capacity for OCPW fleet vehicle and equipment parking, staff and seasonal volunteer parking The applicant proposes the following improvements within the fenced portion of the site:

- **Provide 5'-0" landscape buffer along west and north property/fence line. New plantings to include ground cover and medium shrubs.**
- **Replant the existing landscape buffer along the east property/fence line. New plantings to include grounds cover and medium shrubs. Install vinyl sight obscuring slats in the existing chain link fence where replanting is not feasible.**
- **Maintain the existing landscape buffer along the south fence line.**

See the Site & Parking Lot Coverage Exhibit attached.

B. Development Standards.

1. *The landscaping shall be located in defined landscaped areas that are uniformly distributed throughout the parking or loading area.*

Applicant's Response:
All proposed landscaping is located within existing and new defined landscaped areas uniformly distributed throughout the parking and loading areas to the extent possible, including areas to manage stormwater.

2. *All areas in a parking lot not used for parking, maneuvering, or circulation shall be landscaped.*

Applicant's Response:
The applicant acknowledges and understands that all areas in the parking lot not used for parking, maneuvering, or circulation are to be landscaped. Because the site is programmed as an field operations facility, a large percentage of the site is paved for the maneuvering and storage of vehicles and equipment. These areas a primarily fenced and gated for safety and security.

3. *Parking lot trees shall be a mix of deciduous shade trees and coniferous trees. The trees shall be evenly distributed throughout the parking lot as both interior and perimeter landscaping.*

Applicant's Response:
The proposed parking lot trees are a mix of deciduous shade and coniferous trees. They are to be planted throughout the parking areas at both the interior and perimeters of the lots.

4. *Required landscaping trees shall be of a minimum two-inch minimum caliper size (though it may not be standard for some tree types to be distinguished by caliper), planted according to American Nurseryman Standards, and selected from the Oregon City Street Tree List or approved by an arborist;*

Applicant's Response:
All proposed landscaping trees are to be a minimum two-inch caliper for deciduous shade trees and 6' height for conifers, planted according to American Nurseryman Standards. All species specified are listed on the Oregon City Street Tree List.

5. *At maturity, all of the landscaped area shall be planted in ground cover plants, which includes grasses. Mulch (as a ground cover) shall only be allowed underneath plants at full growth and within two feet of the base of a tree and is not a substitute for ground cover.*

Applicant's Response:
All proposed landscaped areas are to be planted in ground cover plants, which includes grasses.

6. *Landscaped areas shall include irrigation systems unless an alternate plan is submitted, and approved by the Community Development Director, that can demonstrate adequate maintenance;*

Applicant's Response:
All existing landscape areas are supported by an automated irrigation system. The existing irrigation system will be extended to all new landscaped areas.

7. *All landscaping shall be installed according to accepted planting procedures, according to American Nurseryman Standards.*

Applicant's Response:
All installed landscaping will be inspected to ensure conformance to accepted planting procedures and/or according to the American Nurseryman Standards.

C. *Perimeter Parking Lot Landscaping and Parking Lot Entryway/Right-of-Way Screening. Parking lots and associated drive aisles shall include a five-foot wide landscaped buffer where the parking lot abuts the right-of-way and/or adjoining properties. In order to provide connectivity between non-single-family sites, the Community Development Director may approve an interruption in the perimeter parking lot landscaping for a single driveway where the parking lot abuts property designated as multi-family, commercial or industrial. Shared driveways and parking aisles that straddle a lot line do not need to meet perimeter landscaping requirements.*

Applicant's Response:
All staff and visitor parking areas and associated drive aisles include a minimum five-foot wide landscaped buffer where the parking lots abut a public right-of-way and adjoining properties. The majority of these landscape buffers are an existing condition that is to remain as is and will be supplemented as needed to meet the buffer requirements.

The OCPW fleet vehicle and equipment parking areas are secured with an existing chain link fence and gate. They are be buffered from the adjacent properties through the installation of a minimum five-foot landscaped area.

1. *The perimeter parking lot are[a] shall include:*
   a. *Trees spaced a maximum of thirty feet apart (minimum of one tree on either side of the entryway is required). When the parking lot is adjacent to a public right-of-way, the parking lot trees shall be offset from the street trees;*

Applicant's Response:
Proposed trees in the parking lot perimeter areas are spaced at a maximum of 35 feet on center.

   b. *An evergreen hedge screen of thirty to forty-two inches high or shrubs spaced no more than four feet apart on average. The hedge/shrubs shall be parallel to and not nearer than two feet from the right-of-way line. The required screening shall be designed to allow for free access to the site and sidewalk by pedestrians. Visual breaks, no more than five feet in width, shall be provided every thirty feet within evergreen hedges abutting public rights-of-way.*

Applicant's Response:
Parking lot perimeter areas are proposed to include evergreen hedge of 30-42 inch height or shrubs spaced at 4 foot maximum. The evergreen hedge at the street is not closer than 2 feet from the right-of-way line and includes visual breaks every thirty feet, with each break less than 5' width.

D. Parking Area/Building Buffer. Except for parking lots with fewer than five parking stalls, parking areas (excluding drive aisles with no adjacent parking) shall be separated from the exterior wall of a structure, exclusive of pedestrian entranceways or loading areas, by one of the following:

1. Minimum five-foot wide landscaped planter strip (excluding areas for pedestrian connection) meeting the standards for perimeter parking lot area landscaping; or:

Applicant's Response:
Staff and visitor parking areas to the south and west of the building are separated from the exterior walls with minimum five-foot wide landscape buffers.

2. Minimum seven foot sidewalks with shade trees spaced a maximum of thirty feet apart in three-foot by five-foot tree wells.

Applicant's Response:
Staff and visitor parking areas to the south and west of the building are separated from the exterior walls with minimum five-foot wide landscape buffers.

E. Interior Parking Lot Landscaping. Surface parking lots with more than five parking stalls shall include at least forty-five square feet of interior parking lot landscaping per parking stall to improve the water quality, reduce storm water runoff, and provide pavement shade. Pedestrian walkways or any impervious surface in the landscaped areas are not to be counted in the percentage. Fractions shall be rounded up when calculating the required number of plantings. Interior parking lot landscaping shall include:

Applicant's Response:
A total of 13,082 sf of landscaped area is proposed for Interior Parking Lot Landscaping. A total of 69 visitor and staff parking spaces are proposed.

a. A minimum of one tree per four parking spaces.

Applicant's Response:
A total of 19 interior parking lot trees are proposed.

b. A minimum of 1.5 shrubs per parking space.

Applicant's Response:
A total of 194 shrubs are proposed for interior parking areas.

c. No more than eight contiguous parking spaces shall be created without providing an interior landscape strip between them. Landscape strips shall be provided between rows of parking shall be a minimum of six feet in width and a minimum of ten feet in length.

Applicant's Response:
For staff and visitor parking areas, no more than eight contiguous parking spaces are proposed. For the fleet and equipment parking area, the requirement is not met in order to provide adequate parking. A variance is requested for the fleet and equipment parking areas.

F. Alternative landscaping plan.

Any applicant may propose an alternative landscaping plan. Such plans are often proposed to address physically constrained or smaller sites, however innovative designs for larger sites may also be considered. Alternative plans may include the use of low impact development techniques and minimized landscaping requirements. In such situations, the Community Development Director may approve variations to the landscaping standards of OCMC 17.52.060 in accordance with A and/or B below.

1. General Review Standard. The alternative shall meet the standards in OCMC 17.62.015-Modifications that will better meet design review requirements.

Applicant's Response:
Because the applicant will be applying for a variance, an alternative landscape plan is not proposed.

2. Credit for Pervious/Low Impact Development. The Community Development Director may count up to fifty percent of the square footage of any pervious hardscaped landscape material within a parking lot that is designed and approved pursuant to the City's adopted stormwater and low impact development design standards toward minimum landscaping requirements for the site. (This includes porous pavement detention, open celled block pavers, porous asphalt, porous concrete pavement, porous turf, porous gravel, etc.).

Applicant's Response:
The proposed improvements do not include the use of pervious paving, therefore, this standard is not applicable.

17.52.080 - Maintenance.

The owner, tenant and their agent, if any, shall be jointly and severally responsible for the maintenance of the site including but not limited to the off-street parking and loading spaces, bicycle parking and all landscaping which shall be maintained in good condition so as to present a healthy, neat and orderly appearance and shall be kept free from refuse and debris.

All plant growth in interior landscaped areas shall be controlled by pruning, trimming, or otherwise so that:

a. It will not interfere with the maintenance or repair of any public utility;
b. It will not restrict pedestrian or vehicular access; and
c. It will not constitute a traffic hazard due to reduced visibility.

Applicant's Response:
The applicant acknowledges and understands the responsibility to maintain the proposed development including interior landscaped areas.

17.52.090 - Loading areas.

A. Purpose.

The purpose of this section is to provide adequate loading areas for commercial, office, retail and industrial uses that do not interfere with the operation of adjacent streets.

B. Applicability.

OCMC 17.52.090 applies to uses that are expected to have service or delivery truck visits with a forty-foot or longer wheelbase, at a frequency of one or more vehicles per week. The City Engineer and decision maker shall determine through site plan and design review the number, size, and location of required loading areas, if any.

Applicant's Response:
Though the proposed develop does include multiple loading areas the applicant does not anticipate service or delivery truck visits with forty foot or longer wheelbase vehicles occurring more than once a week. All deliveries or services requiring a loading area will be accommodated on site and will not interfere with the operation of adjacent streets.

C. Standards.

1. The off-street loading space shall be large enough to accommodate the largest vehicle that is expected to serve the use without obstructing vehicles or pedestrian traffic on adjacent streets and driveways. Applicants are advised to provide complete and accurate information about the potential need for loading spaces because the City Engineer or decision maker may restrict the use of other public right-of-way to ensure efficient loading areas and reduce interference with other uses.

Applicant's Response:
Though the proposed develop does include multiple loading areas the applicant does not anticipate service or delivery truck visits with forty foot or longer wheelbase vehicles occurring more than once a week. All deliveries or services requiring a loading area will be accommodated on site and will not interfere with the operation of adjacent streets.

2. *Where parking areas are prohibited between a building and the street, loading areas or drive isles are also prohibited.*

Applicant's Response:
Though the proposed develop does include multiple loading areas the applicant does not anticipate service or delivery truck visits with forty foot or longer wheelbase vehicles occurring more than once a week. All deliveries or services requiring a loading area will be accommodated on site and will not interfere with the operation of adjacent streets.

3. *The City Engineer and decision maker, through site plan and design review, may approve a loading area adjacent to or within a street right-of-way when all of the following loading and unloading operations conditions are met:*
   a. *Short in duration (i.e., less than one hour);*
   b. *Infrequent (less than three operations daily between 5:00 a.m. and 12:00 a.m. or all operations between 12:00 a.m. and 5:00 a.m. at a location that is not adjacent to a residential zone);*
   c. *Does not obstruct traffic during peak traffic hours;*
   d. *Does not interfere with emergency response services; and*
   e. *Is acceptable to the applicable roadway authority.*

Applicant's Response:
Though the proposed develop does include multiple loading areas the applicant does not anticipate service or delivery truck visits with forty foot or longer wheelbase vehicles occurring more than once a week. All deliveries or services requiring a loading area will be accommodated on site and will not interfere with the operation of adjacent streets.

OCMC | NARRATIVE

Chapter 17.54 Supplemental Zoning Regulations and Exceptions

17.54.100 Fences, Hedges, Walls, and Retaining Walls.

A. A fence, hedge, wall, retaining wall, or combination thereof may be located on real property, not within the right-of-way, subject to all of the following:

1. A fence, hedge, wall, retaining wall, or combination thereof located in front of a building may be up to 3.5-feet in total height as measured from the finished grade at any point on the fence.

2. A fence, hedge, wall, located next to, or behind the forward most building, or within more than forty feet of the right-of-way, whichever is less may be up to:

a. Six feet in total height for residential properties with less than five units as measured from the finished grade at any point on the fence; or

b. Eight feet in total height for all other uses as measured from the finished grade at any point on the fence.

Applicant's Response:

All fences, hedges walls and retaining walls included in the proposed development are complaint with the height limitations indicated. No walls taller than the allowed are proposed.

3. A retaining wall or combination of a fence, hedge, wall located next to and behind the forward most building, or within more than forty feet of the right-of-way, whichever is less, may be up to (as measured from the finished grade) 8.5 feet in height from the finished grade.

Applicant's Response:

All retaining wall or combination of fence, hedge wall located next to and behind the forward most building or within forty feet of the right-of-way included in the proposed development are complaint with the height limitations indicated. No walls taller than the allowed are proposed.

4. Fences, hedges, and/or walls located within two feet above a retaining wall, as measured on a horizontal plane, shall be measured together for the purposes of determining height.

Applicant's Response:

The applicant acknowledges and understands that fences, hedges and/or walls located within two feet above a retaining wall shall be measured together in determining the height.

5. Property owners shall ensure compliance with the Traffic Sight Obstruction requirements in Chapter 10.32 of the Oregon City Municipal Code.

Applicant's Response:
The OCPW acknowledges and understands they shall ensure compliance with the Traffic Sight Obstruction requirements in Chapter 10.32 of the Oregon City Municipal Code.

6. Retaining walls completely below the elevation of the right-of-way may be up to six feet in height.

Applicant's Response:
The applicant acknowledges and understands that retaining walls completely below the elevation of the right of way may be up to six feet in height.

7. Minimum fall protection required by the Building Official, such as railings, is not included in the height of a retaining wall but must comply with the fence height requirements.

Applicant's Response:
The applicant acknowledges and understands that fall protection, including, the minimum required by the Building Official, is not included in the height of a retaining wall but must comply with fence height requirements.

B. When no other practicable alternative exists, the City Engineer may permit a fence, hedge, wall, retaining wall, or combination thereof to be located within the right-of-way subject to all of the following:

1. A Revocable Permanent Obstruction in the Right of Way permit is granted per OCMC 12.04.120;
2. Retaining walls, fences, or hedges comply with OCMC 17.54.100.A, unless determined to be impracticable by the City Engineer.
3. The abutting property owner shall ensure compliance with the Traffic Sight Obstruction requirements in Chapter 10.32 of the Oregon City Municipal Code.

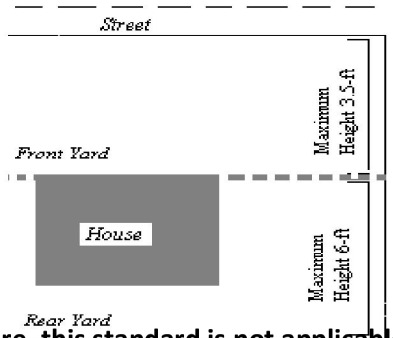
Applicant's Response:
The proposed development does not include the installation of fence, hedge, wall, retaining wall or combination thereof to be located within the right-of-way, therefore, this standard is not applicable.

C. It is unlawful for any person to erect any electric fence or any fence constructed in whole or in part of barbed wire or to use barbed wire, except as erected in connection with security installations at a minimum height of six feet, providing further that prior written approval has been granted by the City Manager.

Applicant's Response:
The proposed development does not include the installation or construction of electric fence and/or barbed wire not in connection with security installations above a height of six feet, therefore, this standard is not applicable.

Any fence, hedge or wall located in front of may be up to 3.5-feet in total height.

A fence, hedge or wall located next to and behind your home may be up to 6-feet in total height.



Applicant's Response:

The proposed development is commercial use; therefore, this standard is not applicable.

OCMC | NARRATIVE

Chapter 17.58 Lawful Nonconforming Uses, Lots, Structures, and Sites

17.58.010 - Purpose.
Nonconforming situations are created when the application of zoning district to a site changes or the zoning regulations change. As part of the change, existing uses, density, or development might no longer be allowed or are further restricted. Nonconforming uses, structures and lots are those uses, structures and lots that were lawfully established but do not conform to the provisions of this title or the provisions of the zoning district in which the use, structure or lot is located. The intent of these provisions is not to force all nonconforming situations immediately to be brought into conformance. Instead, the intent is to guide nonconforming situations in a new direction consistent with city policy, and, eventually, bring them into conformance.

Applicant Response:
The proposed development is a lawful nonconforming Site. The proposed development addresses the items of nonconformance as described below.

Lawful nonconforming use.

17.58.015 - Applicability.
The regulations of this chapter apply only to those nonconforming situations that were lawfully established or that were approved through a land use decision. All nonconforming structures, uses or lots shall have been maintained over time. These situations have lawful nonconforming status. Nonconforming situations that were not allowed when established or have not been maintained over time have no lawful right to continue.

Applicant Response:
The proposed development is a lawful nonconforming Site. The proposed development addresses the items of nonconformance as described below.

17.58.020 - Lawful nonconforming lots of record.
Lots or parcels lawfully created but which do not now conform to the legal lot standards in this land use code may be occupied by uses otherwise permitted if those uses comply with all other provisions of this land use code.

Applicant Response:
The proposed development is not a lawful nonconforming lot of record, therefore, this standard is not applicable.

17.58.030 - Lawful nonconforming use.
A use that was lawfully established on a particular development site but that no longer complies with the allowed uses or the standards for those uses in this title may be considered a lawful nonconforming use. Change of ownership, tenancy, or management of a lawfully established nonconforming use shall not affect its lawful nonconforming status. The continuation of a lawful nonconforming use is subject to the following:

A. Discontinuance. If a lawful nonconforming use is discontinued for a period of one year, it shall lose its lawful nonconforming status and the use of the property thereafter shall conform with the existing provisions of this title. If a nonconforming use ceases operations, even if the structure or materials related to the use remain, the use shall be deemed to have been discontinued.

Applicant Response:
The proposed development is not a nonconforming use, therefore, this standard is not applicable.

B. Conformance. If a lawful nonconforming use is converted to a conforming use, no nonconforming use may be resumed.

Applicant Response:
The applicant acknowledges and understands that if a lawful nonconforming use is converted to a conforming use, no nonconforming use may be resumed.

C. Destruction of a Non-residential Use. When a structure containing a lawful nonconforming non-residential use is damaged by fire or other causes, the re-establishment of the nonconforming use shall be prohibited if the repair cost of the structure is more then sixty percent of its assessed value.

Applicant Response:
The proposed development is not a nonconforming use, therefore, this standard is not applicable.

D. Destruction of a Residential Use. When a structure containing a lawful nonconforming residential use is damaged by fire or other causes, the re-establishment of the nonconforming use shall be permitted.

Applicant Response:
The proposed development is not a nonconforming residential use, therefore, this standard is not applicable.

E. Intentional Destruction. When a structure containing a nonconforming use is removed or intentionally damaged by fire or other causes within the control of the owner, the re-establishment of the nonconforming use shall be prohibited.

Applicant Response:
The proposed development is not a nonconforming use, therefore, this standard is not applicable.

F. Expansion. No lawful nonconforming use may be replaced by a different type of nonconforming use, nor may any legal nonconforming use be expanded or intensified.

Applicant Response:
The proposed development is not a nonconforming use, therefore, this standard is not applicable.

17.58.040 - Lawful nonconforming structure or site.
A structure or site that was lawfully established but no longer conforms to all development standards of this land use code (such as setbacks) shall be considered lawfully nonconforming. Notwithstanding development standard requirements in this Code, minor repairs and routine maintenance of a lawful nonconforming structure are permitted. The continuation of a lawful nonconforming structure or site is subject to the following:

Applicant Response:
The applicant acknowledges and understands that the development site is considered lawfully conforming and the continuation of a lawful conforming site is subject to OCMC 17.50.040.

A. Accidental Destruction. When a nonconforming structure is damaged by fire or other causes, the structure may be rebuilt using the same structure footprint.

Applicant Response:
The applicant acknowledges and understands that if a nonconforming structure is damaged by fire or other causes, the replacement structure may be rebuilt using the same structure footprint.

B. Intentional Destruction. When a nonconforming structure is removed or intentionally damaged by fire or other causes within the control of the owner, the replacement structure shall comply with the development standards of this title.

Applicant Response:
The applicant acknowledges and understands that if a nonconforming structure is removed or intentionally damaged by fire or other cause, the replacement structure shall comply with OCMC 17.58.040

C. Expansion. An expansion of a lawful nonconforming structure or site may be approved, conditionally approved or denied in accordance with the standards and procedures of this section.
1. In making a determination on such applications, the decision maker shall weigh the proposal's positive and negative features and the public convenience or necessity to be served against any adverse conditions that would result from authorizing the particular development at the location proposed, and, to approve such expansion, it shall be found that the criteria identified in OCMC 17.58.060 have either been met, can be met by observance of conditions, or are not applicable.

2. Increases in the square footage of a building and/or site improvements which include installation of any additional off-street parking stalls that exceed the threshold of subparagraph C.2.a. below shall comply with the development standards listed in subparagraph C.2.b. The value of the alterations and improvements is based on the entire project and not individual building permits.
a. Thresholds triggering compliance. The standards of subparagraph C.2.b. below shall be met when the value of the increase in square footage of a building and/or increase in off-street parking stalls, as determined by the Community Development Director, is more than seventy-five thousand dollars. The following alterations and improvements shall not be included in the threshold calculation:
1. Proposed alterations to meet approved fire and life safety agreements;
2. Alterations related to the removal of existing architectural barriers, as required by the Americans with Disabilities Act, or as specified in Section 1113 of the Oregon Structural Specialty Code;
3. Alterations required to meet Seismic Design Requirements; and
4. Improvements to on-site stormwater management facilities in conformance with Oregon City Stormwater Design Standards.

Applicant Response:
The proposed development will exceed thresholds triggering compliance requirements. The improvements to be made address the standards that must brought into compliance.

b. Standards that shall be met. Developments not complying with the development standards listed below shall be brought into conformance.
1. Pedestrian circulation systems, as set out in the pedestrian standards that apply to the sites;
2. Minimum perimeter parking lot landscaping;
3. Minimum interior parking lot landscaping;
4. Minimum site landscaping requirements;
5. Bicycle parking by upgrading existing racks and providing additional spaces in order to comply with OCMC 17.52—Off-Street Parking and Loading;
6. Screening; and
7. Paving of surface parking and exterior storage and display areas.
Applicant Response:
A response for each standard is provided.

1 Pedestrian circulation systems; all site pedestrian circulation systems included in the proposed development are compliant with development standards. See Pedestrian Circulation Exhibit.

2 Minimum perimeter parking lot landscaping; the applicant requests a variance to zoning requirement 17.36.040.f Dimensional standards and 17.52.060A Parking lot landscaping, see responses to 17.60 Variances and Proposed Site Coverage Exhibit.

3 Minimum interior parking lot landscaping; the applicant requests a variance to zoning requirement 17.36.040.f Dimensional standards and 17.52.060A Parking lot landscaping, see responses to 17.60 Variances and Proposed Site Coverage Exhibit.

4 Minimum site landscaping requirements; the applicant request a variance to zoning requirement 17.36.040.f Dimensional standards and 17.52.060A Parking lot landscaping, see responses to 17.60 Variances and Proposed Site Coverage Exhibit.

5 Bicycle parking; the proposed development includes the installation of three new bicycle racks. All proposed improvements are in compliance with OCMC 17.52 Off-Street Parking and Loading

6 Screening; the proposed development will increase the current screening of parking and equipment storage areas. Improvements to the office building include new mechanical systems that will result in the removal of existing rooftop package equipment that are visible from the right-of-way. New equipment will be screened from view at the right-of-way.

7 Paving of surface parking and exterior storage and display areas; All surface parking, storage and display areas within the development site are paved aeras. Proposed improvements include limited regrading and paving of existing parking and landscape areas. All improvements are in compliance with OCMC standards.

c. Area of required improvements.
1. Generally. Except as provided in C.2.c.2. below, required improvements shall be made for the entire site.
2. Exception for sites with ground leases. Required improvements may be limited to a smaller area if there is a ground lease for the portion of the site where the alterations are proposed. If all of the following are met, the area of the ground lease will be considered as a separate site for purposes of required improvements. The applicant shall meet the following:
i. The signed ground lease — or excerpts from the lease document satisfactory to the city attorney — shall be submitted to the Community Development Director. The portions of the lease shall include the following:
A. The term of the lease. In all cases, there shall be at least one year remaining on the ground lease; and
B. A legal description of the boundaries of the lease.
ii. The boundaries of the ground lease shall be shown on the site plan submitted with the application. The area of the lease shall include all existing and any proposed development that is required for, or is used exclusively by, those uses within the area of the lease; and
iii. Screening shall not be required along the boundaries of ground leases that are interior to the site.

Applicant Response:
The applicant acknowledges and understands that the area of required improvements are applicable to the entire site.

d. Timing and cost of required improvements. The applicant may choose one of the two following options for making the required improvements:
1. Option 1. Required improvements may be made as part of the alteration that triggers the required improvements. The cost of the standards that shall be met, identified in subparagraph C.2.b. above, is limited to ten percent of the value of the proposed alterations. It is the responsibility of the applicant to document to the Community Development Director the value of the required improvements. Additional costs may be required to comply with other applicable requirements associated with the proposal. When

all required improvements are not being made, the priority for the improvements shall be as listed in subparagraph C.2.b. above.

Applicant Response:
All proposed improvements are to be constructed in one phase as indicated in Option 1.

2. Option 2. Required improvements may be made over several years, based on the compliance period identified in Table 17.58—1 below. However, by the end of the compliance period, the site shall be brought fully into compliance with the standards listed in subparagraph C.2.b. Where this option is chosen, the following shall be met:
i. Before a building permit is issued, the applicant shall submit the following to the Community Development Director:
A. A Nonconforming Development Assessment, which identifies in writing and on a site plan, all development that does not meet the standards listed in Subparagraph C.2.b.

Applicant Response:
All proposed improvements are to be constructed in one phase as indicated in Option 1.

B. A covenant, in a form approved by the City Attorney, executed by the property owner that meets the requirements of OCMC 17.50.150. The covenant shall identify development on the site that does not meet the standards listed in Subparagraph C.2.b., and require the owner to bring that development fully into compliance with this title. The covenant shall also specify the date by which the owner will be in conformance. The date shall be within the compliance periods set out in Table 17.58 — 1.

Applicant Response:
All proposed improvements are to be constructed in one phase as indicated in Option 1.

ii. The nonconforming development identified in the Nonconforming Development Assessment shall be brought into full compliance with the requirements of this Title within the following compliance periods. The compliance period begins when a building permit is issued for alterations to the site of more than seventy-five thousand dollars. The compliance periods are based on the size of the site (see Table 17.58—1 below).

Applicant Response:
All proposed improvements are to be constructed in one phase as indicated in Option 1.

iii. By the end of the compliance period, the applicant or owner shall request that the site by certified by the Community Development Director as in compliance. If the request is not received within that time, or if the site is not fully in conformance, no additional building permits will be issued.

Applicant Response:
All proposed improvements are to be constructed in one phase as indicated in Option 1.

iv. If the regulations referred to by subparagraph C.2.b. are amended after the Nonconforming Development Assessment is received by the Community Development Director, and those amendments

result in development on the site that was not addressed by the Assessment becoming nonconforming, the applicant shall address the new nonconforming development using Option 1 or 2. If the applicant chooses Option 2, a separate Nonconforming Development Assessment, covenant and compliance period will be required for the new nonconforming development.

Table 17.58—1: Compliance Periods for Option 2

Square footage of site	*Compliance Period*
Less than 150,000 sq. ft.	*2 years*
150,000 sq. ft. or more, up to 300,000 sq. ft.	*3 years*
300,000 sq. ft. or more, up to 500,000 sq. ft.	*4 years*
More than 500,000 sq. ft.	*5 years*

Applicant Response:
All proposed improvements are to be constructed in one phase as indicated in Option 1.
Applicant Response:

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Chapter 17.60 Variances

17.60.010 - Authority.
According to procedures set forth in OCMC 17.60.030, the planning commission or the community development director may authorize variances from the requirements of this title. In granting a variance, the planning commission or community development director may attach conditions to protect the best interests of the surrounding property or neighborhood and otherwise achieve the purposes of this title. No variances shall be granted to allow the use of property for a purpose not authorized within the zone in which the proposed use would be located.

17.60.020 - Variances—Procedures.
A. A request for a variance shall be initiated by a property owner or authorized agent by filing an application with the city recorder. The application shall be accompanied by a site plan, drawn to scale, showing the dimensions and arrangement of the proposed development. When relevant to the request, building plans may also be required. The application shall note the zoning requirement and the extent of the variance requested. Procedures shall thereafter be held under Chapter 17.50. In addition, the procedures set forth in subsection D. of this section shall apply when applicable.

Applicant's Response:
Due to OCPW's operational needs and existing site constraints the proposed development will require three variances. The application material provided include relevant site plans and building plans for each variance being requested. The following are the zoning requirement and extent of each variance:

VARIANCE I

Zoning Requirement: 17.36.040.F -Dimensional standards; Landscaping; 15% of site

F. Minimum required landscaping (including landscaping within a parking lot): Fifteen percent.

Applicant's Response:
The proposed development site includes two parking lot areas; A fenced yard used for OCPW fleet vehicles and equipment and limited staff parking. And an unfenced area dedicated to visitor and staff parking along the Fir Street and the southern property boundary. These two areas include landscaping areas that when combined meet the 15% landscaping requirements of OCMC 17.36.040.F.

Improvements proposed within the yard will reduce the landscape area to 8% of the overall site area.

A reduction in the required landscape area is requested in addition to the following improvements proposed:

- **New plantings outside the fenced equipment yard are per OCMC 17.62 and 17.52. See Landscape and Parking Lot Landscape Exhibit.**
- **Provide a perimeter landscape buffer and/or sight obscuring slats in existing chain link fencing at equipment yard.**
- **Provide additional Stormwater facilities beyond code minimums.**

The reduction in landscape requirements within the fenced yard will increase OCPW's ability to maximize the capacity to consolidate vehicles and equipment essential to perform their daily duties.

See the Site & Parking Lot Coverage Exhibit attached.

Variance II

Zoning Requirement: 17.52.060.A – Parking lot landscaping (fleet vehicle & equipment area)

A. Applicability. Unless otherwise specified, construction of new parking lots and alterations of existing parking lots shall comply with parking lot landscaping standards. Parking lot landscaping requirements within this section do not apply to parking structures or parking garages, except landscaping as required in OCMC 17.62.

Applicant's Response:
The proposed development site includes two parking lot areas or categories; A fenced yard used for OCPW fleet vehicles and equipment and staff and an unfenced area dedicated to visitor and staff parking only.

Applicant request variance to the required parking lot landscaping requirements applicable to improvements being proposed within the existing fenced yard. The proposed development within the yard will increase the capacity for OCPW fleet vehicle and equipment parking, staff and seasonal volunteer parking The applicant proposes the following improvements within the fenced portion of the site:

- **Provide 5'-0" landscape buffer along west and north property/fence line. New plantings to include ground cover and medium shrubs.**
- **Replant the existing landscape buffer along the east property/fence line. New plantings to include grounds cover and medium shrubs. Install vinyl sight obscuring slats in the existing chain link fence where replanting is not feasible.**

- **Maintain the existing landscape buffer along the south fence line.**

See the Site & Parking Lot Coverage Exhibit attached.

Variance III

Zoning Requirement: 17.62.050.B.1- Vehicular access and connectivity

B. Vehicular Access and Connectivity.
1. Parking areas shall be located behind the building façade that is closest to the street, below buildings, or on one or both sides of buildings.

Applicant's Response:
Applicant proposes to retain existing parking located beyond the building façade (south) that is closest to Fir street. The proposed development will remove of one of the three existing driveways serving the project site. Therefore, modification to the existing parking areas located between the office building and street frontage will be made but overall existing site configuration, primary egress to the site, and vehicle and pedestrian circulation patterns will be maintained as is. Maintaining these conditions with the proposed improvements will allow full and efficient use of the site.

See the Pedestrian Circulation Exhibit attached.

B. A nonrefundable filing fee, as listed in OCMC 17.50.080, shall accompany the application for a variance to defray the costs.

Applicant's Response:
Applicant will provide the filing fees as required.

C. Before the planning commission may act on a variance, it shall hold a public hearing thereon following procedures as established in Chapter 17.50. A Variance shall address the criteria identified in OCMC 17.60.030, Variances — Grounds.

Applicant's Response:
Applicant acknowledges and understands that a public hearing will be held as established in Chapter 17.50.

D. Minor variances, as defined in subsection E. of this section, shall be processed as a Type II decision, shall be reviewed pursuant to the requirements in OCMC 17.50.030B., and shall address the criteria identified in OCMC 17.60.030, Variance — Grounds.

Applicant's Response:
Applicant acknowledges and understands that the criteria for minor variances shall be addressed.

E. For the purposes of this section, minor variances shall be defined as follows:

1. Variances to setback and yard requirements to allow additions to existing buildings so that the additions follow existing building lines;
2. Variances to width, depth and frontage requirements of up to twenty percent;
3. Variances to residential yard/setback requirements of up to twenty-five percent;
4. Variances to nonresidential yard/setback requirements of up to ten percent;
5. Variances to lot area requirements of up to five percent;
6. Variance to lot coverage requirements of up to twenty-five percent;
7. Variances to the minimum required parking stalls of up to five percent; and
8. Variances to the floor area requirements and minimum required building height in the mixed-use districts.
9. Variances to design and/or architectural standards for single family dwellings, duplexes, single-family attached dwellings, internal conversions, accessory dwelling units, and 3-4 plexes in OCMC 17.14, 17.16, 17.20, 17.21, and 17.22.

Applicant's Response:
No minor variances are being requested by the Applicant.

17.60.030 - Variance—Grounds.
A variance may be granted only in the event that all of the following conditions exist:

VARIANCE I: 17.36.040.F -Dimensional standards; Landscaping; 15% of site

A. That the variance from the requirements is not likely to cause substantial damage to adjacent properties by reducing light, air, safe access or other desirable or necessary qualities otherwise protected by this title;

Applicant's Response:
Variance will have no impact to adjacent properties. All light, air, and safe access and other desirable or necessary qualities are maintained in proposed variance.

B. That the request is the minimum variance that would alleviate the hardship;

Applicant's Response:
Variance would alleviate the hardship. Reduction of the landscape requirement from 15% to 8% would provide necessary vehicular parking and maneuvering space for the site.

C. Granting the variance will equal or exceed the purpose of the regulation to be modified.

Applicant's Response:
Variance will equal the purpose of the regulation to be modified. Green space will be provided, with emphasis on frontage area.

D. Any impacts resulting from the adjustment are mitigated;

Applicant's Response:
There will be no impacts from the adjustment.

E. No practical alternatives have been identified which would accomplish the same purpose and not require a variance; and

Applicant's Response:
There are no practical alternatives that would accomplish the same purpose of the variance requested.

F. The variance conforms to the comprehensive plan and the intent of the ordinance being varied.

Applicant's Response:
Variance conforms to the comprehensive plan and the intent of the ordinance being varied.

VARIANCE II: 17.52.060.A – Parking lot landscaping (fleet parking area)

A. That the variance from the requirements is not likely to cause substantial damage to adjacent properties by reducing light, air, safe access or other desirable or necessary qualities otherwise protected by this title;

Applicant's Response:
Variance will have no impact to adjacent properties. All light, air, and safe access and other desirable or necessary qualities are maintained in proposed variance.

B. That the request is the minimum variance that would alleviate the hardship;

Applicant's Response:
Variance would alleviate the hardship. Reduction of the landscape island requirements allows for more parking spaces on the site. This increases the effectiveness of the site for operations.

C. Granting the variance will equal or exceed the purpose of the regulation to be modified.

Applicant's Response:
Variance will equal the purpose of the regulation to be modified. Green space will be provided, with emphasis on frontage area.

D. Any impacts resulting from the adjustment are mitigated;

Applicant's Response:
There will be no impacts from the adjustment.

E. No practical alternatives have been identified which would accomplish the same purpose and not require a variance; and

Applicant's Response:
There are no practical alternatives that would accomplish the same purpose of the variance requested.

F. The variance conforms to the comprehensive plan and the intent of the ordinance being varied.

Applicant's Response:
Variance conforms to the comprehensive plan and the intent of the ordinance being varied.

Variance III: **17.62.050.B.1- Vehicular access and connectivity; increase in parking stall in front of building**

A. That the variance from the requirements is not likely to cause substantial damage to adjacent properties by reducing light, air, safe access or other desirable or necessary qualities otherwise protected by this title;

Applicant's Response:
Variance will have no impact to adjacent properties. All light, air, and safe access and other desirable or necessary qualities are maintained in proposed variance.

B. That the request is the minimum variance that would alleviate the hardship;

Applicant's Response:
Variance would alleviate the hardship. There are currently (2) parking lots and entrances to the site. Applicant is proposing the reduction of driveway entrances to (1) and combining all parking lots at front, side and back to create a safer, single drive aisle between the lots. Allowing for parking in the front will help alleviate parking constraints of the site.

C. Granting the variance will equal or exceed the purpose of the regulation to be modified.

Applicant's Response:
Variance will equal the purpose of the regulation to be modified. Parking entrance will be simplified and create a safer, more accessible drive aisle.

D. Any impacts resulting from the adjustment are mitigated;

Applicant's Response:
Street frontage will be improved, any impacts will be mitigated.

E. No practical alternatives have been identified which would accomplish the same purpose and not require a variance; and

Applicant's Response:
There are no practical alternatives that would accomplish the same purpose of the variance requested.

F. The variance conforms to the comprehensive plan and the intent of the ordinance being varied.

Applicant's Response:
Variance conforms to the comprehensive plan and the intent of the ordinance being varied.

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Chapter 17.62 - Site Plan and Design Review

17.62.015 - Modifications that will better meet design review requirements.

The review body shall consider modification of certain site related development standards of this Chapter specified below. These modifications may be approved as part of a Type II design review process.

A. Applicability.

1. This process shall apply to modifications to:

a. Landscaping in OCMC 17.62.050.A;
b. Vehicular Connections to Adjoining Properties in OCMC 17.62.050.B.2;
c. On-site pedestrian circulation in OCMC 17.62.050.C;
d. Utility Undergrounding Requirements in OCMC 16.12.095.G;
e. Building location in OCMC 17.62.055.D;
f. Building Details in OCMC 17.62.050.B.9.055.I;
g. Windows in OCMC 17.62.050.B.10.055.J
h. Parking Lot Landscaping in OCMC 17.52.060.

Applicant's Response:

Applicant requests a modification to standard OCMC 17.62.055.J Windows.

2. Modifications that are denied through Type II design review may be requested as a variance through the Variance process pursuant to OCMC 17.60.020 or Master Plan Adjustment pursuant to OCMC 17.65.070 as applicable.

Applicant's Response

Applicant acknowledges and understands that any modifications denied through the Type II design review may be requested as a variance described in OCMC 17.60.020.

3. Rather than a modification, applicants may choose to apply for a Variance through the Variance process pursuant to OCMC 17.60.020 or Master Plan Adjustment pursuant to OCMC 17.65.070 as applicable.

Applicant's Response:

The OCPW is requesting a variance to the following items:

7.36.040 [F] – Dimensional standards: Minimum required landscaping of 15% of site

17.52.060 – Parking lot landscaping: Fleet parking lot area

17.62.050 [B][1] – Vehicular access and connectivity: Parking stall increase at building façade

See responses provided to OCMC 17.60 Variances.

B. The review body may approve requested modifications if it finds that the applicant has shown that the following approval criteria are met:

1. The modification will result in a development that better meets the applicable design guidelines; and

Applicant's Response:

MODIFICATION I

Zoning Requirement: OCMC 17.62.055.J Windows

J. Windows.

1. The minimum windows requirements are set forth in Table 17.62.055.J. Windows are measured in lineal fashion between 3.5 feet and six feet from the ground. For example, a one hundred foot long building elevation would be required to have at least sixty feet (sixty percent of one hundred feet) of windows in length between the height of 3.5 feet and six feet from the ground.

Table 17.62.055.J Minimum Windows

Use	*Ground Floor: Front and Street Facing Facades*	*Upper floor(s): Front and Street Facing Facades*	*Ground Floor: Side(s) Facades*	*Upper Floor(s): Side(s) Facades*
Non-Multi-Family (or Portions of Buildings Thereof)	*60%*	*10%*	*30%*	*10%*
Multi-Family (or Portions of Buildings Thereof)	*15%*	*15%*	*10%*	*10%*

Applicant's Response:

The applicant requests a modification to the design standard for Minimum windows for the ground floor side(s) facades. The standard, per table 17.62.055.J, requires 30% of the length of the ground floor side(s) facades to be glazed.

The following calculation is used to determine the length of glazing required for 129 ft of facade;

129 lft of side facade x.30 = 38.7 lft of glazing required.

The proposed design provides 35.5 lft (27.5%) of glazing at the west office building façade. The applicant requests a modification to the standard to allow the proposed glazing design. See Glazing Exhibit.

2. *The modification meets the intent of the standard. On balance, the proposal will be consistent with the purpose of the standard for which a modification is requested.*

Applicant's Response:
The proposed design of the west façade meets the intent of the standard for which a modification is being requested. Windows are evenly distributed across the façade providing natural daylight to all occupied spaces along the length of the wall and integrated into the exterior cladding material configuration. The composition of window and door openings provide clear wayfinding to the building entrances along the west building façade.

17.62.030 - When required.

Site plan and design review shall be required for all development of real property in all zones except the low and medium density residential districts, unless otherwise provided for by this title or as a condition of approval of a permit. Site plan and design review shall also apply to all conditional uses, cluster housing developments, multi-family uses, manufactured home parks, and non-residential uses in all zones. Site Plan and Design Review does not apply to activities occurring within the right-of-way except for communication facilities pursuant to OCMC 17.80.

Site plan and design review is required for a change in use between the uses in Table 17.62.030:
Table 17.62.030

Existing Use	*Proposed Use*
Residential	*Nonresidential use, including but not limited to: commercial, office, industrial, retail, or institutional*
Single-family or duplex	*3 or more dwellings*

Site plan and design review shall not alter the type and category of uses permitted in the underlying zoning districts.

The general standards of section 17.62.050 do not apply to 3-4 plex, duplex, single-family attached dwellings, single-family detached residential unit, internal conversions, live/work dwelling and accessory dwelling unit Type I applications.

Applicant's Response:
Applicant acknowledges and understands the proposed development requires a site plan and design review.

17.62.035 - Minor site plan and design review.

This section provides for a Minor Site Plan and Design Review process. Minor Site Plan review is a Type I or Type II decision, as described in OCMC 17.62.035.A., subject to administrative proceedings described

in OCMC 17.50 and may be utilized as the appropriate review process only when authorized by the Community Development Director. The purpose of this type of review is to expedite design review standards for uses and activities that require only a minimal amount of review, typical of minor modifications and/or changes to existing uses or buildings.

A. Type I Minor Site Plan and Design Review.

1. Applicability. Type I applications involve no discretion and are typically processed concurrently with a building permit application. The Type I process is not applicable for:

a. Any activity which is included with or initiates actions that require Type II-IV review.

b. Any increase in square footage of a conditional or nonconforming use (excluding nonconforming structures).

c. Any proposal in which nonconforming upgrades are required under OCMC 17.58.

d. Any proposal in which modifications are proposed under OCMC 17.62.015.

2. The following projects may be processed as a Type I application:

a. Addition of up to two hundred square feet to a commercial, institutional, or multifamily structure in which no increases are required to off-street parking. This includes a new ancillary structure, addition to an existing structure, or new interior space (excluding new drive thru). Increases of more than two hundred square feet in a twelve-month period shall be processed as Type II.

b. Addition of up to one thousand square feet to an industrial use in which no increases are required to off-street parking. This includes a new ancillary structure, addition to an existing structure, or new interior space (excluding ancillary retail and office). Increases of more than one thousand square feet in a twelve-month period shall be processed as Type II.

c. Temporary structures, excluding mobile vendors.

d. Removal, replacement or addition of awnings, or architectural projections to existing structures.

e. Addition, modification, or relocation of refuse enclosure.

f. Changes to amount, location, or design of bicycle parking.

g. Installation of mechanical equipment.

h. Repaving of previously approved parking lots with no change to striping.

i. Replacement of exterior building materials.

j. Addition of windows and doors, relocation of windows and doors in which transparency levels remain unchanged, or removal of windows and doors provided minimum transparency requirements are still met.

k. Addition or alteration of parapets or rooflines.

l. Modification of building entrances.

m. Addition to or alteration of a legal nonconforming single or two-family dwelling.

n. Change to parking lot circulation or layout, excluding driveway modifications.

o. Removal or relocation of vehicle parking stalls provided total parking remains between approved minimum and maximum with no new reductions other than through the downtown parking district.

p. Adoption of shared parking agreements.

q. Changes to landscaping that do not require stormwater quality and quantity treatment under OCMC 13.12.

r. New or changes to existing pedestrian accessways, walkways or plazas.

s. Installation of or alterations to ADA accessibility site elements.

t. Modification or installation of a fence, hedge, or wall, or addition of a fence, hedge or wall.

u. Addition of or alterations to outdoor lighting.

v. Demolition of any structure or portion of a structure
w. Tree removal
x. Type I Master Plan Amendments under OCMC 17.65.080.
y. Mobile food units in one location for five hours or less as identified in OCMC 17.54.115
z. 3-4 plex, duplex, single-family attached dwellings, single-family detached residential unit, internal conversions, live/work dwelling and accessory dwelling unit.
aa. Placement of a single manufactured home within an existing space or lot in a manufactured home park.

3. Submittal Requirements. A Type I application shall include:
a. A narrative describing the project.
b. Site plan drawings showing existing conditions/uses and proposed conditions/uses.
c. Architectural drawings, including building elevations and envelopes, if architectural work is proposed.
d. A completed application form.
e. Any other information determined necessary by the Community Development Director.

B. Type II Minor Site Plan and Design Review.

1. Type II Minor Site Plan and Design Review applies to the following uses and activities unless those uses and activities qualify for Type I review per OCMC 17.62.035.A.:
a. Modification of an office, commercial, industrial, institutional, public or multi-family structure that does not increase the interior usable space (for example covered walkways or entryways, addition of unoccupied features such as clock tower, etc.).
b. Modification to parking lot layout and landscaping, or the addition of up to five parking spaces.
c. A maximum addition of up to one thousand square feet to a commercial, office, institutional, public, multi-family, or industrial building provided that the addition is not more than thirty-five percent of the original building square footage.
d. Mobile food units in OCMC 17.54.115.
e. Other land uses and activities may be added if the Community Development Director makes written findings that the activity/use will not increase off-site impacts and is consistent with the type and/or scale of activities/uses listed above.

2. Application. The application for the Type II Minor Site Plan and Design Review shall contain the following elements:
a. The submittal requirements of OCMC 17.50.
b. A narrative explaining all aspects of the proposal in detail and addressing each of the applicable criteria listed in OCMC 17.62.
c. Site plan drawings showing existing conditions/uses and proposed conditions/uses.
d. Architectural drawings, including building elevations and envelopes, if architectural work is proposed.
e. Additional submittal material may be required by the Community Development Director on a case-by-case basis.

Applicant's Response:

Applicant acknowledges and understands the proposed development will be reviewed under the Type II Minor Site Plan and Design review procedure. Responses to each criterion for a Type II Minor Site Plan and Design review are listed below.

B[1][a] The proposed development will not result in an increase interior useable space.

B[1][b] The proposed development includes the modification of an existing parking lot. The modification will result in the addition of no more than five new parking spaces.

B[1][c] The proposed development will not increase any of the existing building square footage, it will be reduced by the selective demolition proposed.

B[1][d] Not applicable. The proposed development does not include a mobile food unit.

B[1][e] No additional requirements or findings have been received.

The application material submitted meets the requirement of OCMC 17.50 and includes a narrative summarizing the proposed development and addresses each applicable section of OCMC 17.62. Site plan(s), building plans and elevation drawings are included.

17.62.040 – Items required.

A complete application for Site Plan and Design Review shall be submitted. Except as otherwise in subsection I of this section, the application shall include the following:

A. A site plan or plans, to scale, containing the following:

1. *Vicinity information showing streets and access points, pedestrian and bicycle pathways, transit stops and utility locations;*
2. *The site size, dimensions, and zoning, including dimensions and gross area of each lot or parcel and tax lot and assessor map designations for the proposed site and immediately adjoining properties;*
3. *Contour lines at two foot contour intervals for grades zero to ten percent, and five-foot intervals for grades over ten percent;*
4. *The location of natural hazard areas on and within one hundred feet of the boundaries of the site, including:*
   a. *Areas indicated on floodplain maps as being within the one-hundred-year floodplain,*
   b. *Unstable slopes, as defined in OCMC 17.44.020,*
   c. *Areas identified on the seismic conditions map in the comprehensive plan as subject to earthquake and seismic conditions;*
5. *The location of natural resource areas on and within one hundred feet of the boundaries of the site, including fish and wildlife habitat, existing trees (six inches or greater in caliper measured four feet above ground level), wetlands, streams, natural areas, wooded areas, areas of significant trees or vegetation, and areas designated as being within the natural resources overlay district;*
6. *The location of inventoried historic or cultural resources on and within one hundred feet of the boundaries of the site;*
7. *The location, dimensions, and setback distances of all existing permanent structures, improvements and utilities on or within twenty five feet of the site, and the current or proposed uses of the structures;*
8. *The location, dimensions, square footage, building orientation and setback distances of proposed structures, improvements and utilities, and the proposed uses of the structures by square footage;*

9. *The location, dimension and names, as appropriate, of all existing and platted streets, other public ways, sidewalks, bike routes and bikeways, pedestrian/bicycle accessways and other pedestrian and bicycle ways, transit street and facilities, neighborhood activity centers, and easements on and within two hundred fifty feet of the boundaries of the site;*
10. *The location, dimension and names, as appropriate, of all proposed streets, other public ways, sidewalks, bike routes and bikeways, pedestrian/bicycle accessways and other pedestrian and bicycle ways, transit streets and facilities, neighborhood activity centers, and easements on and within two hundred feet of the boundaries of the site;*
11. *All parking, circulation, loading and servicing areas, including the locations of all carpool, vanpool and bicycle parking spaces as required in OCMC 17.52;*
12. *Site access points for automobiles, pedestrians, bicycles and transit;*
13. *On-site pedestrian and bicycle circulation;*
14. *Outdoor common areas proposed as open space;*
15. *Total impervious surface created (including buildings and hard ground surfaces);*
16. *The proposed location, dimensions and materials of fences and walls.*

B. *A landscaping plan, drawn to scale, showing the location and types of existing trees (six inches or greater in caliper measured four feet above ground level) and vegetation proposed to be removed and to be retained on the site, the location and design of landscaped areas, the varieties, sizes and spacings of trees and plant materials to be planted on the site, other pertinent landscape features, and irrigation systems required to maintain plant materials.*
C. *Architectural drawings or sketches, drawn to scale and showing floor plans, elevations accurately reflected to grade, and exterior materials of all proposed structures and other improvements as they will appear on completion of construction. The name of the adjacent street shall be identified on each applicable building elevation.*
D. *An electronic materials board clearly depicting all building materials with specifications as to type, color and texture of exterior materials of proposed structures.*
E. *An erosion/sedimentation control plan, in accordance with the requirements of OCMC 17.47 and the Public Works Erosion and Sediment Control Standards, and a drainage plan developed in accordance with city drainage master plan requirements, OCMC 13.12 and the Public Works Stormwater and Grading Design Standards. The drainage plan shall identify the location of drainage patterns and drainage courses on and within one hundred feet of the boundaries of the site. Where development is proposed within an identified hazard area, these plans shall reflect concerns identified in the hydrological/geological/geotechnical development impact statement.*
F. *An exterior lighting plan, drawn to scale, showing type, height, and area of illumination.*
G. *Archeological Monitoring Recommendation. For all projects that will involve ground disturbance, the applicant shall provide:*
    1. *A letter or email from the Oregon State Historic Preservation Office Archaeological Division indicating the level of recommended archeological monitoring on-site, or demonstrate that the applicant had notified the Oregon State Historic Preservation Office and that the Oregon State Historic Preservation Office had not commented within forty-five days of notification by the applicant; and*
    2. *A letter or email from the applicable tribal cultural resource representative of the Confederated Tribes of the Grand Ronde, Confederated Tribes of the Siletz, Confederated Tribes of the Umatilla, Confederated Tribes of the Warm Springs and the Confederated Tribes of the Yakama Nation indicating the level of recommended archeological monitoring on-site, or demonstrate that the applicant had notified the applicable tribal cultural resource representative and that the applicable tribal cultural resource representative had not commented within forty-five days of notification by the applicant.*

If, after forty-five days' notice from the applicant, the Oregon State Historic Preservation Office or the applicable tribal cultural resource representative fails to provide comment, the City will not require the letter or email as part of the completeness review. For the purpose of this section, ground disturbance is defined as the movement of native soils.

H. Such special studies or reports as the Community Development Director may require to obtain information to ensure that the proposed development does not adversely affect the surrounding community or identified natural resource areas or create hazardous conditions for persons or improvements on the site. The Community Development Director shall require an applicant to submit one or more development impact evaluations as may be necessary to establish that the City's traffic safety or capacity standards, natural resource, including geologic hazard and flood plain overlay districts, will be satisfied.

I. The Community Development Director may waive the submission of information for specific requirements of this section or may require information in addition to that required by a specific provision of this section, as follows:

1. The Community Development Director may waive the submission of information for a specific requirement upon determination either that specific information is not necessary to evaluate the application properly, or that a specific approval standard is not applicable to the application. If submission of information is waived, the Community Development Director shall, in the decision, identify the waived requirements, explain the reasons for the waiver, and state that the waiver may be challenged on appeal and may be denied by a subsequent review authority. If the matter is forwarded to the Planning Commission for initial review, the information required by this paragraph shall be included in the staff report;

2. The Community Development Director may require information in addition to that required by a specific provision of this section upon determination that the information is needed to evaluate the application properly and that the need can be justified on the basis of a special or unforeseen circumstance as necessary to comply with the applicable standards. If additional information is required, the Community Development Director shall, in the decision, explain the reasons for requiring the additional information.

J. One full-sized copy of all architectural and site plans.

Applicant's Response:

All required documentation and materials including site plans, landscape plan, floor plans, building elevations, digital material boards, erosion control plans, and lighting plans are provided within the submitted application. As requested, a full-size copy of all architectural and site plans have been included.

17.62.050 - General Standards

All development shall comply with the following standards:

A. Landscaping.

1. Existing native vegetation is encouraged to be retained to the maximum extent practicable. All plants listed on the Oregon City Nuisance Plant List shall be removed from the site prior to issuance of a final occupancy permit for the building.

Applicant's Response:

Applicant is to retain the maximum extent of native vegetation while removing all nuisance plants. Refer to the landscape plan for the identification of native and nuisance vegetation within the site.

2. *The amount of landscaping required is found in the standards for each underlying zone. Where the underlying zone does not contain and minimum landscaping standard, the minimum site landscaping shall be 15% of the total site area. Except as allowed elsewhere in Title 16 or 17 of this Code, all areas to be credited towards landscaping shall be installed with growing plant materials.*

Applicant's Response:
The project parcel is located within the GI – General Industrial zone, which, requires 15% of the site be landscaped including landscaped parking areas.

Applicant has submitted a variance on this item pursuant to OCMC 17.60.020.

3. *Pursuant to OCMC 17.49, landscaping requirements within the Natural Resource Overlay District, other than landscaping required for parking lots, may be met by preserving, restoring and permanently protecting native vegetation and habitat on development sites.*

Applicant's Response:
The project parcel is not located within a Natural Resource Overlay. Not applicable.

4. *A landscaping plan shall be prepared by a registered landscape architect for new or revised landscaped areas and parking lots. Landscape architect approval is not required for tree removal and/or installation if the species are chosen from an approved street tree list. A certified landscape designer, arborist, or nurseryman shall be acceptable in lieu of a landscape architect for projects with less than five hundred square feet of landscaping. All landscape plans shall include a mix of vertical (trees and shrubs) and horizontal elements (grass, groundcover, etc.) that within three years will cover one hundred percent of the landscape area. Plant species listed on the Oregon City Nuisance Plant list are prohibited and native species are encouraged. No mulch, bark chips, or similar materials shall be allowed at the time of landscape installation except under the canopy of shrubs and within two feet of the base of trees.*

Applicant's Response:
A landscaping plan has been included within the application material. All proposed plantings are selected from the Oregon City approved plating list and include a mix of vertical and horizontal elements that within three years will cover the entire landscape area.

5. *Landscaping shall be visible from public thoroughfares to the extent practicable.*

Applicant's Response:
The proposed landscaping will be visible from public thoroughfares throughout the public street frontage.

6. *The landscaping in parking areas shall not obstruct lines of sight for safe traffic operation and shall comply with all requirements of OCMC 10.32, Traffic Sight Obstructions.*

Applicant's Response:
The proposed and existing landscaping with parking areas is design and will be constructed to not obstruct lines of sight for safe traffic operation and compliance with the requirements of OCMC 10.32 Traffic Sight Obstructions.

B. Vehicular Access and Connectivity.

1. Parking areas shall be located behind the building façade that is closest to the street, below buildings, or on one or both sides of buildings.

Applicant's Response:
Applicant has submitted a variance on this item pursuant to OCMC 17.60.020.

Applicant proposes to retain existing parking located beyond the building façade (south) that is closest to Fir street. The proposed development will remove of one of the three existing driveways serving the project site. Therefore, modification to the existing parking areas located between the office building and street frontage will be made but overall existing site configuration, primary egress to the site, and vehicle and pedestrian circulation patterns will be maintained as is. Maintaining these conditions with the proposed improvements will allow full and efficient use of the site.

See the Pedestrian Circulation Exhibit attached.

2. Existing or future connections to adjacent sites through the use of vehicular and pedestrian access easements which provide connection from the right-of-way to the adjoining property shall be provided.

Applicant's Response:
The proposed development does not have any existing or future connections to adjacent sites that require access easements to from the right-of-way. Not applicable.

3. Parcels larger than three acres shall provide streets as required in OCMC 16.12.

Applicant's Response:
The existing project parcel is approximately 4.79 acres. See responses to OCMC 16.12-Minimum Public Improvements and Design Standards.

4. Parking garage entries shall not be more than half of the streetscape.

Applicant's Response:

The proposed development does not include garage entrances along the streetscape. Not applicable.

C. A well-marked, continuous and protected on-site pedestrian circulation system meeting the following standards shall be provided:

1. Pathways between all building entrances and the street are required. Pathways between the street and buildings fronting on the street shall be direct and not cross a drive aisle. Exceptions may be allowed by the director where steep slopes, a physically constrained site, or protected natural resources prevent a direct connection or where an indirect route would enhance the design and/or use of a common open space.

Applicant's Response:
Clearly defined, continuous and protected pedestrian circulation pathways are provided from the main office building entrance to Fir Street and visitor/staff parking areas. Signage and other wayfinding measures will be used to direct visitors to the main building entrance.

The existing site conditions require that a vehicle drive aisle cross the pedestrian pathway from the main building entrance to the public right of way, therefore, an exception is requested. Multiple pedestrian amenities such as signage, benches, bicycle racks, enhance concrete paving and landscaping are proposed to help alert drivers of potential pedestrians at the crossing.

2. The pedestrian circulation system shall connect all main entrances, parking areas, bicycle parking, recreational areas, common outdoor areas, and any pedestrian amenities on the site. For buildings fronting on the street, the sidewalk may be used to meet this standard.

Applicant's Response:
The proposed development includes a pedestrian plaza that connects the main building entrance to the existing sidewalk located along the project parcels street frontage. The plaza will be the main pedestrian circulation system to the entrance of the office building and include multiple pedestrian amenities such as bicycle parking, bench seating and increased landscape areas and visitor (public) parking. Secondary sidewalks and pathways will provide a pedestrian connection to other parking areas on site.

3. The pedestrian circulation system shall connect the principal building entrance to those of buildings on adjacent sites, except within industrial zoning designations.

Applicant's Response:
The project parcel is located with the GI- General Industrial zone, therefore, pedestrian circulation system is not required between adjacent buildings.

4. Elevated external stairways or walkways shall not extend beyond the building facade except for external stairways or walkways located in, or facing interior courtyard areas that are not visible from the street or a public access easement. This standard does not apply to sky-bridges or sky-ways.

Applicant's Response:
The proposed development does not include external stairways or walkways, therefore, this standard is not applicable.

5. *On-site pedestrian walkways shall be hard surfaced, well drained and at least five feet wide. Surface material shall contrast visually to adjoining surfaces. When bordering parking spaces other than spaces for parallel parking, pedestrian walkways shall be a minimum of seven feet in width unless curb stops are provided. When the pedestrian circulation system is parallel and adjacent to an auto travel lane, the walkway shall be raised or separated from the auto travel lane by a raised curb, bollards, landscaping or other physical barrier. If a raised walkway is used, the ends of the raised portions shall be equipped with curb ramps for each direction of travel. Pedestrian walkways that cross drive isles or other vehicular circulation areas shall utilize a change in textual material or height to alert the driver of the pedestrian crossing area.*

Applicant's Response:
All proposed pedestrian routes are hard surfaced, well drained and at least five feet in width. Where pedestrian routes are along parking spaces curb stops have been provided. The pedestrian walkway along Fir Street is separated from the auto travel land by a raised curb. Existing walkway ramps at driveways along Fir Street will be improved for accessibility and way finding. The pedestrian route from the right of way to the building's main entrance will incorporate enhanced concrete paving, enhanced landscaping, and pedestrian lighting and signage to help alert drivers of the pedestrian crossing area.

D. All development shall maintain continuous compliance with applicable federal, state, and City standards .

Applicant's Response:
The applicant ensures that the proposed development will maintain continuous compliance will applicable federal, state and city standards.

E. Adequate public water and sanitary sewer facilities sufficient to serve the proposed or permitted level of development shall be provided pursuant to OCMC 16.12. The applicant shall demonstrate that adequate facilities and services are presently available or can be made available concurrent with development. Service providers shall be presumed correct in the evidence, which they submit. All facilities shall be designated to City standards as set out in the City's facility master plans and public works design standards. A development may be required to modify or replace existing offsite systems if necessary to provide adequate public facilities. The City may require over sizing of facilities where necessary to meet standards in the City's facility master plan or to allow for the orderly and efficient provision of public facilities and services. Where over sizing is required, the developer may request reimbursement from the City for over sizing based on the City's reimbursement policy and fund availability, or provide for recovery of costs from intervening properties as they develop.

Applicant's Response:

The applicant acknowledges the demonstration of adequate public water and sanitary sewer facilities sufficient for the proposed development.

F. If a transit agency, upon review of an application for an industrial, institutional, retail or office development, recommends that a bus stop, bus turnout lane, bus shelter, accessible bus landing pad, lighting, or transit stop connection be constructed, or that an easement or dedication be provided for one of these uses, consistent with an agency adopted or approved plan at the time of development, the review authority shall require such improvement, using designs supportive of transit use. Improvements at a major transit stop may include intersection or mid-block traffic management improvements to allow for crossings at major transit stops, as identified in the City's Transportation System Plan.

Applicant's Response:
The applicant understands the potential improvements the transit agency may request upon review of the application.

G. Screening of Mechanical Equipment: Commercial, mixed-use, institutional, and multi-family buildings shall include the following measures to screen or block views of mechanical equipment from adjacent streets according to the following requirements.

1. Rooftop mechanical equipment, including HVAC equipment and utility equipment that serves the structure, shall be screened from view from the adjacent street on all new buildings or building additions. Screening shall be accomplished through the use of parapet walls or a sight-obscuring enclosure around the equipment constructed of one of the primary materials used on the primary facades of the structure, and that is an integral part of the building's architectural design. The parapet or screen shall completely surround the rooftop mechanical equipment to an elevation equal to or greater than the highest portion of the rooftop mechanical equipment being screened from adjacent streets, as viewed from the sidewalk or future sidewalk location on the adjacent street at pedestrian level. In the event such parapet wall does not fully screen all rooftop equipment, then the rooftop equipment shall be enclosed by a screen constructed of one of the primary materials used on the primary facade of the building so as to achieve complete screening. Screening requirements do not apply to new or replacement equipment on existing buildings. New or replacement rooftop mechanical equipment on existing buildings shall be painted or powder-coated.

2. Wall-mounted mechanical HVAC and air conditioning equipment, and groups of multiple utility meters shall not be placed on the front facade of a building or on a facade that faces a right-of-way. Wall-mounted mechanical equipment, including–air conditioning and groups of multiple utility meters, that extend six inches or more from the outer building wall shall be screened from view from adjacent streets; from residential, public, and institutional properties; and from public areas of the site or adjacent sites through the use of (a) sight-obscuring enclosures constructed of one of the primary materials used on the primary facade of the structure, (b) sight-obscuring fences, or (c) trees or shrubs that block at least eighty percent of the equipment from view or (d) painting the units to match the building. Wall-mounted mechanical equipment that extends six inches or less from the outer building wall shall be designed to blend in with the color and architectural design of the subject building. Vents which extend six inches or less from the outer building wall shall exempt from this standard if painted.

3. *Ground-mounted above-grade mechanical equipment shall be screened by ornamental fences, screening enclosures, trees, or shrubs that block at least eighty percent of the view from the public right of way.*
4. *This section shall not apply to the installation of solar energy panels, photovoltaic equipment, wind power generating equipment, dishes/antennas, pipes, vents, and chimneys.*

Applicant's Response:

The project proposes to reuse the existing building while modifying / replacing the existing units as needed. Screening is not required as the building is existing.

H. Building Materials.

1. *Prohibited Materials. The following materials shall be prohibited in visible locations from the right-of-way or a public access easement unless an exception is granted by the Community Development Director based on the integration of the material into the overall design of the structure.*
   - *i. Vinyl or plywood siding (including T-111 or similar plywood).*
   - *ii. Glass block or highly tinted, reflected, translucent or mirrored glass (except stained glass) as more than ten percent of the building facade.*
   - *iii. Corrugated fiberglass.*
   - *iv. Chain link fencing (except for temporary purposes such as a construction site, gates for a refuse enclosure, stormwater facilities, when excepted by 17.62.050.H.2.vii, or when located on properties within the General Industrial District).*
   - *v. Crushed colored rock/crushed tumbled glass.*
   - *vi. Non-corrugated and highly reflective sheet metal.*
   - *vii. Tarps, except for the protection of outside storage.*

Applicant's Response:

The proposed development does not include any of the prohibited building materials with exception to chain link fencing. The site is currently partially enclosed by chain link fencing which is to remain with only minor repairs and improvements to be made. Improvements include the installation of vinyl sight obscuring slats to the fencing along the easterly property boundary.

The project parcel is located with the GI- General Industrial zone, therefore, the use of chain link fencing is allowed.

2. *Special Material Standards. The following materials are allowed if they comply with the requirements found below:*
   - *i. Concrete Block. When used for the front façade of any building, concrete blocks shall be split, rock- or ground-faced and shall not be the prominent material of the elevation. Plain concrete block or plain concrete may be used as foundation material if the foundation material is not revealed more than three feet above the finished grade level adjacent to the foundation wall.*
   - *ii. Metal Siding. Metal siding shall have visible corner moldings and trim and incorporate masonry or other similar durable/permanent material near the ground level (first two feet above ground level) except when used for a temporary structure.*

iii. *Exterior insulation and finish system (EIFS) and similar troweled finishes shall be trimmed in wood, masonry, or other approved materials and shall be sheltered from extreme weather by roof overhangs or other methods.*

iv. *Building surfaces shall be maintained in a clean condition and painted surfaces shall be maintained to prevent or repair peeling, blistered or cracking paint.*

v. *Membrane or fabric covered storage areas are permitted as temporary structures, excluding the use of tarps.*

vi. *Vinyl or powder coated chain link fencing is permitted for City-owned stormwater management facilities, reservoirs, and other public works facilities such as pump stations, maintenance yards, and storage yards not located within the General Industrial District.*

vii. *Chain link fencing is permitted in the following circumstances:*

1. *Within City-owned parks and recreational facilities*
2. *On any property when used for a baseball or softball backstop or dugout, track and field facility, or sports court.*

Applicant's Response:

A response for each of the special material standards is provided below. Further information for where these materials are being proposed can be found in the architectural drawings included in the application materials.

Concrete Block; Concrete block is proposed in limited quantities. Small site amenities such as the refuse and recycle enclosure, boot wash station, vehicle wash station will be constructed of concrete block.

Metal Siding; Metal siding is the predominant building cladding material proposed. The existing warehouse building is fully cladded in metal panel and is to remain as is. The renovated office building will be clad utilizing two different metal panel profiles and will be accented by existing concrete walls and other similar materials. The metal paneling will be detailed and constructed to included visible corner modeling and metal trim around wall openings.

Exterior Insulation and Finish System; none proposed

Applicant agrees to maintain and keep the building in a clean condition. All painted surfaces will be maintained to prevent and/or repair peeling, blistering or cracking paint.

Membrane or Fabric covered storage areas; non proposed

The project parcel is located within the GI – General Industrial zone which allows the use of chain link fencing. The site is currently partially enclosed by chain link fencing which is to remain as is with minor repair and improvements to be made. Improvements include the installation of vinyl sight obscuring slats to the fencing along the easterly property boundary. No additional chain link fencing is proposed.

I. Temporary Structures. Temporary structures are permitted pursuant to the following standards:

1. *Structures up to two hundred square feet:*
   - i. *Shall not be on a property for more than three consecutive days; and*
   - ii. *Shall not be on a property more than six times per year; and*
   - iii. *Shall comply with the minimum dimensional standards of the zoning designation; and*
   - iv. *Shall be sited so as to leave the minimum number of parking spaces for the primary uses as required by OCMC 17.52 or as otherwise specified in a land use approval;*
   - v. *Shall not disturb ingress or egress to the site; and*
   - vi. *Shall be exempt from all sections of s OCMC 12.08, 16.12, 17.52 and 17.62 except subsections 17.62.050.I and J.*
2. *Temporary structures larger than two hundred square feet may be permitted up to 2 times per year; and:*
   - i. *Structures larger than two hundred square feet up to eight hundred square feet:*
     - a. *Shall not be on a property for more than thirty consecutive days;*
     - b. *Shall comply with the minimum dimensional standards of the zoning designation;*
     - c. *Shall be sited so as to leave the minimum number of parking spaces for the primary uses as required by OCMC 17.52 or as otherwise specified in a land use approval;*
     - d. *Shall not disturb ingress or egress to the site; and*
     - e. *Shall be exempt from all sections of OCMC 12.08, 16.12, 17.52 and 17.62 except subsections 17.62.050.I and J.*
   - ii. *Structures larger than eight hundred square feet:*
     - a. *Shall not be on a property for more than seven consecutive days;*
     - b. *Shall comply with the minimum dimensional standards of the zoning designation;*
     - c. *Shall be sited so as to leave the minimum number of parking spaces for the primary uses as required by OCMC 17.52 or as otherwise specified in a land use approval;*
     - d. *Shall not disturb ingress or egress to the site; and*
     - e. *Shall be exempt from all sections of OCMC 12.08, 16.12, 17.52 and 17.62 except subsections 17.62.050.I and J.*
3. *Government owned properties are exempt from all sections of OCMC 12.08, 16.12, 17.52 and 17.62 except subsections 17.62.050.H and I and the dimensional standards of the zoning designation.*

J. Development shall comply with requirements of the following Oregon City Municipal Code chapters, as applicable, including but not limited to:

1. *12.04 Streets, Sidewalks and Public Places*
2. *12.08 Public and Street Trees*
3. *13.04 Water Service System*
4. *13.08 Sewer Regulations*
5. *13.12 Stormwater Management*
6. *16.12 Minimum Improvements and Design Standards for Development*
7. *17.20 Residential Design Standards for ADU's, Cluster Housing, Internal Conversions, Live/Work Units, and Manufactured Home Parks*
8. *17.40 Historic Overlay District*
9. *17.41 Tree Protection Standards*
10. *17.42 Flood Management Overlay District*
11. *17.44 Geologic Hazards*

12. *17.47 Erosion and Sediment Control*
13. *17.48 Willamette River Greenway*
14. *17.49 Natural Resource Overlay District*
15. *17.50 Administration and Procedures*
16. *17.52 Off-Street Parking and Loading*
17. *17.54 Supplemental Zoning Regulations and Exceptions*
18. *17.58 Lawful Nonconforming Uses, Structures, and Lots*
19. *17.65 Master Plans and Planned Unit Development*

Applicant's Response:

The proposed development does not include temporary structures, therefore, sections 17.62.050.I.1-2 are not applicable.

17.62.055 –Institutional, office, multi-family, retail, and commercial building standards.

A. *Purpose. The primary objective of the regulations contained in this section is to provide a range of design choices that promote creative, functional, and cohesive development that is compatible with surrounding areas. Buildings approved in compliance with these standards are intended to serve multiple tenants over the life of the building, and are not intended for a one-time occupant. The standards encourage people to spend time in the area, which also provides safety though informal surveillance. Finally, this section is intended to promote the design of an urban environment that is built to human scale by creating buildings and streets that are attractive to pedestrians, create a sense of enclosure, provide activity and interest at the intersection of the public and private spaces, while also accommodating vehicular movement.*

B. *Applicability. This section applies to institutional, office, multi-family, retail and commercial buildings except accessory structures less than one thousand square feet and temporary structures. .*

Applicant's Response:

The applicant understands building standards will apply to the proposed development as it a institutional building.

C. *Conflicts. With the exception of standards for building orientation and building front setbacks, in the event of a conflict between a design standard in this section and a standard or requirement contained in the underlying zoning district, the standard in the zoning district shall prevail.*

Applicant's Response:

Applicant acknowledges and understands hierarchy of standards.

D. *Siting of Structures. On sites with one hundred feet or more of frontage at least sixty percent of the site frontage width shall be occupied by buildings placed within five feet of the property line. For sites with less than one hundred feet of street frontage, at least fifty percent of the site frontage width shall be occupied by buildings placed within five feet of the property. Multi-family developments shall be placed no farther than twenty feet from the front property line. This section does not apply to properties with less than forty feet of frontage.*

A larger front yard setback may be approved through site plan and design review if the setback area incorporates at least one element from the following list for every five feet of increased setback requested:

1. *Tables, benches or other approved seating area.*
2. *Cobbled, patterned or paved stone or enhanced concrete.*
3. *Pedestrian scale lighting.*
4. *Sculpture/public art.*
5. *Fountains/Water feature.*
6. *At least twenty square feet of landscaping or planter boxes for each tenant facade fronting on the activity area.*
7. *Outdoor café.*
8. *Enhanced landscaping or additional landscaping.*
9. *Other elements, as approved by the Community Development Director, that can meet the intent of this section.*

Applicant's Response:
The proposed development will be setback seventy feet from the front property line, therefore, (14) approved elements must be incorporated into the front setback. The proposed pedestrian elements include a combination of the following;

Bike Racks
Benches
Enhanced Concrete
1,020 sf of Landscape Area
Enhanced Landscaping
Flag Pole
Monument Sign
Pedestrian Lighting

E. Building Orientation. All buildings along the street frontage shall face the front most architecturally significant facade toward the street and have a functional primary entrance facing the street. Primary building entrances shall be clearly defined and recessed or framed by a sheltering element such as an awning, arcade or portico in order to provide shelter from the summer sun and winter weather.

Applicant's Response:
The existing office building to be renovated, orientated such that the dominant building façade and main (public) entrance is street facing and oriented to the south. The main entrance is recessed from the primary façade plain and is clearly defined by a sheltering portico. Signage with lighting among other features will be provided to help further define the main entrance of the office building.

F. Entryways. Entrances shall include a doorway and a minimum of four of the following elements:

1. *Display windows;*

Recesses or projections; Peaked roof or raised parapet over the door; Canopy of at least five feet in depth; Porch; Distinct materials; Architectural details such as tile work and moldings; Pedestrian amenities such as benches, planters or planter boxes; Landscape treatments integrating arbors, low walls, trellis work; or Similar elements. Trellises, canopies and fabric awnings may project up to five feet into front setbacks and public rights-of-way, provided that the base is not less than eight feet at the lowest point and no higher than ten feet above the sidewalk.

Applicant's Response:

Each entry way to the office building include a doorway and four design elements. Design elements include relite windows, recesses, metal canopy, landscape planters and other pedestrian amenities.

G. Corner Lots.

For buildings located at the corner of intersections, the primary entrance of the building shall be located at the corner of the building or within twenty-five feet of the corner of the building. Additionally, one of the following treatments shall be required:

1. *Incorporate prominent architectural elements, such as increased building height or massing, cupola, turrets, or pitched roof, at the corner of the building or within twenty-five feet of the corner of the building.*
2. *Chamfer the corner of the building (i.e. cut the corner at a forty-five degree angle and a minimum of ten feet from the corner) and incorporate extended weather protection (arcade or awning), special paving materials, street furnishings, or plantings in the chamfered area.*
3. *Standards 1 and 2 above do not apply to vertically attached 3-4 plexes, multi-family buildings or multi-family portions of residential mixed-use buildings.*

Applicant's Response:

The proposed development is located mid-block, therefore, this section is not applicable.

H. Variation in Massing. For street facing facades greater than 120 feet in length a modulation is required which extends through all floors. Decks and roof overhangs may encroach up to three feet per side into the modulation. The modulation shall meet one of the following dimensional requirements:

1. A minimum depth of two percent of the length of the façade and a minimum width of thirty percent of the length of the façade; or

2. A minimum depth of four percent of the length of the façade and a minimum width of twenty percent of the length of the façade.

Applicant's Response:

The proposed development includes one primary street façade that is approximately 144 feet in length. The proposed variation in massing meets the requirement of a minimum depth of two percent of the length of the façade and a minimum width of thirty percent of the length of the façade. The proposed variation includes a 4 foot modulation depth over 44 feet in length, thus, meeting the variation in massing standard.

The following calculations were used to determine compliance with the standard.

144ft x 2% = 2.88ft min depth required

144ft x 30% = 43.2ft min length required

I. Building Design Elements.

1. *All front and side facades shall provide a design element or architectural feature that add interest and detail such that there are no blank walls of thirty feet in length or more, measured horizontally. Features that can meet this requirement include:*

a. Change in building material or texture;

b. Window or door;

c. *Balcony; or*
d. *Pillar or post*

Applicant's Response:
The applicant would like a modification to the building design standard considering the existing warehouse is to be reused in its entirety with little to no renovation as its function is to remain as a storage warehouse. It is important to mention the warehouse is in a GI district, the exterior finishes, materials and design elements are consistent with all adjacent vernacular buildings. In addition, the warehouse located in the secured back of house portion of the site, it is hidden behind the office building but most importantly away from the public eye. The applicant believes the modification is best not applied as the existing warehouse conditions are to remain in this portion of the development.

Connected to the south of the warehouse [grid line 3], the office portion is to receive a complete renovation on which the applicant agrees should be subject to the building design standards. The east, south [street facing] and west elevations all have been developed with design elements and feature to be complaint whether it be change in color, material, textures, extrusions, recessions, doors, windows, or shading canopies.

2. *Street facing facades shall include additional design features. For every thirty feet of façade length, three of the following elements are required:*
   a. *Decorative materials on more than ten percent of the total wall area (e.g., brick or stonework, shingles, wainscoting, ornamentation, and similar features);*
   b. *Decorative cornice and/or roof line (e.g., for flat roofs);*
   c. *Roof gable;*
   d. *Recessed entry;*
   e. *Covered canopy entry;*
   f. *Cupola or tower;*
   g. *Dormer;*
   h. *Balcony;*
   i. *Pillars or posts;*
   j. *Repeating pattern of building materials;*
   k. *A change in plane of at least two feet in width and six inches in depth;*
   l. *Bay or oriel window; or*
   m. *An alternative feature providing visual relief and detail as approved by the Community Development Director*

Applicant's Response:
The proposed development includes a single primary street facing façade. For every thirty feet of façade length a min of three of the listed design features are incorporated. The design features include a recessed entry, a covered entry canopy, repeating pattern of building materials, and/or a change in plane of at least two feet in width and six inches in depth.

3. Building Detail Variation. Architectural features shall be varied on different buildings within the same development. At least two of the required features on each street-facing elevation shall be distinct from the street-facing elevations of other buildings within the same development.

Applicant's Response:

The proposed development only has a single street-facing elevation in which it meets the design features stated in 17.62.055[I][2]. Not applicable.

J. Windows.

1. The minimum windows requirements are set forth in Table 17.62.055.J. Windows are measured in lineal fashion between 3.5 feet and six feet from the ground. For example, a one hundred foot long building elevation would be required to have at least sixty feet (sixty percent of one hundred feet) of windows in length between the height of 3.5 feet and six feet from the ground.

Table 17.62.055.J Minimum Windows

Use	*Ground Floor: Front and Street Facing Facades*	*Upper floor(s): Front and Street Facing Facades*	*Ground Floor: Side(s) Facades*	*Upper Floor(s): Side(s) Facades*
Non-Multi-Family (or Portions of Buildings Thereof)	*60%*	*10%*	*30%*	*10%*
Multi-Family (or Portions of Buildings Thereof)	*15%*	*15%*	*10%*	*10%*

Applicant's Response:

The applicant requests a modification to the design standard for Minimum windows for the ground floor side(s) facades. The standard, per table 17.62.055.J, requires 30% of the length of the ground floor side(s) facades to be glazed.

The following calculation is used to determine the length of glazing required for 129 ft of facade;

129 lft of side facade x.30 = 38.7 lft of glazing required.

The proposed design provides 35.5 lft (27.5%) of glazing at the west office building façade. The applicant requests a modification to the standard to allow the proposed glazing design. See Glazing Exhibit.

2.Reflective, glazed, mirrored or tinted glass is limited to ten percent of the lineal footage of windows on the street facing facade. Highly reflective or glare-producing glass with a reflective factor of one-quarter or greater is prohibited on all building facades. Any glazing materials shall have a maximum fifteen percent outside visual light reflectivity value. No exception shall be made for reflective glass styles that appear transparent when internally illuminated.

Applicant's Response:

The proposed development does not include the use of reflective, glazed, mirrored or tinted glass, therefore, this standard is not applicable.

3. Side walls that face walkways may include false windows and door openings only when actual doors and windows are not feasible because of the nature of the use of the interior use of the building. False windows located within twenty feet of a right-of-way shall be utilized as display windows with a minimum display depth of thirty-six inches.

Applicant's Response:
The project does not propose any false windows or door openings to any exterior wall.

4. Multi-family windows shall incorporate window trim at least four inches in width when surrounded by horizontal or vertical lap siding.

Applicant's Response:
The proposed development does not include multi-family; therefore, this standard is not applicable.

K. Roof Treatments. The maximum length of any continuous roofline on a street-facing façade shall be seventy-five feet without a cross gable or change in height of at least two feet.

Applicant's Response:
The existing roofline of the industrial warehouse will be re-used. Currently, it is 144'-7" with a single cross gable on center; the existing condition will be maintained.

L. Drive-through facilities shall:
1. Be located at the side or rear of the building.
2. Be designed to maximize queue storage on site.

Applicant's Response:
The proposed development does not include drive-through facilities; therefore, this standard is not applicable.

M. Special development standards along transit streets.
1. Purpose. This section is intended to provide direct and convenient pedestrian access to retail, office and institutional buildings from public sidewalks and transit facilities and to promote pedestrian and transit travel to commercial and institutional facilities.

Applicant's Response:
Fir Street is not designated a transit street, therefore, this standard is not applicable.

2. Applicability. Except as otherwise provide in this section, the requirements of this section shall apply to the construction of new retail, office and institutional buildings which front on a transit street.

Applicant's Response:
Applicant's Response:

Fir Street is not designated a transit street, therefore, this standard is not applicable.

3. Development Standards.

a. All buildings shall have at least one main building entrance oriented towards the transit street. A main building entrance is oriented toward a transit street if it is directly located on the transit street, or if it is linked to the transit street by an on-site pedestrian walkway that does not cross off-street parking or maneuvering areas.

i. If the site has frontage on more than one transit street, or on a transit street and a street intersecting a transit street, the building shall provide one main building entrance oriented to the transit street or to the corner where the two streets intersect.

ii. For building facades over three hundred feet in length on a transit street, two or more main building entrances shall be provided as appropriate and oriented towards the transit street.

Applicant's Response:

Applicant's Response:

Fir Street is not designated a transit street, therefore, this standard is not applicable.

b. In the event a requirement of this section conflicts with other requirements in Title 17, the requirements of this section shall control.

Applicant's Response:

Applicant's Response:

Fir Street is not designated a transit street, therefore, this standard is not applicable.

4. Exemptions. The following permitted uses are exempted from meeting the requirements of subsection 3. of this section:

a. Heavy equipment sales;

b. Motor vehicle service stations, including convenience stores associated therewith; or

c. Solid waste transfer stations.

Applicant's Response:

Applicant's Response:

Fir Street is not designated a transit street, therefore, this standard is not applicable.

17.62.056 - Additional standards for large retail establishments.

Retail building(s) occupying more than ten thousand gross square feet of floor area shall contribute to the establishment or enhancement of community and public spaces by providing at least two of the following:

A. Patio/seating area;

B. Pedestrian plaza with benches;

C. Transportation center;

D. Window shopping walkway;

E. Outdoor playground area;

F. Kiosk area, water feature;
G. Clock tower; or
H. Other such deliberately shaped area and/or a focal feature or amenity that, in the judgment of the appropriate decision maker, adequately enhances such community and public spaces. Any such areas shall have direct access to the public sidewalk network and such features shall not be constructed of materials that are inferior to the principle materials of the building and landscape.

Applicant's Response:

Section 17.62.056 Additional standards for large retail establishments is not applicable. The proposed development does not include retail.

17.62.057 - Multifamily Usable Open Space Requirements

A. Intent. Creating areas of usable open space that are easily accessed by residents provides focal points for community recreation and interaction and adds to the overall quality of life for residents. Given the environmental and recreational benefits of common open space, it should be integrated purposefully into the overall design of a development and not merely be residual areas left over after buildings and parking lots are sited.

B. Open Space Required. All new multi-family developments in all zones shall provide usable open space.

1. In residential zones, each development shall provide a minimum of one hundred square feet of open space per dwelling unit.
2. In non-residential, commercial and mixed-use zones, each development shall provide a minimum of fifty square feet of open space per dwelling unit.
3. Required setback areas shall not count toward the open space requirement unless setback areas are incorporated into spaces that meet all other requirements of this section.
4. Required open space areas may be counted towards both the open space requirements and the minimum landscaping requirements in OCMC 17.62.050.A, if the spaces meet the requirements of both sections.

C. Usable Open Space Types.

1. Common open spaces shall be accessible to all residents of the development and include landscaped courtyards, decks, gardens with pathways, children's play areas, common rooftop decks and terraces, and other multipurpose recreational or green spaces. Common open spaces may be used to meet one hundred percent of the usable open space requirement. Design standards:
a. Minimum dimensions for common open space shall be twelve feet with a minimum size of two hundred square feet for developments with twenty units or less, and twenty feet with a minimum size of four hundred square feet for developments with twenty-one or more units.
b. Common open space shall feature a mix of natural and recreational amenities to make the area more functional and enjoyable for a range of users. Sites with twenty units or less shall provide a minimum of two of the following amenities, and sites with twenty-one units or more shall provide a minimum of three of the following amenities and an additional amenity for every twenty units over forty, rounded up.
1. Landscaping areas.
2. Community gardening areas.
3. Large trees expected to reach over eighteen inches dbh at maturity.
4. Seating.

5. *Pedestrian-scaled lighting.*
6. *Hard-surfaced pedestrian paths in addition to those required for internal pedestrian circulation.*
7. *Paved courtyard or plaza.*
8. *Gazebos or other decorative shelters.*
9. *Play structures for children.*
10. *Sports courts.*
11. *An alternative amenity as approved by the Community Development Director.*

c. *Common open space shall be separated from ground level windows, streets, service areas and parking lots with landscaping, low-level fencing, and/or other treatments as approved by the City that enhance safety and privacy for both the common open space and dwelling units.*

d. *Common open space shall be accessible from the dwelling units and, as appropriate, from public streets and sidewalks. The space shall be oriented to encourage activity from local residents.*

2. *Private open space that is not open to all residents includes balconies, patios, and other outdoor multi-purpose recreational or green spaces. It may be used to meet up to fifty percent of the usable open space requirement.*
   a. *Minimum dimensions for private open space shall be five feet with a minimum size of forty square feet.*
3. *Indoor recreational space may be used to meet up to twenty-five percent of the usable open space requirement provided the space is:*
   a. *Accessible to all dwelling units.*
   b. *Designed for and includes equipment for a recreational use (e.g., exercise, group functions, etc.).*

Applicant's Response:

Section 17.62.057 Multifamily Usable Open Space Requirements is not applicable. The proposed development does not include multifamily uses or multifamily useable open space.

17.62.059 - Cluster housing.

All cluster housing shall comply with the standards in Chapter 17.20.020 in addition to the standards in this chapter.

Applicant's Response:

Section 17.62.059 Cluster Housing is not applicable. The proposed development does not include cluster housing.

17.62.065 - Outdoor lighting.

A. *Purpose. The general purpose of this section is to require outdoor lighting that is adequate for safety and convenience; in scale with the activity to be illuminated and its surroundings; directed to the surface or activity to be illuminated; and designed to clearly render people and objects and contribute to a pleasant nighttime environment. Additional specific purposes are to:*
   1. *Provide safety and personal security as well as convenience and utility in areas of public use or traverse, for uses where there is outdoor public activity during hours of darkness;*
   2. *Control glare and excessive brightness to improve visual performance, allow better visibility with relatively less light, and protect residents from nuisance and discomfort;*
   3. *Control trespass light onto neighboring properties to protect inhabitants from the consequences of stray light shining in inhabitants' eyes or onto neighboring properties;*

4. *Result in cost and energy savings to establishments by carefully directing light at the surface area or activity to be illuminated, using only the amount of light necessary; and*
5. *Control light pollution to minimize the negative effects of misdirected light and recapture views to the night sky.*
6. *Encourage energy efficient lighting with new technologies such as Light Emitting Diodes (LED) or similar to reduce ongoing electrical demand and operating costs.*

B. *Applicability.*
   1. *General.*
      a. *All exterior lighting for any type of commercial, mixed-use, industrial, institutional, or multi-family development shall comply with the standards of this section, unless excepted in subsection B.3.*
      b. *The City Engineer or Public Works Director shall have the authority to enforce these regulations on private property if any outdoor illumination is determined to present an immediate threat to the public health, safety and welfare.*

Applicant's Response:
The applicant acknowledges and understands that all proposed outdoor lighting is subject to the expectations and requirements listed in OCMC 17.62.065.

2. *Lighting Plan Requirement. All commercial, industrial, mixed-use, cottage housing and multi-family developments shall submit a proposed exterior lighting plan. The plan shall be submitted concurrently with the site plan. The exterior lighting plan shall include plans and specifications for streetlights, parking lot lights, and exterior building lights. The specifications shall include details of the pole, fixture height and design, lamp type, wattage, and spacing of lights.*

Applicant's Response:
A lighting plan with specifications on streetlights, parking lot lights and exterior building light fixtures have been included in the application material, see appendix.

3. *Excepted Lighting. The following types of lighting are excepted from the requirements of this section.*
   a. *Residential lighting for single-family attached and detached homes, and duplexes*
   b. *Public street and right-of-way lighting.*
   c. *Temporary decorative seasonal lighting provided that individual lamps have a light output of sixty watts or less.*
   d. *Temporary lighting for emergency or nighttime work and construction.*
   e. *Temporary lighting for theatrical, television, and performance areas, or for special public events.*
   f. *Lighting for a special district, street, or building that, according to an adopted municipal plan or ordinance, is determined to require special lighting aesthetics as part of its physical character.*
   g. *Lighting required and regulated by the Federal Aviation Administration.*

Applicant's Response:
Applicant acknowledges and understands the excepted lighting types, none of which are included in proposed development.

C. Design and Illumination Standards.

1. *Outdoor lighting, if provided, shall be provided in a manner that enhances security, is appropriate for the use, avoids adverse impacts on surrounding properties, and the night sky through appropriate shielding as defined in this section. Glare shall not cause illumination on other properties in excess of a measurement of 0.5 footcandles of light as measured at the property line.*

Applicant's Response:

All proposed site and building lighting are located and will be installed such that adverse impacts on surrounding properties is avoided. A site lighting plan is included and indicates the light levels for proposed lighting. Site lighting is essential to the security and operations of the proposed facility.

2. *Lighting shall be provided in parking lots and vehicular circulation areas.*

Applicant's Response:

The proposed development provides lighting in all parking lots and vehicular circulation areas. These areas are served by pole mounted fixtures or fixtures mounted to the exterior building walls.

3. *Lighting shall be provided in pedestrian walkways, pedestrian plazas, and pedestrian circulation areas.*

Applicant's Response:

The proposed development provides lighting at all pedestrian walkways, pedestrian plazas and pedestrian circulation areas.

4. *Lighting shall be provided at all building entrances.*

Applicant's Response:

The proposed development provides lighting at all building entrances. Lighting will be enhanced at the main entrance to serve as wayfinding for visitors.

5. *With the exception of pedestrian scale lighting, all light sources shall be concealed or shielded with a full cut-off style fixture in order to minimize the potential for glare and unnecessary diffusion on adjacent property.*

Applicant's Response:

All proposed light fixtures include shielding and will be installed such that glare and unnecessary diffusion onto adjacent property is minimized.

6. *The maximum height of any lighting pole serving a multi-family residential use shall be twenty feet. The maximum height serving any other type of use shall be twenty-five feet, except in parking lots larger than five acres, the maximum height shall be thirty-five feet if the pole is located at least one hundred feet from any residential use.*

Applicant's Response:

the proposed development does not include new pole mounted lighting, therefore, this standard is not applicable.

7. *Floodlights shall not be utilized to light all or any portion of a building facade between 10 p.m. and 6 a.m.*

Applicant's Response:
The applicant acknowledges and understands flood lights are to be utilized between 10 a.m. and 6 a.m. only.

8. *Lighting on outdoor canopies shall be fully recessed into the canopy and shall not protrude downward beyond the ceiling of the canopy.*

Applicant's Response:
All proposed lighting at canopies will be fully recessed so that the fixture does not protrude below the ceiling of host canopy.

9. *All outdoor light not necessary for security purposes shall be reduced, activated by motion sensor detectors, or turned off during non-operating hours.*

Applicant's Response:
The applicant understands the requirement and install lighting controls such that all outdoor lighting not necessary for security purposes will be motion activated during non-operating hours.

10. *Light fixtures used to illuminate flags, statues, or any other objects mounted on a pole, pedestal, or platform shall use a narrow cone beam of light that will not extend beyond the illuminated object.*

Applicant's Response:
The proposed project will include an illuminated flagpole and platform sign, both of which shall be illuminated by a narrow cone light fixture that does not extend beyond the subject.

11. *For upward-directed architectural, landscape, and decorative lighting, direct light emissions shall not be visible above the building roofline.*

Applicant's Response:
All proposed architectural, landscape and decorative lighting will be installed such that direct light emissions will not be visible above the roofline of the building.

12. *No flickering or flashing lights shall be permitted, except for temporary decorative seasonal lighting.*

Applicant's Response:
No flickering or flashing light fixtures are proposed as part of this application. Not applicable.

13. *Lighting for outdoor recreational uses such as ball fields, playing fields, tennis courts, and similar uses, are allowed a light post height up to eighty feet in height.*

Applicant's Response:
The proposed development does not include any outdoor recreational uses. Not applicable.

14. *Main building entrances shall be well lighted and visible from any transit street. The minimum lighting level for building entries fronting on a transit street shall be three foot-candles.*

Applicant's Response:

The main building entrance and pedestrian plaza from public right of way will be lit to a minimum lighting level of three foot-candles.

17.62.085 - Refuse and recycling standards for commercial, industrial, office, institutional, and multi-family developments.

The purpose and intent of these provisions is to provide an efficient, safe and convenient refuse and recycling enclosure for the public as well as the local collection firm. All new development, change in property use, expansions or exterior alterations to uses, other than single-family or duplex residences, single-family attached dwellings, 3-4 plexes, internal conversions, or accessory dwelling units (ADUs), shall include a refuse and recycling enclosure. The area(s) shall be:

A. Fully enclosed and visually screened;
B. Located in a manner easily and safely accessible by collection vehicles;
C. Located in a manner so as not to hinder travel lanes, walkways, streets or adjacent properties;
D. On a level, hard surface designed to discharge surface water runoff and avoid ponding;
E. Maintained by the property owner;
F. Used only for purposes of storing solid waste and recyclable materials;
G. Designed in accordance with applicable sections of the Oregon City Municipal Code (including OCMC 8.20—Solid Waste Collection and Disposal) and city adopted policies.

Enclosures are encouraged to be sized appropriately to meet the needs of current and future tenants and designed with sturdy materials which are compatible to the primary structure(s).

Applicant's Response:

The proposed development includes the construction of a new refuse and recycling enclosure. The new refuse and recycling enclosure are to be located within an existing fenced yard and will be fully enclosed and screened from view. The location of the enclosure is compatible with traffic and pedestrian circulation and will be easily accessible by building users and waste management service providers. It is to be on a leveled hard surface able to self-discharge any water runoff. The use of the enclosure will be limited to refuse and recycling material storage and constructed in accordance with applicable sections from OCMC 8.20 Solid Waste Collection and Disposal.

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APPENDIX ITEMS

1 | TREE REMOVAL + MITIGATION PLAN
2 | STORM WATER MANUAL
3 | GEO TECHNICAL ENGINEERING REPORT
4 | EXTERIOR MATERIAL STUDY
5 | PRE APPLICATION CONFERENCE SUMMARY
6 | TRANSPORTATION IMPACT ANALYSIS
7 | PRELIMINARY TITLE REPORT

Thank you

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TERAGAN & ASSOCIATES, INC.
ARBORICULTURAL CONSULTANTS

3/17/2020

Samra Egger
Plan B Consultancy
696 McVey Ave, Suite
Lake Oswego, OR 97034

RE: Tree Protection Plan for Oregon City Operations Complex Development.

Summary

Thirty-six (36) trees were inventoried in preparation for the renovation of 13895 Fir Street. Most of the trees are in good health, with the exception of several European white birch trees *(Betula pendula*) that are in declining health. One mature Douglas-fir (*Pseudotsuga menziesii*) will require tree protection. Fifteen (15) trees greater than 6 inches are recommended for removal to accommodate additional parking on the site.

Assignment

Prepare a tree protection plan for the renovation of 13985 Fir Street, Oregon City, OR 97045 for the City of Oregon City as required by municipal code Chapter 17.41.

Background

Oregon City Public Works will be remodeling the building for their use. Parking is to be expanded along the west and south perimeters to accommodate the city's fleet and office staff parking.

Observations

Stephen Peacock, an Associate of Teragan & Associates, Inc., conducted the inventory on January 13, 2020. Thirty-six (36) trees were observed to been in mostly good condition with the exception of five birch trees. The property has many small stature trees, including multi-stemmed vine maple (*Acer circinatum*) and serviceberry (*Amelanchier alnifolia*). Mr. Peacock inventoried all trees on the property, including trees less than 6 inches to ensure that all trees onsite were captured.

Discussion

Of the 36 trees inventoried, only 18 trees are larger than 6 inches and therefore regulated by the City (Chapter 17.41.060). The renovation of the property will impact trees along the west property line and the south parking lot in order to increase parking spaces on the property.

Renovations along the west property line require the removal of six regulated trees (Table 1). Of these six trees, all but one are in poor condition. Although Tree 21 was marked on the site plans to be protected, the tree is in declining health and is *not recommended to be retained*. All birch trees on the property are in poor health and would not adapt to the impacts caused by construction.

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Tree 21, a 36-inch Douglas-fir is in good health and could be successfully retained (Table 1).

Table 1 West perimeter regulated trees.

Tree No.	Common Name	*Botanical Name*	DBH (in)	Health	Condition	Status
20	Douglas-fir	*Pseudotsuga menziesii*	36	Good	Good	Protect
21	Birch	*Betula pendula*	10	Poor	Poor	Remove
22	Birch	*Betula pendula*	9	Poor	Poor	Remove
23	Birch	*Betula pendula*	12	Poor	Fair	Remove
24	Birch	*Betula pendula*	9	Poor	Fair	Remove
25	Coast pine	*Pinus contorta*	19	Good	Good	Remove
26	Birch	*Betula pendula*	8	Poor	Fair	Remove

The south parking lot along Fir Street will be expanded as part of the renovation. The plaza will be completely removed and renovated as part of the construction. Seven (7) regulated trees will be removed (Table 2). These trees are in good health, but retention will be difficult with the proposed plans.

Table 2 South parking lot regulated trees.

Tree No.	Common Name	*Botanical Name*	DBH (in)	Health	Condition	Status
3	Flowering plum	*Prunus cerasifera*	15	Good	Good	Remove
5	Serviceberry	*Amelanchier alnifolia*	6	Good	Good	Remove
6	Serviceberry	*Amelanchier alnifolia*	6	Good	Good	Remove
8	Serviceberry	*Amelanchier alnifolia*	6	Good	Good	Remove
34	Vine maple	*Acer circinatum*	7	Good	Good	Remove
35	Vine maple	*Acer circinatum*	7	Good	Good	Remove
36	Vine maple	*Acer circinatum*	10	Good	Good	Remove

Recommendations

Based on my observations, and the planned improvements to the site, I recommend the following:

1. **Retain, protect, and manage Tree 20.** See Appendix 4 for tree protection steps and Appendix 5 for protection fencing locations.
    - **a.** Install tree protection fencing around Tree 20 prior to any work on the property. Fencing shall be a minimum of four-feet tall with steel posts no further than ten-feet apart and placed ten-feet out from the dripline.
    - **b.** Prohibit entry inside the tree protection area unless a project arborist is on site.
    - **c.** Adhere to municipal code 17.41.130 for additional tree protection guidelines.
2. **Remove eight (8) regulated trees in the construction zone.**
    a. Remove eight (8) regulated trees that cannot be saved per with the proposed construction.
3. **Remove seven (7) dead and/or dying trees in the construction zone.**
    a. Remove five (5) dead and dying birch trees.
    b. Remove one (1) dying flowering plum.
    c. Remove one (1) dead serviceberry.

d. Dying, diseased and hazardous trees are removed from the tree replacement calculation.

4. **Plant eleven (11) replacement trees in the construction zone.** As required per Mitigation Option 1 requirements.
    a. Trees 5, 6, 8 and 34-36 are between 6-12" DBH and therefore require the planting of one (1) replacement tree each.
    b. Tree 3 is 15" DBH and requires two (2) replacement trees.
    c. Tree 25 is 19" DBH and requires three (3) replacement trees.
    d. These eleven (11) replacement trees are calculated separately from and in addition to any public or street trees.

Conclusions

It will be possible to retain the large Douglas-fir so that it can continue to thrive in its present location. It is not possible to protect Tree 21 due to its declining health and inability to recover from soil disturbance. The planting of eleven replacement trees will meet the requirement of Oregon City code for the new Oregon City Operations Complex.

Sincerely,

Terrence P. Flanagan
ISA Board Certified Master Arborist PN-0120BMTL
ISA Tree Risk Assessment Qualified
Member, American Society of Consulting Arborists

Enclosures

Appendix 1: Certification of Performance
Appendix 2: Assumptions and Limitations Conditions
Appendix 3: Tree Protection Steps
Appendix 4: Tree Inventory
Appendix 5: Site Plan Showing Tree Protection

Appendix 1
Certification of Performance

I, Terrence Flanagan, Certify:

- That a representative of Teragan & Associates, Inc., has inspected the tree(s) and/or the property referred to in this report. The extent of the evaluation is stated in the attached report.
- That Teragan & Associates, Inc. has no current or prospective interest in the vegetation of the property that is the subject of this report, and Teragan & Associates, Inc. has no personal interest or bias with respect to the parties involved.
- That Teragan & Associates, Inc.'s compensation is not contingent upon the reporting of a predetermined conclusion that favors the cause of the client or any other party, or upon the results of the assessment, the attainment of stipulated results, or the occurrence of any subsequent events.
- That the analysis, opinions, and conclusions that were developed as part of this report have been prepared according to commonly accepted arboricultural practices.
- That a Board-Certified Master Arborist has overseen the gathering of data.

Appendix 2
Assumptions and Limiting Conditions

1. Any legal description provided to the consultant is assumed to be correct. Teragan and Associates, Inc. checked the species identification and tree diameters in the field.
2. It is assumed that this property is not in violation of any codes, statutes, ordinances, or other governmental regulations.
3. The consultant is not responsible for information gathered from others involved in various activities pertaining to this project. Care has been taken to obtain information from reliable sources.
4. Loss or alteration of any part of this delivered report invalidates the entire report.
5. Drawings and information contained in this report may not be to scale and are intended to be used as display points of reference only.
6. The consultants' role is only to make recommendations. Inaction on the part of those receiving the report is not the responsibility of the consultant.
7. This report is to certify the trees that are on site, their size and condition and create a tree plan. Tree plan to include the measures necessary to protect trees that are to be retained during the construction process.

Tree No.	Common Name	Botanical Name	DBH* (in)	Condition**	Structure	Comment
1	Flowering plum	*Prunus cerasifera*	13	Good	Good	DBH taken at 3' above ground level.
2	Flowering plum	*Prunus cerasifera*		Good	Good	DBH inaccessible.
3	Flowering plum	*Prunus cerasifera*	15	Good	Good	DBH taken at 2' above ground level.
4	Serviceberry	*Amelanchier alnifolia*	5	Good	Good	
5	Serviceberry	*Amelanchier alnifolia*	6	Good	Good	
6	Serviceberry	*Amelanchier alnifolia*	6	Good	Good	
7	Serviceberry	*Amelanchier alnifolia*	5	Good	Good	
8	Serviceberry	*Amelanchier alnifolia*	6	Good	Good	
9	Serviceberry	*Amelanchier alnifolia*	5	Good	Good	
10	Serviceberry	*Amelanchier alnifolia*	5	Dead	Dead	No new growth present.
11	Serviceberry	*Amelanchier alnifolia*	5	Good	Good	
12	Red maple	*Acer rubrum*	8	Good	Good	
13	Red maple	*Acer rubrum*	6	Good	Fair	Basal wound on SW side.
14	Red maple	*Acer rubrum*	9	Good	Good	
15	Vine maple	*Acer circinatum*	< 6	Good	Good	Muti-stemmed.
16	Vine maple	*Acer circinatum*	< 6	Good	Good	Muti-stemmed.
17	Vine maple	*Acer circinatum*	< 6	Good	Good	Muti-stemmed.
18	Vine maple	*Acer circinatum*	< 6	Good	Fair	Muti-stemmed; two declining leaders.
19	Vine maple	*Acer circinatum*	< 6	Good	Good	Muti-stemmed.
20	Douglas-fir	*Pseudotsuga menziesii*	36	Good	Good	Co-dominant at 12’ and again at 25’.
21	Birch	*Betula pendula*	10	Poor	Poor	DBH taken at 3' 3" above ground level; 75 % dead; declining health; borer damage.
22	Birch	*Betula pendula*	9	Poor	Poor	DBH taken at 3' 6" above ground level; declining health; borer damage.
23	Birch	*Betula pendula*	12	Poor	Fair	DBH taken at 3' above ground level; declining health; borer damage.
24	Birch	*Betula pendula*	9	Poor	Fair	Declining health; borer damage.
25	Coast pine	*Pinus contorta*	19	Good	Good	Co-dominant split at 6.5’.
26	Birch	*Betula pendula*	8	Poor	Fair	Declining health; borer damage.
27	Cherry	*Prunus avium*	< 6	Good	Good	Multi-stemmed.
28	Vine maple	*Acer circinatum*	< 6	Good	Good	Multi-stemmed.
29	Vine maple	*Acer circinatum*	< 6	Good	Good	Multi-stemmed.
30	Vine maple	*Acer circinatum*	< 6	Good	Good	Multi-stemmed.
31	Vine maple	*Acer circinatum*	< 6	Good	Good	Multi-stemmed.
32	Vine maple	*Acer circinatum*	< 6	Good	Good	Multi-stemmed.
33	Flowering plum	*Prunus cerasifera*	5	Very Poor	Poor	Canopy 75 % dead.
34	Vine maple	*Acer circinatum*	7	Good	Good	Multi-stemmed.
35	Vine maple	*Acer circinatum*	7	Good	Good	Multi-stemmed.
36	Vine maple	*Acer circinatum*	10	Good	Good	Multi-stemmed.

* **DBH (Diameter at Breast Height).** The trunk diameter measured at industry standard, 4.5 feet above ground.

** **Condition** and **Structure** ratings range from Good, Fair, Poor, Very Poor, to Dead.

Appendix #4 Tree Protection Steps

It is critical that the following steps be taken to ensure that be retained are protected.

Before Construction Begins

1. **Notify all contractors of the tree protection procedures.** For successful tree protection on a construction site, all contractors must know and understand the goals of tree protection. It can only take one mistake with a misplaced trench or other action to destroy the future of a tree.
    - **a.** Hold a Tree Protection meeting with all contractors to fully explain goals of tree protection.
    - **b.** Have all sub-contractors sign memoranda of understanding regarding the goals of tree protection. Memoranda to include penalty for violating tree protection plan. Penalty to equal appraised value of tree(s) within the violated tree protection zone per the current Trunk Formula Method as outline by the Council of Tree & Landscape Appraisers current edition of the ***Guide for Plant Appraisal***. Penalty is to be paid to owner of the property.
2. **Fencing.**
    - **a.** Establish fencing around each tree or grove of trees to be retained.
    - **b.** The fencing is to be put in place before the ground is cleared in order to protect the trees and the soil around the trees from any disturbance at all.
    - **c.** Fencing is to be placed at the edge of the root protection zone. Root protection zones are to be established by the project arborist based on the needs of the site and the tree to be protected.
    - **d.** Fencing is to consist of 6-foot high steel fencing secured to the ground with 8-foot metal posts to prevent it from being moved by contractors, sagging or falling down OR as required by municipal code.
    - **e.** Fencing is to remain in the position that is established by the project arborist and not to be moved without written permission from the project arborist until the end of the project.
3. **Signage**
    - **a.** a. All tree protection fencing should have signage as follows so that all contractors understand the purpose of the fencing:

VEGETATION/TREE PROTECTION ZONE
DO NOT REMOVE OR ADJUST THIS FENCING**.**
The fence locations are approved to protect vegetation & trees.
NOTE: Moving these fences is a civil violation.

Please contact the Code Enforcement Specialist and project arborist, if alterations to the approved location of the protection fencing are requested.

Project Arborist: TERAGAN & ASSOCIATES, INC 503-697-1975

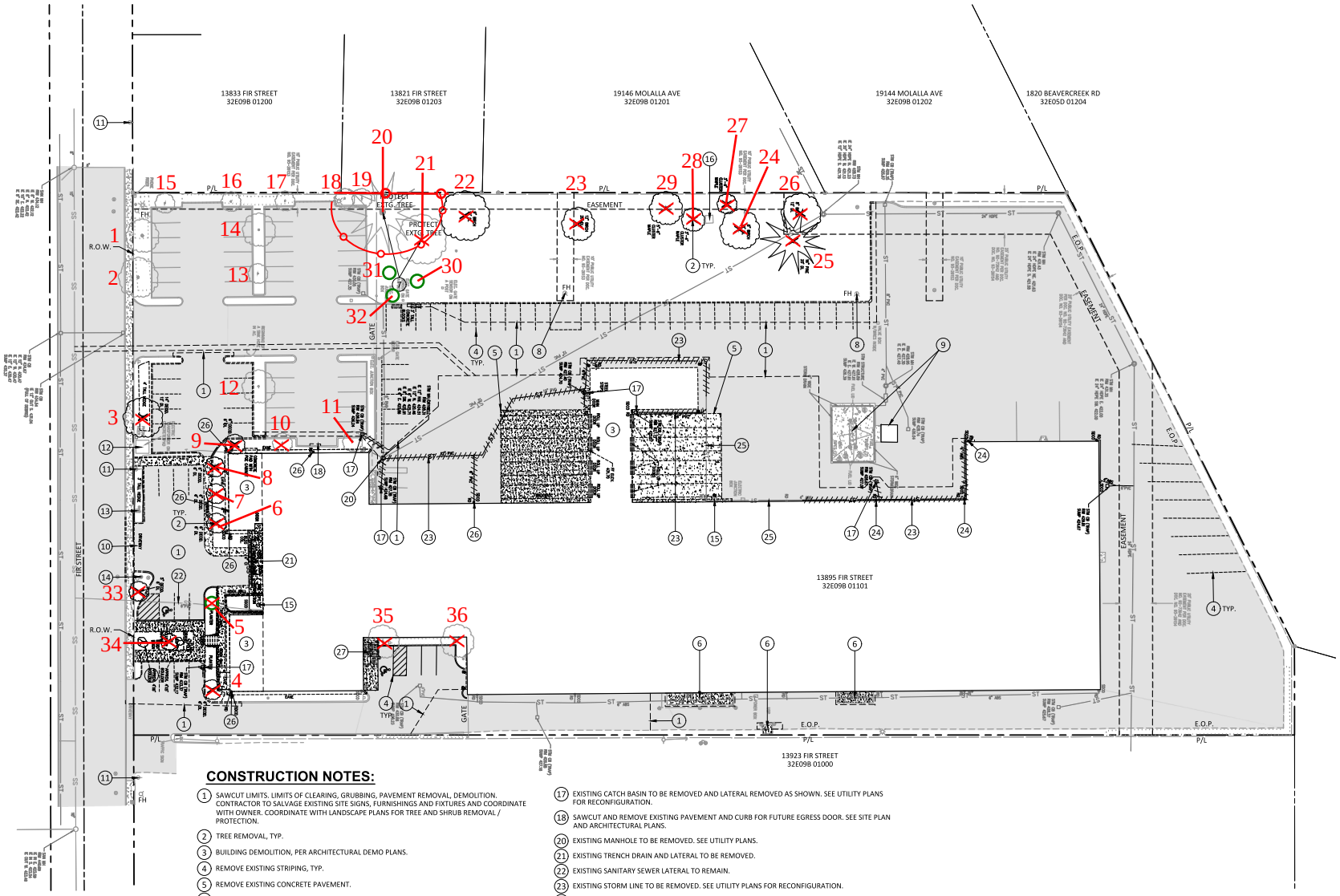
b. Signage should be place as to be visible from all sides of a tree protection area and spaced every 75 feet.

During Construction

1. **Protection guidelines Within the Root Protection Zone**
    - **a.** No traffic shall be allowed within the root protection zone. No vehicle, heavy equipment, or even repeated foot traffic.
    - **b.** No storage of materials including but not limiting to soil, construction material, or waste from the site.
        - **i.** Waste includes but is not limited to concrete wash out, gasoline, diesel, paint, cleaner, thinners, etc.
    - **c.** Construction trailers are not to be parked / placed within the root protection zone without written clearance from project arborist.
    - **d.** No vehicles shall be allowed to park within the root protection areas.
    - **e.** No activity shall be allowed that will cause soil compaction within the root protection zone.
2. **Tree pruning.** The trees shall be protected from any cutting, skinning or breaking of branches, trunks or roots.
3. **Root pruning.** Any roots that are to be cut from existing trees that are to be retained, the project consulting arborist shall be notified to evaluate and oversee the proper cutting of roots with sharp cutting tools. Cut roots are to be immediately covered with soil or mulch to prevent them from drying out.
4. **Grade changes**. No grade change should be allowed within the root protection zone.
5. **Root protection zone changes.** Any necessary deviation of the root protection zone shall be cleared by the project consulting arborist or project owner.
6. **Watering**. Provide water to trees during the summer months. Tree(s) that will have had root system(s) cut back will need supplemental water to overcome the loss of ability to absorb necessary moisture during the summer months.
7. **Utilities**. Any necessary passage of utilities through the root protection zone shall be by means of tunneling under roots by hand digging or boring.

After Construction

1. **Landscaping.** Carefully landscape in the area of the tree. Do not allow trenching within the root protection zone. Carefully plant new plants within the root protection zone. Avoid cutting the roots of the existing trees.
2. **Irrigation**. Do not plan for irrigation within the root protection zone of existing trees unless it is drip irrigation for a specific planting or cleared by the project arborist.
3. **Drainage**. Provide for adequate drainage of the location around the retained trees.
4. **Tree pruning**. Pruning of the trees should be completed as one of the last steps of the landscaping process before the final placement of trees, shrubs, ground covers, mulch or turf.
5. **Pest and disease inspection.** Provide for inspection and treatment of insect and disease populations that are capable of damaging the retained trees and plants.
6. **Fertilization**. Trees that are retained may need to be fertilized as called for by project arborist after final inspection.



CONSTRUCTION NOTES:

1. SAWCUT LIMITS. LIMITS OF CLEARING, GRUBBING, PAVEMENT REMOVAL, DEMOLITION. CONTRACTOR TO SALVAGE EXISTING SITE SIGNS, FURNISHINGS AND FIXTURES AND COORDINATE WITH OWNER. COORDINATE WITH LANDSCAPE PLANS FOR TREE AND SHRUB REMOVAL / PROTECTION.
2. TREE REMOVAL, TYP.
3. BUILDING DEMOLITION, PER ARCHITECTURAL DEMO PLANS.
4. REMOVE EXISTING STRIPING, TYP.
5. REMOVE EXISTING CONCRETE PAVEMENT.
6. EXISTING EQUIPMENT PADS TO BE REMOVED.
7. PROTECT EXISTING TREE TO REMAIN.
8. PROTECT EXISTING FIRE HYDRANT TO REMAIN.
9. PROTECT EXISTING FUELING STATION AND EQUIPMENT TO REMAIN.
10. EXISTING DRIVEWAY TO BE REMOVED AND SIDEWALK RECONSTRUCTED.
11. EXISTING UTILITY POLE TO REMAIN.
12. EXISTING TRANSFORMER TO REMAIN.
13. EXISTING WATER METER TO BE REPLACED, COORDINATE WITH OREGON CITY PUBLICS WORKS STAFF PRIOR TO CONSTRUCTION. SEE UTILITY PLAN.
14. EXISTING FIRE SERVICE TO BE REPLACED. SEE UTILITY PLAN.
15. EXISTING FDC TO BE REMOVED AND REPLACED. SEE UTILITY PLAN AND FIRE PROTECTION PLAN.
16. PROTECT EXISTING WATER VAULT TO REMAIN.
17. EXISTING CATCH BASIN TO BE REMOVED AND LATERAL REMOVED AS SHOWN. SEE UTILITY PLANS FOR RECONFIGURATION.
18. SAWCUT AND REMOVE EXISTING PAVEMENT AND CURB FOR FUTURE EGRESS DOOR. SEE SITE PLAN AND ARCHITECTURAL PLANS.
20. EXISTING MANHOLE TO BE REMOVED. SEE UTILITY PLANS.
21. EXISTING TRENCH DRAIN AND LATERAL TO BE REMOVED.
22. EXISTING SANITARY SEWER LATERAL TO REMAIN.
23. EXISTING STORM LINE TO BE REMOVED. SEE UTILITY PLANS FOR RECONFIGURATION.
24. EXISTING BUILDING ROOF DOWNSPOUT TO BE REROUTED AND OUTFALL TO STORMWATER PLANTER. SEE PLUMBING AND ARCHITECTURAL PLANS.
25. EXISTING STORM LINE TO REMAIN. PROTECT IN PLACE.
26. EXISTING BUILDING ROOF DOWNSPOUT TO BE REROUTED. SEE PLUMBING AND ARCHITECTURAL PLANS.
27. EXISTING EXTERIOR STAIRWAY TO BE REMOVED. SEE ARCHITECTURAL PLANS.

× = Removal
○ = Existing tree
= Tree protection fencing extending 10' outside the dripline.

0 15 30 60
SCALE: 1" = 30'

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THESE DRAWINGS ARE THE ORIGINAL UNPUBLISHED WORK OF THE ARCHITECT AND MAY NOT BE DUPLICATED OR USED WITHOUT THE WRITTEN CONSENT OF THE ARCHITECT.

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NOT FOR CONSTRUCTION

OREGON CITY PUBLIC WORKS

Job Number: 19112

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Drawing:

EXISTING CONDITIONS AND DEMO PLAN

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Geotechnical Engineering Report

Oregon City Public Works
13895 Fir Street
Oregon City, Oregon

Prepared for:
City of Oregon City
122 S Center Street
Oregon City, Oregon

December 4, 2019
PBS Project 73457.000

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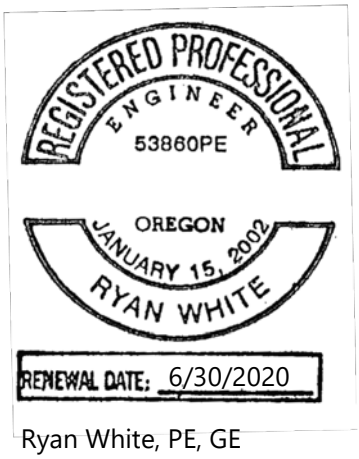
Exp. 7/1/2020

Shaun Cordes, RG, CEG
Project Engineering Geologist



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Appendix A: Field Explorations

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1 INTRODUCTION

1.1 General

This report presents results of PBS Engineering and Environmental Inc. (PBS) geotechnical engineering services for the proposed facility addition to the existing structures located at 13895 Fir Street in Oregon City, Oregon (site). The general site location is shown on the Vicinity Map, Figure 1. The locations of PBS' explorations in relation to existing and proposed site features are shown on the Site Plan, Figure 2.

1.2 Purpose and Scope

The purpose of PBS' services was to develop geotechnical design and construction recommendations in support of the planned facility addition. This was accomplished by performing the following scope of services.

1.2.1 Literature and Records Review

PBS reviewed various published geologic maps of the area for information regarding geologic conditions and hazards at or near the site.

1.2.2 Subsurface Explorations

Six borings were advanced to depths ranging from approximately 11.5 to 25 feet below the existing ground surface (bgs) within the development footprint. The borings were logged and representative soil samples collected by a member of the PBS geotechnical engineering staff. The approximate boring locations are shown on the Site Plan, Figure 2. The interpreted boring logs are presented as Figures A1 through A6 in Appendix A, Field Explorations.

1.2.3 Field Infiltration Testing

Cased-hole, falling-head field infiltration tests were completed in borings B-2 and B-4 within the proposed development at a depth of 5 feet bgs. Infiltration testing was monitored by PBS geotechnical engineering staff.

1.2.4 Soils Testing

Soil samples were returned to our laboratory and classified in general accordance with the Unified Soil Classification System (ASTM D2487) and/or the Visual-Manual Procedure (ASTM D2488). Laboratory tests included natural moisture contents, grain-size analyses, and Atterberg limits. Laboratory test results are included in the exploration logs in Appendix A, Field Explorations; and in Appendix B, Laboratory Testing.

1.2.5 Geotechnical Engineering Analysis

Data collected during the subsurface exploration, literature research, and testing were used to develop site-specific geotechnical design parameters and construction recommendations.

1.2.6 Report Preparation

This Geotechnical Engineering Report summarizes the results of our explorations, testing, and analyses, including information relating to the following:

- Field exploration logs and site plan showing approximate exploration locations
- Laboratory test results
- Infiltration test results
- Groundwater considerations
- Seismic site hazard study that includes:
    - Discussion of geologic and seismic hazards impacting the site
    - Location of nearby faults

  - Evaluation of liquefaction potential
- Shallow foundation design recommendations:
  - Minimum embedment
  - Allowable bearing pressure
  - Estimated settlement (total and differential)
  - Sliding coefficient
- Earthwork and grading, cut, and fill recommendations:
  - Structural fill materials and preparation, and reuse of on-site soils
  - Wet weather considerations
  - Utility trench excavation and backfill requirements
  - Temporary and permanent slope inclinations
- Seismic design criteria in accordance with the 2019 Oregon Structural Specialty Code (OSSC)
- Slab and pavement subgrade preparation recommendations
- Recommended asphalt concrete (AC) pavement sections

1.3 Project Understanding

PBS understands that the City of Oregon City Public Works Division intends to construct a new office building and parking areas at the currently developed, 8.4-acre site located along Fir Street. Construction of the new office building will include demolition of the existing office, including the southern section of the existing structure, and other modifications to the existing warehouse. The new office building will be a two-story, presumably wood-framed structure, with a first-floor footprint of approximately 10,000 square feet. Upgrades to the existing development will include new structures to create covered parking areas west of the existing facility, new drive lanes, reconfiguration of parking areas, and stormwater facilities. Currently, the project plans are in the preliminary stages of design. We encourage the design team to consult PBS when project plans are finalized.

2 SITE CONDITIONS

2.1 Surface Description

The site is located in Oregon City above the Willamette River on a relatively flat plateau. The site is bordered to the south by Fir Street, and to the north, east, and west by commercial properties. Review of available LiDAR data indicates the site elevation ranges from 430 feet above mean sea level (amsl) at the northern end of the lot and 433 feet amsl at the southern end of the lot near Fir Street (DOGAMI, 2019a).

2.2 Geologic Setting

The site is located on a plateau adjacent to the Willamette River water gap that separates the Portland Basin from the Willamette Valley. The Portland Basin and Willamette Valley form a tectonic depression within the physiographic province of the Puget-Willamette Lowland that separates the Cascade Range from the Coast Range, and extends from the Puget Sound to Eugene, Oregon (Yeats et al., 1996). The Puget-Willamette Lowland is situated along the Cascadia Subduction Zone (CSZ) where oceanic rocks of the Juan de Fuca Plate are subducting beneath the North American Plate, resulting in deformation and uplift of the Coast Range and volcanism in the Cascade Range (Figure 3). Northwest-trending faults accommodating clockwise rotation of the North American Plate are found throughout the Puget-Willamette lowland (USGS, 2006).

Basement rocks beneath the site and the highlands surrounding the Willamette River water gap consist of Miocene age volcanic rocks of the Columbia River Basalt Group overlain by younger Miocene to Pliocene age

sedimentary rocks of the Troutdale Formation, and ultimately Pliocene age Boring volcanic field rocks (Madin, 2009; O'Connor et al., 2001). The Columbia River Basalt Group originated as massive flood basalts flowing westward toward the Pacific Ocean from volcanic vents in eastern Oregon and Washington (Madin, 2009). These flood basalts were subsequently buried by Troutdale Formation sediments associated with westward draining ancestral river systems. Younger basalt flows of the Boring volcanic field make up the upper most sequence of bedrock and the modern-day plateau surface now occupied by the city of Oregon City.

The site is mapped as underlain by Pliocene age basalt of Canemah, a sub member of the Boring volcanic field rocks (Madin, 2009). These rocks are described as dark gray, medium-grained diktytaxitic olivine basalt. Exposed outcrops within the vicinity are massive, with well-developed crude columns measuring 1.5 to 5 feet across. Weathering of the basalt produces accumulations of red clay that extend from the surface to roughly 20 feet bgs. From cross sections in the area and associated well logs in the vicinity, we anticipate that this basalt persists to depths of roughly 180 feet bgs.

2.3 Subsurface Conditions

The site was explored by drilling six borings, designated B-1 through B-6, to depths of 11.5 to 24.75 feet bgs. The drilling was performed by Holt Services, Inc., of Vancouver, Washington, using a truck-mounted CME-75 drill rig and mud-rotary drilling techniques.

PBS has summarized the subsurface units as follows:

ASPHALT and BASE ROCK:	Asphalt concrete (AC) and base rock was encountered in borings B-1 through B-6. The AC and base rock section thicknesses ranged from 3 to 12 inches and 2 to 15 inches, respectively.
FILL:	Fill composed of lean clay and fine, rounded gravel (pea gravel) was encountered just below the asphalt and base rock in boring B-6, extending to a depth of greater than 15 feet bgs. The fill was soft/loose to medium stiff with SPT N-values of 3 to 6.
CLAY (CL and CH), SANDY CLAY (CL) and CLAY with SAND (CL):	Clay was encountered just below the base rock in borings B-1 through B-5 and ranged from lean clay (CL) to sandy lean clay (CL), as well as fat clay (CH). The clay was generally red to orange and reddish brown with medium plasticity and contained fine to coarse sand. These clays were medium stiff to stiff, with SPT N-values ranging from 5 to 13.
WEATHERED BEDROCK:	Preserved bedrock fabric was observed in B-2, B-3, B-4, and B-5 beneath the clay and sandy clay. The bedrock was severely weathered to the point that it could be described as a soil and classified as lean clay (CL), fat clay (CH), sandy lean clay (CL), clayey sand (SC), and silty sand (SM). These materials varied from low to medium plasticity with colors varying from red, orange, brown, purple, and gray. These materials generally increased in sand and stiffness with depth from medium stiff/loose to very stiff/medium dense, with SPT N-values ranging from 8 to 24. These materials often appeared as interbedded due to the degree of differential weathering.
BASALT BEDROCK:	Hard (R4) basalt bedrock was encountered beneath the clayey sand and silty sand in B-4 and B-5 at a depth of approximately 24 feet bgs.

2.4 Groundwater

Static groundwater was encountered during our explorations at a depth of approximately 8 feet bgs. Please note that groundwater levels can fluctuate during the year depending on climate, irrigation season, extended periods of precipitation, drought, and other factors.

2.5 Infiltration Testing

PBS completed a cased-hole, falling head infiltration test in borings B-2 and B-4 at a depth of 5 feet bgs. The infiltration tests were conducted within the 6.25-inch inside diameter, hollow-stem auger used to drill the borings. The auger was filled with water to achieve a minimum 1-foot-high column of water. After a period of saturation, the height of the water column in the pipe was then measured initially and at regular, timed intervals. Results of our field infiltration testing are presented in Table 1.

Table 1. Infiltration Test Results

Test Location	Depth (feet bgs)	Field Measured Infiltration Rate (in/hr)	Soil Classification
B-2	5	0	FAT CLAY (CH)
B-4	5	0.75	SANDY CLAY (CL)

The infiltration rates listed in Table 1 are not permeabilities/hydraulic conductivities, but field-measured rates and do not include correction factors related to long-term infiltration rates. We recommend the designer include correction factors to account for the expected level of maintenance, type of system, and sediment control. Field-measured infiltration rates are typically reduced by a minimum factor of 2 to 4 for use in design.

Soil types can vary significantly over relatively short distances. The infiltration rates noted above are representative of one discrete location and depth. Installation of infiltration systems within the layer the field rate was measured is considered critical to proper performance of the systems.

3 GEOLOGIC HAZARDS

Geologic and seismic hazards are defined as conditions associated with the geologic and seismic environment that could influence existing and/or proposed improvements. Geologic and seismic hazards that could affect the site's development are identified below and should be considered during the planning process.

3.1 Seismicity and Faulting

3.1.1 Historical Seismicity

Regional historical seismicity information was acquired from the Advanced National Seismic System (ANSS) Comprehensive Catalog, hosted by the Northern California Earthquake Data Center (NCEDC), and is presented on Figure 6. These data include earthquakes with magnitudes exceeding M 2.5, within a 150-km radius of the city of Oak Grove, Oregon, and recorded between 1963 and 2017 (NCEDC, 2017). Magnitudes within the ANSS dataset are recorded as local magnitude, surface-wave magnitude, body-wave magnitude, moment magnitude, and magnitude of completeness.

The most significant historic earthquake within the Portland region occurred on March 25, 1993, approximately 40 km south of the site, producing a M 5.6 earthquake known as the Scotts Mills earthquake. The Scotts Mills earthquake is one of the largest historical earthquakes observed in the region and caused damage to structures as far as Salem and Yamhill, Oregon (Wong et al., 1993).

3.1.1.1 Seismic Sources

Several types of seismic sources exist in the Pacific Northwest, which are outlined below. Volcanic sources beneath the Cascade Range are not considered further in this study. Cascade Range earthquakes rarely exceed about M 5.0 in size and are believed be far enough removed to not pose a threat to the site.

3.1.1.2 Cascadia Subduction Zone (CSZ) – Interface Earthquakes

The CSZ represents the boundary between the subducting Juan de Fuca tectonic plate and the overriding North American tectonic plate (Figure 3). Recurrence intervals for subduction zone earthquakes are based on studies of the geologic record, with studies estimating a recurrence interval between 500 to 530 years (Goldfinger et al., 2012). Geologic evidence and written records from Japan suggest the most recent earthquake occurred in January 1700. The 1700 earthquake probably ruptured much of the approximate 620-mile (1,000 km) length of the CSZ and was estimated at moment magnitudes of M_W 9.0. The horizontal distance from the edge of the CSZ megathrust is located approximately 135 miles (220 km) from Oregon City, Oregon, and the depth to slab is an estimated at less than 50 km (USGS, 2019; Hayes, 2018). The current US Geological Survey risk-based maximum credible earthquake for CSZ megathrust is M_W 9.0±0.2 (USGS, 2008).

3.1.1.3 Intraslab Earthquakes

Intraslab earthquakes occur within the subducting slab. They are problematic in the sense that they do not have a surface expression or rupture the ground surface and their seismicity generates deformation along many faults within the slab (Kirby et al., 2002). The CSZ has generated significant intraslab destructive earthquakes including the 2001 M_W 6.8 Nisqually earthquake in the Puget lowland. The estimated depth to the subducting Juan de Fuca plate under Portland is less than 50 km (Blair et al., 2011). Therefore, intraslab earthquakes are a seismic hazard that must be considered.

3.1.2 Crustal Earthquakes and Faults

At least 55 faults or fault zones are present in northwest Oregon and southwest Washington. Studies of small earthquakes in the region indicate most crustal earthquake activity is occurring at depths of 10 to 20 km (Yelin and Patton, 1991).

Review of the Oregon Statewide Geohazard Viewer (HazVu) indicates the site is located within close proximity (less than 25 km) to several active faults (DOGAMI, 2019; USGS, 2019; Figure 7). These faults include the Oatfield fault (approximately 5.6 km north), Portland Hills fault (approximately 5.7 km northeast), Damascas-Tickle fault zone (approximately 6.8 km northeast), Canby-Molalla fault (approximately 8.4 km south-southwest), East Bank fault (approximately 13.5 km north), and the Beaverton fault zone (approximately 23.7 km northwest).

The fault zones within 25 km of the site are listed in Table 2.

Table 2. Faults within the Site Vicinity

Fault Zone Name	Proximity to Site (Surface Projection in km)	USGS Fault Number
Oatfield fault	<4	No. 875
Portland Hills fault	5.5	No. 877
Damascas-Tickle fault zone	6.8	No. 879
Canby-Molalla fault	8.4	No. 716
Grant Butte fault	17.1	No. 878
East Bank fault	20	No. 876
Beaverton fault zone	23.7	No. 715

3.1.3 Seismic Hazards

Other site-specific seismic hazards considered include earthquake-induced landslides, fault rupture, liquefaction and lateral spreading, and earthquake shaking. Based on the flat surface topography and geology at the site, the risk from landslides and earthquake-induced landslides is low. The site is within close proximity to one local fault (approximately 0.5 km); therefore, the risk of fault rupture is low but not absent. Due to the location of the site, the risk of seiche and tsunami inundation is absent. Review of Oregon HazVu indicates the site is located within a zone of non-liquefiable soils; therefore, the risk of liquefaction and lateral spreading is low (Mabey et al., 1997). Severe earthquake ground shaking will occur during a code-based seismic event on the CSZ as well as from local faults. Based on our current project understanding, our opinion is that effects of earthquake ground motions can be accounted for by using code-based design procedures and the code-based design response spectrum.

3.1.3.1 Liquefaction and Lateral Spreading

Liquefaction is defined as a decrease in the shear resistance of loose, saturated, cohesionless soil (e.g., sand) or low plasticity silt soils, due to the buildup of excess pore pressures generated during an earthquake. This results in a temporary transformation of the soil deposit into a viscous fluid. Liquefaction can result in ground settlement, foundation bearing capacity failure, and lateral spreading of ground.

Based on a review of the Oregon Statewide Geohazard Viewer (HazVu), the site is not located in a mapped liquefaction hazard area. This is consistent with subsurface conditions encountered in our explorations.

4 CONCLUSIONS AND RECOMMENDATIONS

4.1 Geotechnical Design Considerations

Shallow subsurface conditions at the site consist predominantly of clay. Based on our observations and analyses, conventional foundation support on shallow spread footings is feasible for the proposed new building. Excavation with conventional equipment is feasible at the site.

Soft to medium stiff clay and loose, fine, gravel fill was encountered to a depth of 15 feet bgs in boring B-6. Due to the presence of fine gravel at a depth of 13 feet, there was concern this may represent a utility trench and the boring was terminated. However, this condition may not be limited to a trench, and the lateral extent of the fill is currently unknown. Footings located in this area should not be supported on undocumented fill. Unsuitable soils should be removed and backfilled with compacted structural fill and these subgrades should be evaluated by PBS prior to pouring footings.

The grading and final development plans for the project had not been completed when this report was prepared. Once completed, PBS should be engaged to review the project plans and update our recommendations as necessary.

4.2 Shallow Foundations

Shallow spread footings bearing on native medium stiff or to stiff clay may be used to support loads associated with the proposed development, provided the recommendations in this report are followed. Footings should not be supported on undocumented fill.

4.2.1 Minimum Footing Widths / Design Bearing Pressure

Continuous wall and isolated spread footings should be at least 18 and 24 inches wide, respectively. Footings should be sized using a maximum allowable bearing pressure of 2,500 pounds per square foot (psf). This is a net bearing pressure and the weight of the footing and overlying backfill can be disregarded in calculating footing sizes. The recommended allowable bearing pressure applies to the total of dead plus long-term live loads. Allowable bearing pressures may be increased by one-third for seismic and wind loads.

Footings will settle in response to column and wall loads. Based on our evaluation of the subsurface conditions and our analysis, we estimate post-construction settlement will be less than 1 inch for the column and perimeter foundation loads. Differential settlement will be on the order of one-half of the total settlement.

4.2.2 Footing Embedment Depths

PBS recommends that all footings be founded a minimum of 18 inches below the lowest adjacent grade. The footings should be founded below an imaginary line projecting upward at a 1H:1V (horizontal to vertical) slope from the base of any adjacent, parallel utility trenches or deeper excavations.

4.2.3 Footing Preparation

Excavations for footings should be carefully prepared to a neat and undisturbed state. A representative from PBS should confirm suitable bearing conditions and evaluate all exposed footing subgrades. Observations should also confirm that loose or soft materials have been removed from new footing excavations and concrete slab-on-grade areas. Localized deepening of footing excavations may be required to penetrate soft, loose, wet, or deleterious materials.

PBS recommends a layer of compacted, crushed rock be placed over the footing subgrades to help protect them from disturbance due to foot traffic and the elements. The footing subgrade should be in a dense or stiff condition prior to pouring concrete. Based on our experience, approximately 4 inches of compacted crushed rock will be suitable beneath the footings.

4.2.4 Lateral Resistance

Lateral loads can be resisted by passive earth pressure on the sides of footings and grade beams, and by friction at the base of the footings. A passive earth pressure of 250 pounds per cubic foot (pcf) may be used for footings confined by native soils and new structural fills. The allowable passive pressure has been reduced by a factor of two to account for the large amount of deformation required to mobilize full passive resistance. Adjacent floor slabs, pavements, or the upper 12-inch depth of adjacent unpaved areas should not be considered when calculating passive resistance. For footings supported on native soils or new structural fills, use a coefficient of friction equal to 0.35 when calculating resistance to sliding. These values do not include a factor of safety (FS).

4.3 Floor Slabs

Satisfactory subgrade support for building floor slabs can be obtained from the native clay or structural fill subgrades prepared in accordance with our recommendations presented in the Site Preparation, Wet/Freezing Weather and Wet Soil Conditions, and Select Granular Fill sections of this report. A minimum 6-inch-thick layer of imported granular material should be placed and compacted over the prepared subgrade. Thicker aggregate sections may be necessary where undocumented fill is present, soft/loose soils are present at subgrade elevation, and/or during wet conditions. Imported granular material should be composed of crushed rock or crushed gravel that is relatively well graded between coarse and fine, contains no deleterious materials, has a maximum particle size of 1 inch, and has less than 5 percent by dry weight passing the US Standard No. 200 Sieve.

Floor slabs supported on a subgrade and base course prepared in accordance with the preceding recommendations may be designed using a modulus of subgrade reaction (k) of 100 pounds per cubic inch (pci).

4.4 Seismic Design Considerations

4.4.1 Code-Based Seismic Design Parameters

The current seismic design criteria for this project are based on the 2019 Oregon Structural Specialty Code (OSSC). Based on subsurface conditions encountered in our explorations, Site Class C is appropriate for use in design. The seismic design criteria, in accordance with the 2019 OSSC, are summarized in Table 3.

Table 3. 2019 OSSC Seismic Design Parameters

Parameter	Short Period	1 Second
Maximum Credible Earthquake Spectral Acceleration	S_s = 0.80 g	S_1 = 0.36 g
Site Class	C	
Site Coefficient	F_a = 1.2	F_v = 1.5
Adjusted Spectral Acceleration	S_{MS} = 0.96 g	S_{M1} = 0.55 g
Design Spectral Response Acceleration Parameters	S_{DS} = 0.64 g	S_{D1} = 0.36 g

g= Acceleration due to gravity

4.5 Temporary and Permanent Slopes

All temporary cut slopes should be excavated with a smooth-bucket excavator, with the slope surface repaired if disturbed. In addition, upslope surface runoff should be rerouted to not run down the face of the slopes. Equipment should not be allowed to induce vibration or infiltrate water above the slopes, and no surcharges are allowed within 15 feet of the slope crest.

4.5.1 Erosion Control

Permanent cut and fill slopes up to 10 feet high can be inclined at 2H:1V in medium stiff to stiff clay or compacted structural fill. If slow seepage is present, use of a rock blanket or a suitably revegetated, reinforced erosion control blanket may be required. PBS should be consulted if seepage is present; additional erosion control measures, such as additional drainage elements, and/or flatter slopes, may also be required. Exposed soils that are soft or loose may also require these measures. Fill slopes should be over-built and cut back into compacted structural fill at the design inclination using a smooth-bucket excavator. Erosion control is critical to maintaining slopes.

4.6 Ground Moisture

4.6.1 General

The perimeter ground surface and hard-scape should be sloped to drain away from all structures and away from adjacent slopes. Gutters should be tight-lined to a suitable discharge and maintained as free-flowing. All crawl spaces should be adequately ventilated and sloped to drain to a suitable, exterior discharge.

4.6.2 Perimeter Footing Drains

Due to the relatively low permeability of site soils and the potential for shallow or perched groundwater at the site, we recommend perimeter foundation drains be installed around all proposed structures.

The foundation subdrainage system should include a minimum 4-inch diameter perforated pipe in a drain rock envelope. A non-woven geotextile filter fabric, such as Mirafi 140N or equivalent, should be used to completely wrap the drain rock envelope, separating it from the native soil and footing backfill materials. The invert of the perimeter drain lines should be placed approximately at the bottom of footing elevation. Also, the subdrainage system should be sealed at the ground surface. The perforated subdrainage pipe should be laid to drain by gravity into a non-perforated solid pipe and finally connected to the site drainage stem at a suitable location. Water from downspouts and surface water should be independently collected and routed to a storm sewer or other positive outlet. This water must not be allowed to enter the bearing soils.

4.6.3 Vapor Flow Retarder

A continuous, impervious barrier must be installed over the ground surface under slabs of all structures. Barriers should be installed per the manufacturer's recommendations.

4.7 Existing Pavement

The roadway pavement consists of AC over crushed aggregate base course. The measured section thicknesses are provided in Table 4.

Table 4. Existing Pavement Section Approximate Thicknesses

Exploration Boring	AC (in)	Base Course (in)
B-1	6	6
B-2	3	15
B-3	12	2
B-4	12	6
B-5	8	4
B-6	8	10

4.8 Pavement Design

Depending on the extent of site improvements and the condition of the existing AC pavement, considering the existing pavement section thickness (except at B-2), it may be possible for the pavement to remain in place.

The provided pavement recommendations were developed based on our experience with similar developments and references the associated Oregon Department of Transportation (ODOT) specifications for construction. The minimum pavement section thickness can be updated to reflect site-specific traffic data if it is available.

The minimum recommended pavement section thicknesses are provided in Table 5. Depending on weather conditions at the time of construction, a thicker aggregate base course section could be required to support construction traffic during preparation and placement of the pavement section.

Table 5. Minimum AC Pavement Sections

Traffic Loading	AC (inches)	Base Course (inches)	Subgrade
Pull-in Car Parking Only	3.5	12	Stiff subgrade as verified by PBS personnel*
Drive Lanes and Access Roads	5	12	

* Subgrade must pass proofroll

The asphalt cement binder should be selected following ODOT SS 00744.11 – Asphalt Cement and Additives. The AC should consist of ½-inch hot mix asphalt concrete (HMAC) with a maximum lift thickness of 3 inches. The AC should conform to ODOT SS 00744.13 and 00744.14 and be compacted to 91 percent of the maximum theoretical density (Rice value) of the mix, as determined in accordance with ASTM D2041.

Heavy construction traffic on new pavements or partial pavement sections (such as base course over the prepared subgrade) will likely exceed the design loads and could potentially damage or shorten the pavement life; therefore, we recommend construction traffic not be allowed on new pavements, or that the contractor take appropriate precautions to protect the subgrade and pavement during construction.

If construction traffic is to be allowed on newly constructed road sections, an allowance for this additional traffic will need to be made in the design pavement section.

5 CONSTRUCTION RECOMMENDATIONS

5.1 Site Preparation

Construction of the proposed structure will involve clearing and grubbing of the existing vegetation or demolition of possible existing structures. Demolition should include removal of existing pavement, utilities, etc., throughout the proposed new development. Underground utility lines or other abandoned structural elements should also be removed. The voids resulting from removal of foundations or loose soil in utility lines should be backfilled with compacted structural fill. The base of these excavations should be excavated to firm native subgrade before filling, with sides sloped at a minimum of 1H:1V to allow for uniform compaction. Materials generated during demolition should be transported off site or stockpiled in areas designated by the owner's representative.

5.1.1 Dry Weather Conditions

Clay soils should be covered within 4 hours of exposure by a minimum of 4 inches of crushed rock or plastic sheeting during the dry season. Exposure of these materials should be coordinated with the geotechnical engineer so that the subgrade suitability can be evaluated prior to being covered.

5.1.2 Proofrolling/Subgrade Verification

Following site preparation and prior to placing aggregate base over shallow foundation, floor slab, and pavement subgrades, the exposed subgrade should be evaluated either by proofrolling or another method of subgrade verification. The subgrade should be proofrolled with a fully loaded dump truck or similar heavy, rubber-tire construction equipment to identify unsuitable areas. If evaluation of the subgrades occurs during wet conditions, or if proofrolling the subgrades will result in disturbance, they should be evaluated by PBS

using a steel foundation probe. We recommend that PBS be retained to observe the proofrolling and perform the subgrade verifications. Unsuitable areas identified during the field evaluation should be compacted to a firm condition or be excavated and replaced with structural fill.

5.1.3 Wet/Freezing Weather and Wet Soil Conditions

Due to the presence of fine-grained silt and sands in the near-surface materials at the site, construction equipment may have difficulty operating on the near-surface soils when the moisture content of the surface soil is more than a few percentage points above the optimum moisture required for compaction. Soils disturbed during site preparation activities, or unsuitable areas identified during proofrolling or probing, should be removed and replaced with compacted structural fill.

Site earthwork and subgrade preparation should not be completed during freezing conditions, except for mass excavation to the subgrade design elevations.

Protection of the subgrade is the responsibility of the contractor. Construction of granular haul roads to the project site entrance may help reduce further damage to the pavement and disturbance of site soils. The actual thickness of haul roads and staging areas should be based on the contractors' approach to site development, and the amount and type of construction traffic. The imported granular material should be placed in one lift over the prepared undisturbed subgrade and compacted using a smooth-drum, non-vibratory roller. A geotextile fabric should be used to separate the subgrade from the imported granular material in areas of repeated construction traffic. The geotextile should meet the specifications of ODOT SS Section 02320.10 and SS 02320.20, Table 02320-1 for soil separation. The geotextile should be installed in conformance with ODOT SS 00350.00 – Geosynthetic Installation.

5.2 Excavation

The near-surface soils at the site can be excavated with conventional earthwork equipment. Sloughing and caving should be anticipated. All excavations should be made in accordance with applicable Occupational Safety and Health Administration (OSHA) and state regulations. The contractor is solely responsible for adherence to the OSHA requirements. Trench cuts should stand relatively vertical to a depth of approximately 4 feet bgs, provided no groundwater seepage is present in the trench walls. Open excavation techniques may be used provided the excavation is configured in accordance with the OSHA requirements, groundwater seepage is not present, and with the understanding that some sloughing may occur. Trenches/excavations should be flattened if sloughing occurs or seepage is present. Use of a trench shield or other approved temporary shoring is recommended if vertical walls are desired for cuts deeper than 4 feet bgs. If dewatering is used, we recommend that the type and design of the dewatering system be the responsibility of the contractor, who is in the best position to choose systems that fit the overall plan of operation.

5.3 Structural Fill

The extent of site grading is currently unknown; however, PBS estimates that cuts and fills will be on the order of up to 2 feet. Structural fill should be placed over subgrade that has been prepared in conformance with the Site Preparation and Wet/Freezing Weather and Wet Soil Conditions sections of this report. Structural fill material should consist of relatively well-graded soil, or an approved rock product that is free of organic material and debris, and contains particles not greater than 4 inches nominal dimension.

The suitability of soil for use as compacted structural fill will depend on the gradation and moisture content of the soil when it is placed. As the amount of fines (material finer than the US Standard No. 200 Sieve) increases, soil becomes increasingly sensitive to small changes in moisture content and compaction becomes more difficult to achieve. Soils containing more than about 5 percent fines cannot consistently be compacted to a

dense, non-yielding condition when the water content is significantly greater (or significantly less) than optimum.

5.3.1 On-Site Soil

On-site soils encountered in our explorations are generally suitable for placement as structural fill during warm, dry weather when moisture contents can be maintained by air drying and/or addition of water. Due to the moderate to high plasticity of clay soils encountered at the site, reuse of on-site soil as structural fill may not be economically feasible. Several days of frequent mixing during dry, sunny weather could be required to moisture condition site soils to near optimum moisture for compaction. The fine-grained fraction of the site soils are moisture sensitive, and during wet weather, may become unworkable because of excess moisture content. The material should be placed in lifts with a maximum uncompacted thickness of approximately 8 inches and compacted to at least 92 percent of the maximum dry density, as determined by ASTM D1557 (modified proctor).

5.3.2 Borrow Material

Borrow material for general structural fill construction should meet the requirements set forth in ODOT SS 00330.12 – Borrow Material. When used as structural fill, borrow material should be placed in lifts with a maximum uncompacted thickness of approximately 8 inches and compacted to not less than 92 percent of the maximum dry density, as determined by ASTM D1557.

5.3.3 Select Granular Fill

Selected granular backfill used during periods of wet weather for structural fill construction should meet the specifications provided in ODOT SS 00330.14 – Selected Granular Backfill. The imported granular material should be uniformly moisture conditioned to within about 2 percent of the optimum moisture content and compacted in relatively thin lifts using suitable mechanical compaction equipment. Selected granular backfill should be placed in lifts with a maximum uncompacted thickness of 8 to 12 inches and be compacted to not less than 95 percent of the maximum dry density, as determined by ASTM D1557.

5.3.4 Crushed Aggregate Base

Crushed aggregate base course below floor slabs, spread footings, and asphalt concrete pavements should be clean crushed rock or crushed gravel that contains no deleterious materials and meets the specifications provided in ODOT SS 02630.10 – Dense-Graded Aggregate, and has less than 5 percent by dry weight passing the US Standard No. 200 Sieve. The crushed aggregate base course should be placed in lifts with a maximum uncompacted thickness of 8 to 12 inches and be compacted to at least 95 percent of the maximum dry density, as determined by ASTM D1557.

5.3.5 Utility Trench Backfill

Pipe bedding placed to uniformly support the barrel of pipe should meet specifications provided in ODOT SS 00405.12 – Pipe Zone Bedding. The pipe zone that extends from the top of the bedding to at least 8 inches above utility lines should consist of material prescribed by ODOT SS 00405.13 – Pipe Zone Material. The pipe zone material should be compacted to at least 90 percent of the maximum dry density, as determined by ASTM D1557, or as required by the pipe manufacturer.

Under pavements, paths, slabs, or beneath building pads, the remainder of the trench backfill should consist of well-graded granular material with less than 10 percent by dry weight passing the US Standard No. 200 Sieve, and should meet standards prescribed by ODOT SS 00405.14 – Trench Backfill, Class B or D. This material should be compacted to at least 92 percent of the maximum dry density, as determined by ASTM D1557 or as required by the pipe manufacturer. The upper 2 feet of the trench backfill should be compacted to at least 95

percent of the maximum dry density, as determined by ASTM D1557. Controlled low-strength material (CLSM), ODOT SS 00405.14 – Trench Backfill, Class E, can be used as an alternative.

Outside of structural improvement areas (e.g., pavements, sidewalks, or building pads), trench material placed above the pipe zone may consist of general structural fill materials that are free of organics and meet ODOT SS 00405.14 – Trench Backfill, Class A. This general trench backfill should be compacted to at least 90 percent of the maximum dry density, as determined by ASTM D1557, or as required by the pipe manufacturer or local jurisdictions.

5.3.6 Stabilization Material

Stabilization rock should consist of pit or quarry run rock that is well-graded, angular, crushed rock consisting of 4- or 6-inch-minus material with less than 5 percent passing the US Standard No. 4 Sieve. The material should be free of organic matter and other deleterious material. ODOT SS 00330.16 – Stone Embankment Material can be used as a general specification for this material with the stipulation of limiting the maximum size to 6 inches.

6 ADDITIONAL SERVICES AND CONSTRUCTION OBSERVATIONS

In most cases, other services beyond completion of a final geotechnical engineering report are necessary or desirable to complete the project. Occasionally, conditions or circumstances arise that require additional work that was not anticipated when the geotechnical report was written. PBS offers a range of environmental, geological, geotechnical, and construction services to suit the varying needs of our clients.

PBS should be retained to review the plans and specifications for this project before they are finalized. Such a review allows us to verify that our recommendations and concerns have been adequately addressed in the design.

Satisfactory earthwork performance depends on the quality of construction. Sufficient observation of the contractor's activities is a key part of determining that the work is completed in accordance with the construction drawings and specifications. We recommend that PBS be retained to observe general excavation, stripping, fill placement, footing subgrades, and/or pile installation. Subsurface conditions observed during construction should be compared with those encountered during the subsurface explorations. Recognition of changed conditions requires experience; therefore, qualified personnel should visit the site with sufficient frequency to detect whether subsurface conditions change significantly from those anticipated.

7 LIMITATIONS

This report has been prepared for the exclusive use of the addressee, and their architects and engineers, for aiding in the design and construction of the proposed development and is not to be relied upon by other parties. It is not to be photographed, photocopied, or similarly reproduced, in total or in part, without express written consent of the client and PBS. It is the addressee's responsibility to provide this report to the appropriate design professionals, building officials, and contractors to ensure correct implementation of the recommendations.

The opinions, comments, and conclusions presented in this report are based upon information derived from our literature review, field explorations, laboratory testing, and engineering analyses. It is possible that soil, rock, or groundwater conditions could vary between or beyond the points explored. If soil, rock, or groundwater conditions are encountered during construction that differ from those described herein, the client is responsible for ensuring that PBS is notified immediately so that we may reevaluate the recommendations of this report.

Unanticipated fill, soil and rock conditions, and seasonal soil moisture and groundwater variations are commonly encountered and cannot be fully determined by merely taking soil samples or completing explorations such as soil borings. Such variations may result in changes to our recommendations and may require additional funds for expenses to attain a properly constructed project; therefore, we recommend a contingency fund to accommodate such potential extra costs.

The scope of work for this subsurface exploration and geotechnical report did not include environmental assessments or evaluations regarding the presence or absence of wetlands or hazardous substances in the soil, surface water, or groundwater at this site.

If there is a substantial lapse of time between the submission of this report and the start of work at the site, if conditions have changed due to natural causes or construction operations at or adjacent to the site, or if the basic project scheme is significantly modified from that assumed, this report should be reviewed to determine the applicability of the conclusions and recommendations presented herein. Land use, site conditions (both on and off site), or other factors may change over time and could materially affect our findings; therefore, this report should not be relied upon after three years from its issue, or in the event that the site conditions change.

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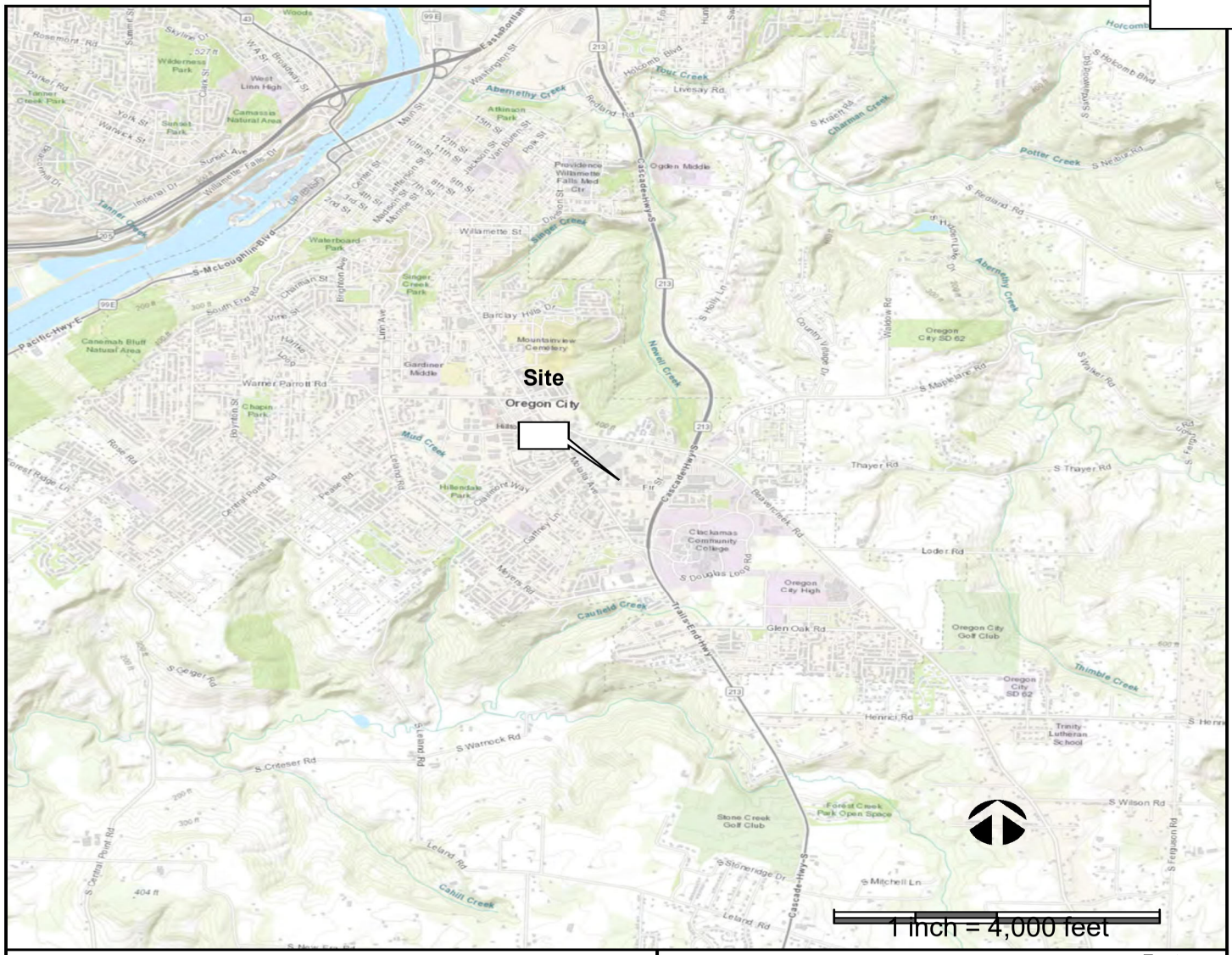
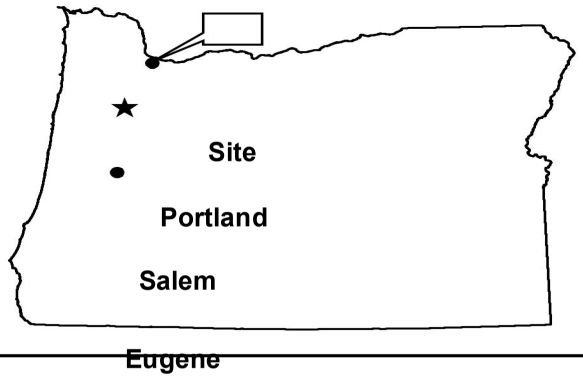
Figures





VICINITY MAP

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OREGON CITY, OREGON

DATE: DEC 2019 PROJECT: 73457.000

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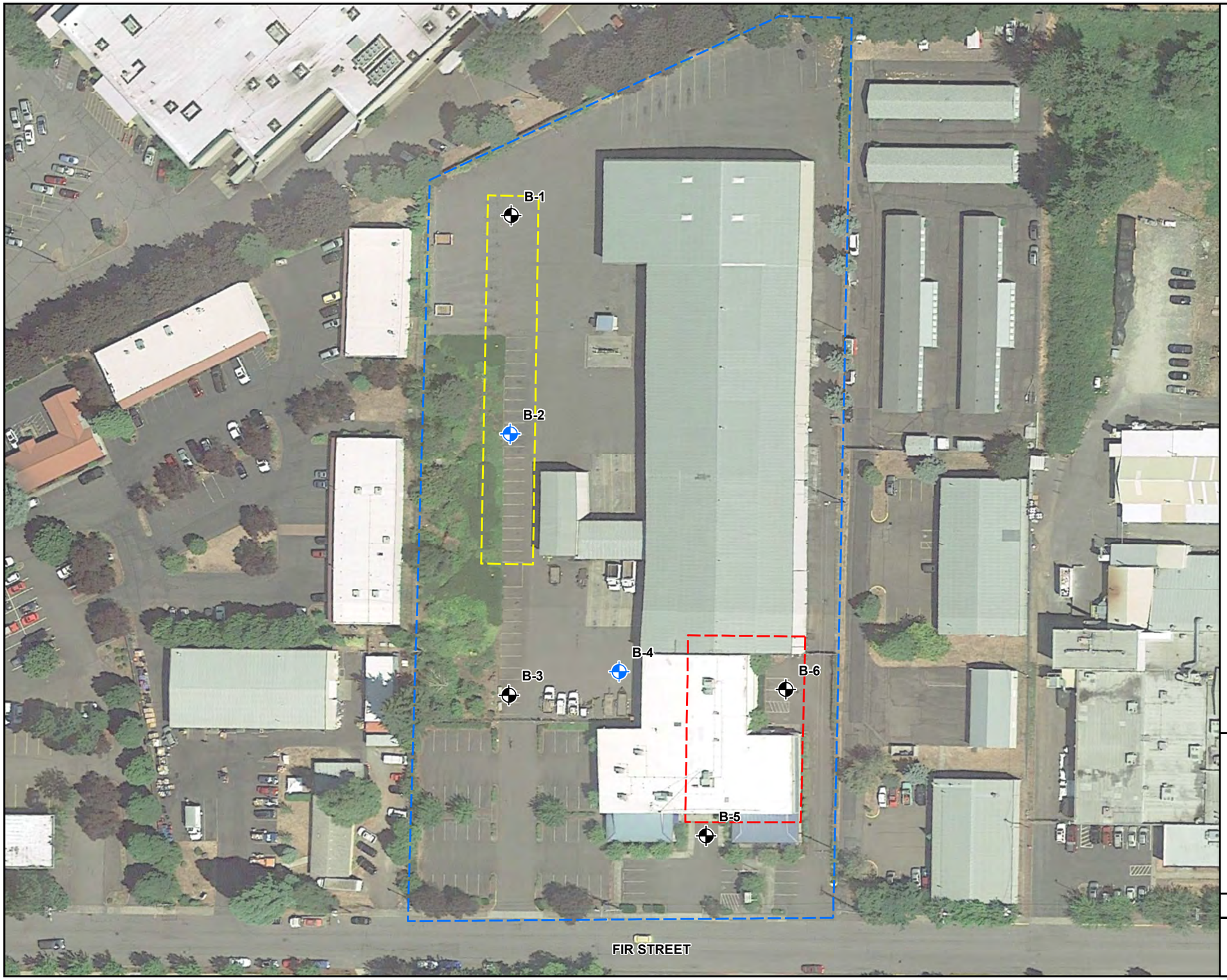

EXPLANATION

- B-1 - Boring name and approximate location
- B-2 - Boring name and approximate location with infiltration test
- Proposed Building
- Proposed covered parking
- Approximate site boundary

1 inch = 75 feet

0 37.5 75 Feet 150

SITE PLAN

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PBS

FIGURE
2

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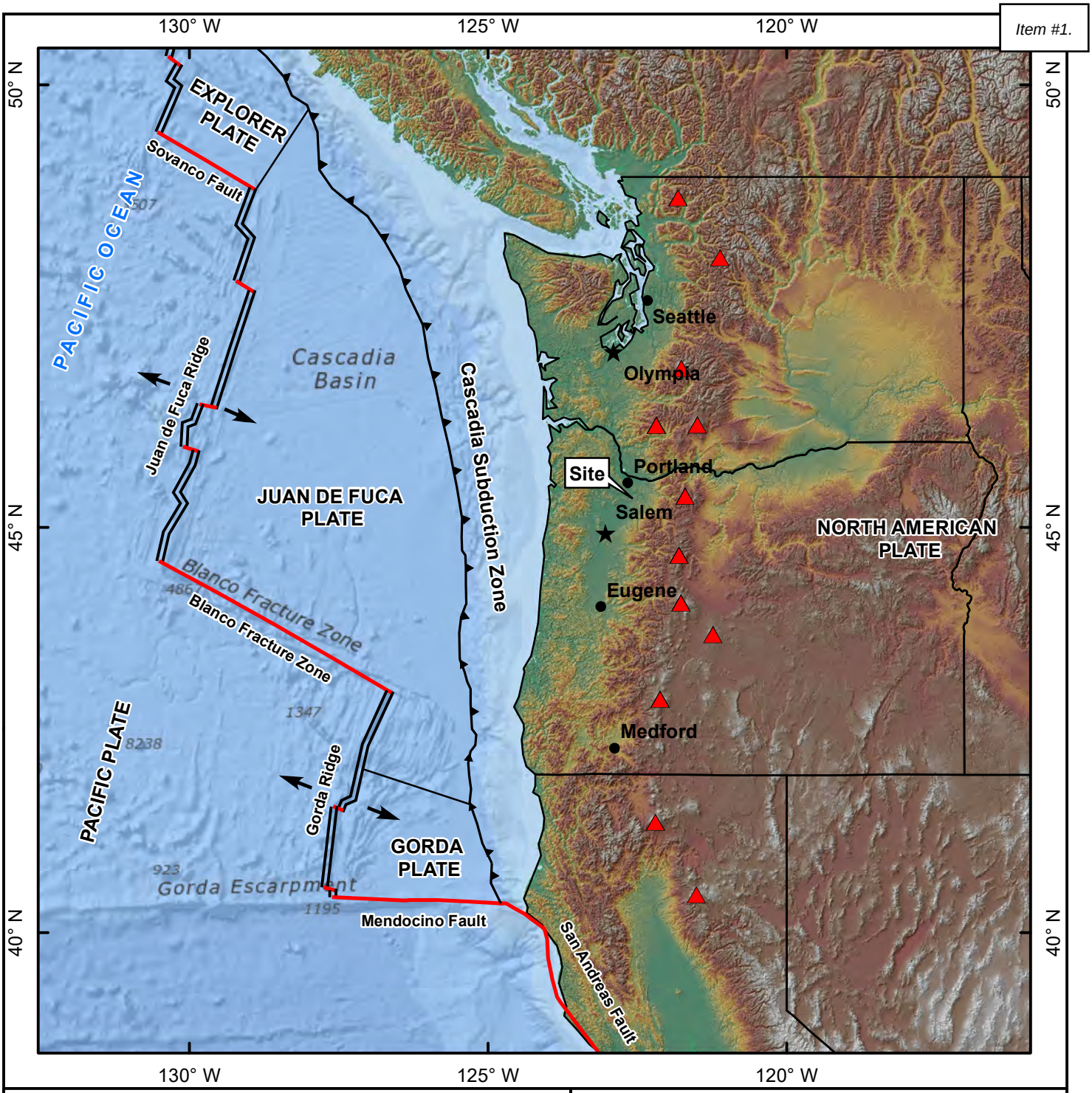

EXPLANATION

- Volcano
- Transform boundary
- Spreading ridge
- Thrust fault

Sources:
1) SRTM 30-meter DEM
2) ESRI World Oceans Basemap
3) USGS Tectonic Plate Boundaries

TECTONIC SETTING OF THE PACIFIC NORTHWEST

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FIGURE
3

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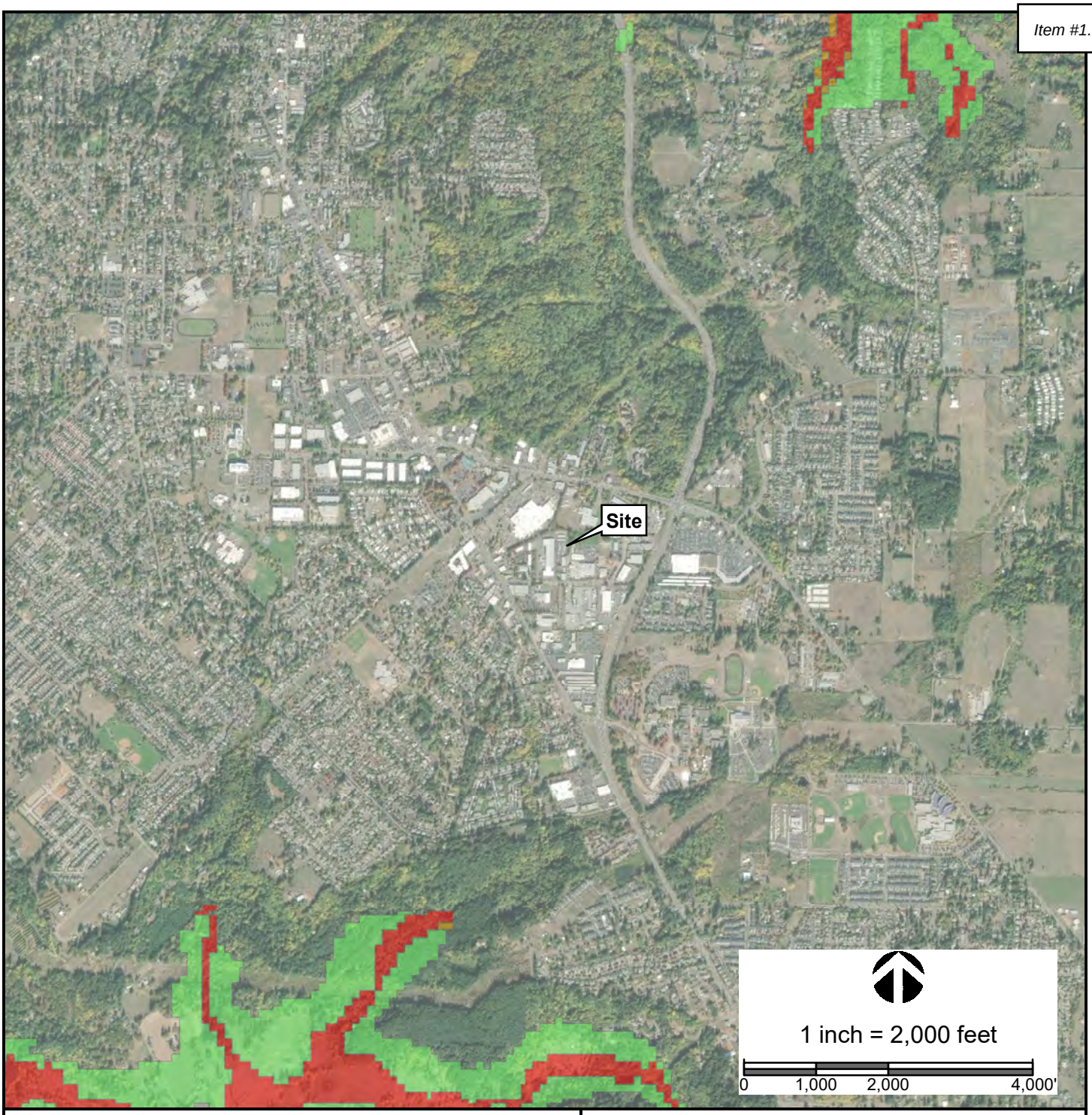

EXPLANATION

- Liquefaction susceptibility: Moderate to high
- Liquefaction susceptibility: Very low to low
- Liquefaction susceptibility: Very low
- Liquefaction susceptibility: Bedrock

Sources: Mabey et al. (1997) DOGAMI IMS-01

LIQUEFACTION SUSCEPTIBILITY MAP

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FIGURE
5

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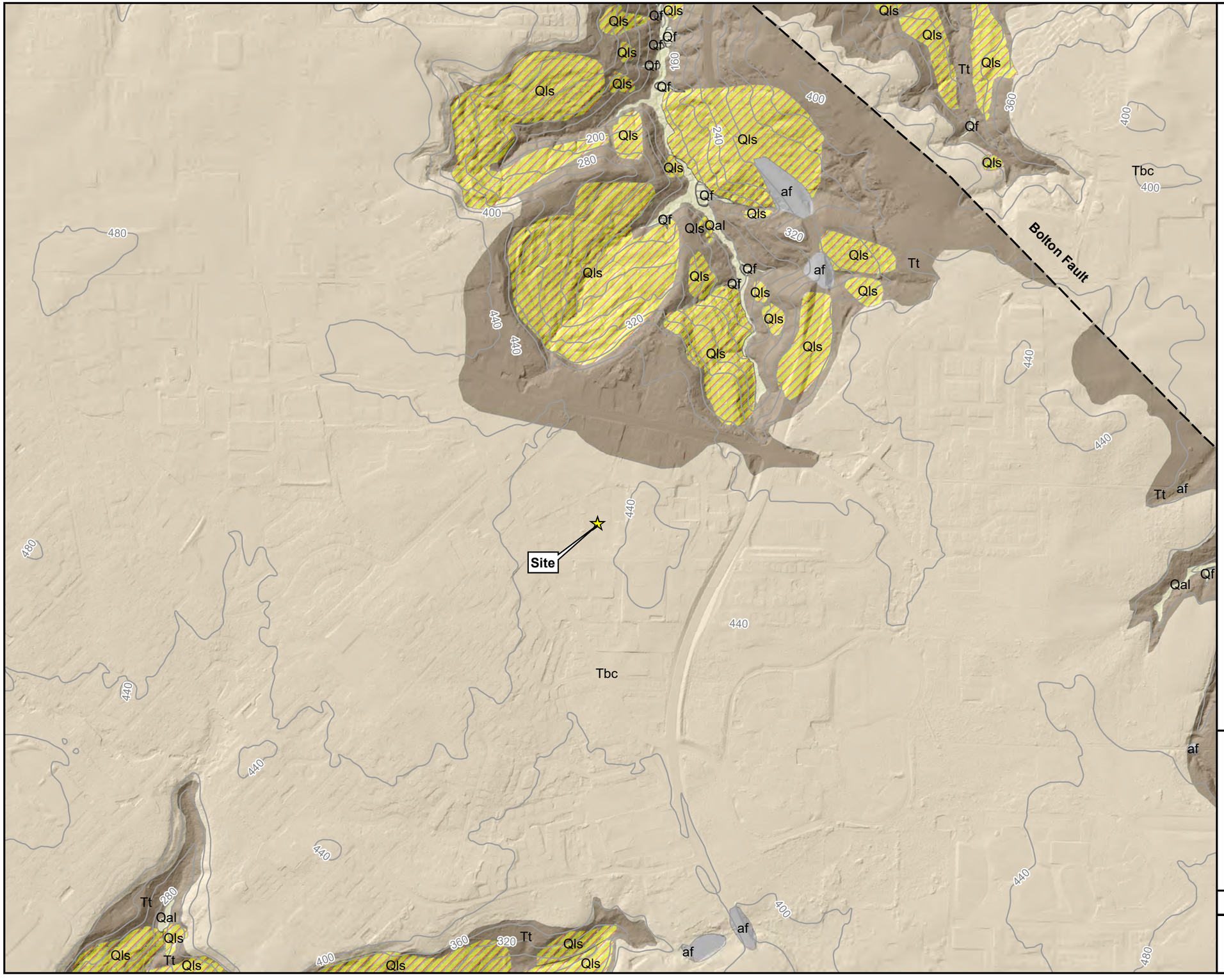

EXPLANATION

- Site
- Fault - approximately located
- 40-foot elevation contour
- af - Artificial fill
- Qal - Alluvial deposits (Quaternary) - gravel, sand, silt, and clay deposited in the active channels and floodplains.
- Qf - Fan or flow deposits (Quaternary) - mixed sand, silt, clay. gravel, and soil deposited by earthflows or debris flows.
- Qls Landslides (Quaternary) - chaotically mixed and deformed masses of rock and colluvium.
- Tbc - Basalt of Canemah (Pliocene) - flows of gray medium-grained, diktytaxitic olivine basalt.
- Tt - Troutdale Formation (Miocene-Pliocene) - sandstone, siltstone, and mudstone, and minor conglomerate and tuff.

EXPLANATION

Notes:
1) Geologic map data derived from GMS-119
2) 40-foot contours from Oregon City 7.5-minute Quadrangle
3) Hillshade basemap produced from DOGAMI LiDAR

1 inch = 1,000 feet

0 500 1,000 2,000ft

GEOLOGIC MAP

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OREGON CITY, OREGON

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PBS

FIGURE
4

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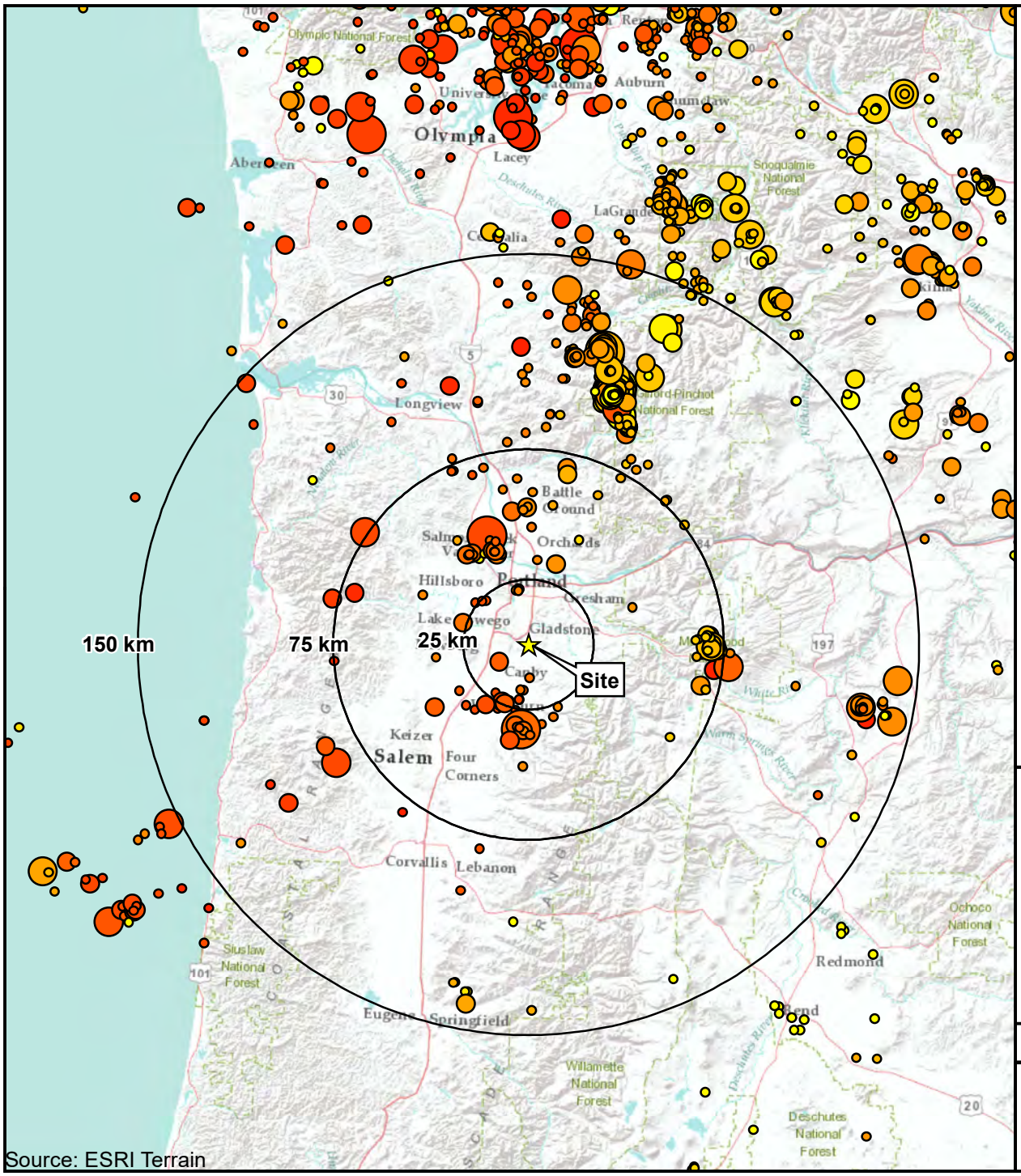

EXPLANATION

☆ Site location

Independent Seismicity (1963-2017)

- M 2.5 - 3.0
- M 3.1 - 4.0
- M 4.1 - 5.0
- M >5.1

Depth in kilometers (km)

Low : 0 km

High: 100 km

1 inch = 60 kilometers

0 15 30 60km

HISTORICAL SEISMICITY

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DATE: DEC 2019 · PROJECT: 73457.000

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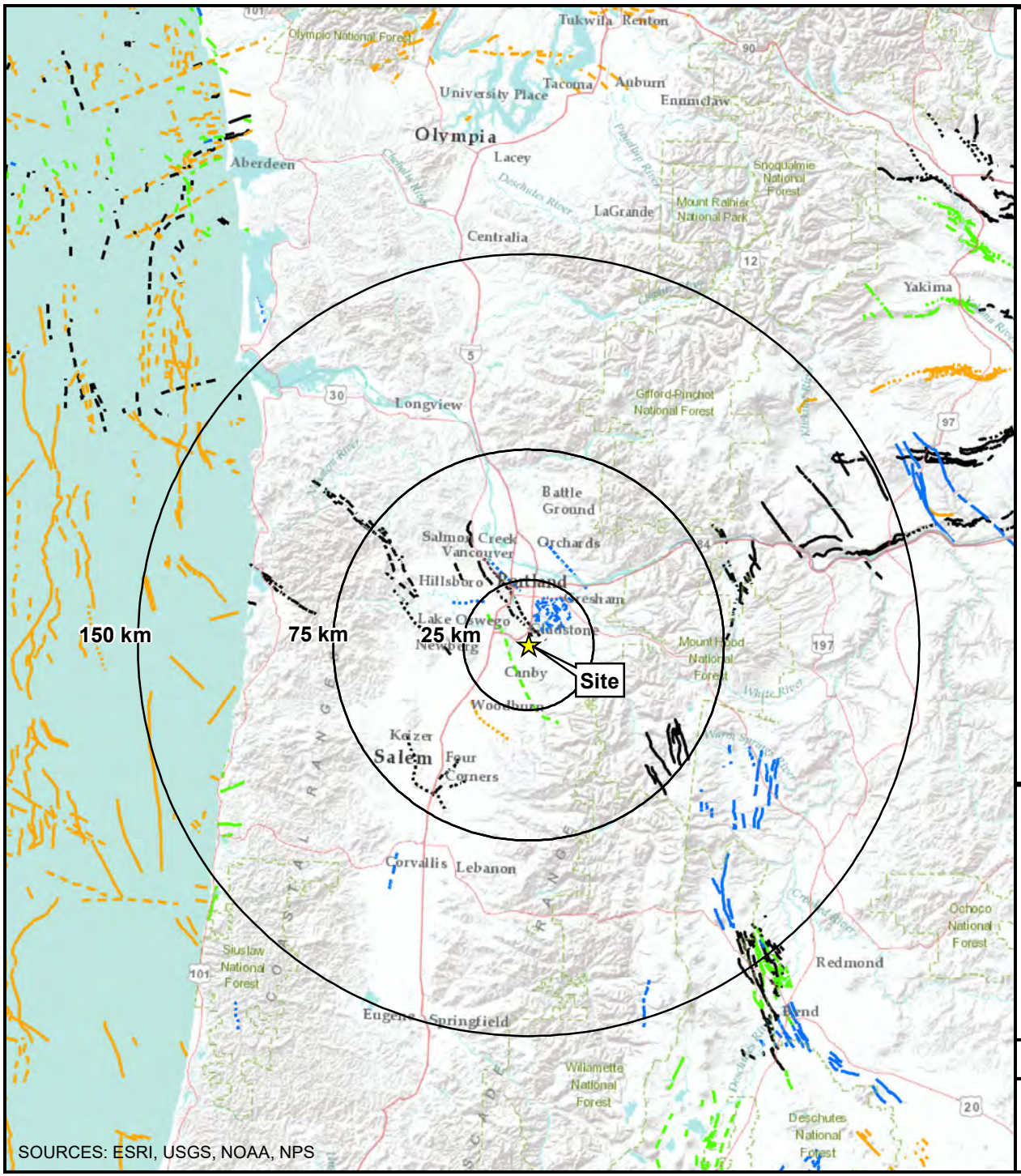
FIGURE

6

L:\Gis\GEOTECH\project\73457.000\fig_06_Seismicity.mxd



SOURCES: ESRI, USGS, NOAA, NPS

L:\Gis\GEOTECH\project\73457.000\fig_07_Faults.mxd

EXPLANATION

☆ Site location

USGS (2006) Quaternary fault traces; solid where well constrained, dashed where moderately constrained, and dotted where inferred

- < 15,000 years - latest Quaternary
- < 130,000 years - late Quaternary
- < 750,000 years - middle and late Quaternary
- < 1.6 million years - undifferentiated Quaternary

1 inch = 60 kilometers

0 15 30 60km

REGIONAL FAULT MAP

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DATE: DEC 2019 · PROJECT: 73457.000

PBS

FIGURE
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Appendix A
Field Explorations

Appendix A: Field Explorations

A1 GENERAL

PBS explored subsurface conditions at the project site by advancing six borings to depths of up to approximately 24.75 feet bgs on October 16 and 17, 2019. The approximate locations of the explorations are shown on Figure 2, Site Plan. The procedures used to advance the borings, collect samples, and other field techniques are described in detail in the following paragraphs. Unless otherwise noted, all soil sampling and classification procedures followed engineering practices in general accordance with relevant ASTM procedures. "General accordance" means that certain local drilling and descriptive practices and methodologies have been followed.

A2 BORINGS

A2.1 Drilling

Borings were advanced using a truck-mounted CME-75 drill rig provided and operated by Holt Services, Inc., of Vancouver, Washington, using mud rotary drilling techniques. The borings were observed by a member of the PBS geotechnical staff, who maintained a detailed log of the subsurface conditions and materials encountered during the course of the work.

A2.2 Sampling

Disturbed soil samples were taken in the borings at selected depth intervals. The samples were obtained using a standard 2-inch outside diameter, split-spoon sampler following procedures prescribed for the standard penetration test (SPT). Using the SPT, the sampler is driven 18 inches into the soil using a 140-pound hammer dropped 30 inches. The number of blows required to drive the sampler the last 12 inches is defined as the standard penetration resistance (N-value). The N-value provides a measure of the relative density of granular soils such as sands and gravels, and the consistency of cohesive soils such as clays and plastic silts. The disturbed soil samples were examined by a member of the PBS geotechnical staff and then sealed in plastic bags for further examination and physical testing in our laboratory.

A2.3 Boring Logs

The boring logs show the various types of materials that were encountered in the borings and the depths where the materials and/or characteristics of these materials changed, although the changes may be gradual. Where material types and descriptions changed between samples, the contacts were interpreted. The types of samples taken during drilling, along with their sample identification number, are shown to the right of the classification of materials. The N-values and natural water (moisture) contents are shown farther to the right.

A3 MATERIAL DESCRIPTION

Initially, samples were classified visually in the field. Consistency, color, relative moisture, degree of plasticity, and other distinguishing characteristics of the soil samples were noted. Afterward, the samples were reexamined in the PBS laboratory, various standard classification tests were conducted, and the field classifications were modified where necessary. The terminology used in the soil classifications and other modifiers are defined in Table A-1, Terminology Used to Describe Soil.

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Table A-2
Terminology Used to Describe Soil and Rock

Soil Descriptions

Soils exist in mixtures with varying proportions of components. The predominant soil, i.e., greater than 50 percent based on total dry weight, is the primary soil type and is capitalized in our log descriptions (SAND, GRAVEL, SILT, or CLAY). Smaller percentages of other constituents in the soil mixture are indicated by use of modifier words in general accordance with the ASTM D2488-06 Visual-Manual Procedure. "General Accordance" means that certain local and common descriptive practices may have been followed. In accordance with ASTM D2488-06, group symbols (such as GP or CH) are applied on the portion of soil passing the 3-inch (75mm) sieve based on visual examination. The following describes the use of soil names and modifying terms used to describe fine- and coarse-grained soils.

Fine-Grained Soils (50% or greater fines passing 0.075 mm, No. 200 sieve)
The primary soil type, i.e., SILT or CLAY is designated through visual-manual procedures to evaluate soil toughness, dilatency, dry strength, and plasticity. The following outlines the terminology used to describe fine-grained soils, and varies from ASTM D2488 terminology in the use of some common terms.

Primary soil NAME, Symbols, and Adjectives			Plasticity Description	Plasticity Index (PI)
SILT (ML & MH)	**CLAY (CL & CH)**	**ORGANIC SOIL (OL & OH)**		
SILT		Organic SILT	Non-plastic	0 – 3
SILT		Organic SILT	Low plasticity	4 – 10
SILT/Elastic SILT	Lean CLAY	Organic SILT/ Organic CLAY	Medium Plasticity	10 – 20
Elastic SILT	Lean/Fat CLAY	Organic CLAY	High Plasticity	20 – 40
Elastic SILT	Fat CLAY	Organic CLAY	Very Plastic	>40

Modifying terms describing secondary constituents, estimated to 5 percent increments, are applied as follows:

Description	% Composition	
With Sand	% Sand ≥ % Gravel	15% to 25% plus No. 200
With Gravel	% Sand < % Gravel	
Sandy	% Sand ≥ % Gravel	≤30% to 50% plus No. 200
Gravelly	% Sand < % Gravel	

Borderline Symbols, for example CH/MH, are used when soils are not distinctly in one category or when variable soil units contain more than one soil type. **Dual Symbols,** for example CL-ML, are used when two symbols are required in accordance with ASTM D2488.

Soil Consistency terms are applied to fine-grained, plastic soils (i.e., PI ≥ 7). Descriptive terms are based on direct measure or correlation to the Standard Penetration Test N-value as determined by ASTM D1586-84, as follows. SILT soils with low to non-plastic behavior (i.e., PI < 7) may be classified using relative density.

Consistency Term	SPT N-value	Unconfined Compressive Strength	
		tsf	kPa
Very soft	Less than 2	Less than 0.25	Less than 24
Soft	2 – 4	0.25 – 0.5	24 – 48
Medium stiff	5 – 8	0.5 – 1.0	48 – 96
Stiff	9 – 15	1.0 – 2.0	96 – 192
Very stiff	16 – 30	2.0 – 4.0	192 – 383
Hard	Over 30	Over 4.0	Over 383

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Table A-1
Terminology Used to Describe Soil and Rock

Soil Descriptions

Coarse - Grained Soils (less than 50% fines)

Coarse-grained soil descriptions, i.e., SAND or GRAVEL, are based on the portion of materials passing a 3-inch (75mm) sieve. Coarse-grained soil group symbols are applied in accordance with ASTM D2488-06 based on the degree of grading, or distribution of grain sizes of the soil. For example, well-graded sand containing a wide range of grain sizes is designated SW; poorly graded gravel, GP, contains high percentages of only certain grain sizes. Terms applied to grain sizes follow.

Material NAME	Particle Diameter	
	Inches	Millimeters
SAND (SW or SP)	0.003 – 0.19	0.075 – 4.8
GRAVEL (GW or GP)	0.19 – 3	4.8 – 75
Additional Constituents:		
Cobble	3 – 12	75 – 300
Boulder	12 – 120	300 – 3050

The primary soil type is capitalized, and the fines content in the soil are described as indicated by the following examples. Percentages are based on estimating amounts of fines, sand, and gravel to the nearest 5 percent. Other soil mixtures will have similar descriptive names.

Example: Coarse-Grained Soil Descriptions with Fines

>5% to < 15% fines (Dual Symbols)	≥15% to < 50% fines
Well graded GRAVEL with silt: GW-GM	Silty GRAVEL: GM
Poorly graded SAND with clay: SP-SC	Silty SAND: SM

Additional descriptive terminology applied to coarse-grained soils follow.

Example: Coarse-Grained Soil Descriptions with Other Coarse-Grained Constituents

Coarse-Grained Soil Containing Secondary Constituents	
With sand or with gravel	≥ 15% sand or gravel
With cobbles; with boulders	Any amount of cobbles or boulders.

Cobble and boulder deposits may include a description of the matrix soils, as defined above.

Relative Density terms are applied to granular, non-plastic soils based on direct measure or correlation to the Standard Penetration Test N-value as determined by ASTM D1586-84.

Relative Density Term	SPT N-value
Very loose	0 – 4
Loose	5 – 10
Medium dense	11 – 30
Dense	31 – 50
Very dense	> 50

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Table A-2
Terminology Used to Describe Soil and Rock
3 of 4

Rock Descriptions

Scale of Rock Strength

Description	Designation	Unconfined Compressive Strength, psi	Unconfined Compressive Strength, MPa	Field Identification
Extremely weak rock	R0	35 – 150	0.25 – 1	Indented by thumbnail.
Very weak rock	R1	150 – 725	1 – 5	Crumbles under firm blows with point of geology pick; can be peeled by a pocket knife.
Weak rock	R2	725 – 3,500	5 – 25	Can be peeled with a pocket knife; shallow indentation made by firm blow with point of geological hammer.
Medium weak rock	R3	3,500 – 7,000	25 – 50	Cannot by scraped or peeled with a pocket knife; specimen can be fractured with a single firm blow of geological hammer.
Strong rock	R4	7,000 – 15,000	50 – 100	Specimen requires more than one blow with a geological hammer to fracture it.
Very strong rock	R5	15,000 – 36,000	100 – 250	Specimen requires many blows of geological hammer to fracture it.
Extremely strong rock	R6	> 36,000	> 250	Specimen can only be chipped with geological hammer.

Descriptive Terminology for Joint Spacing or Bedding

Descriptive Term	Spacing of Joints	
Very close	< 2 inches	< 50 mm
Close	2 inches – 1 foot	50 mm – 300 mm
Moderately close	1 foot – 3 feet	300 mm – 1 m
Wide	3 feet –10 feet	1 m – 3 m
Very wide	> 10 feet	> 3 m

Descriptive Terminology for Vesicularity

Descriptive Term	Percent voids by volume
Dense	< 1%
Slightly vesicular	1 – 10%
Moderately vesicular	10 – 30%
Highly vesicular	30 – 50%
Scoriaceous	> 50%

Correlation of RQD and Rock Quality

Rock Quality Descriptor	RQD Value
Very poor	0 – 25
Poor	25 – 50
Fair	50 – 75
Good	75 – 90

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Table A-2
Terminology Used to Describe Soil and Rock
4 of 4

Rock Descriptions

Scale of Rock Weathering

Stage	Description	Quality Distinction
Fresh	Rock is fresh, crystals are bright, few joints may show slight staining as a result of ground water.	No discoloration
Very Slight	Rock is generally fresh, joints are stained, some joints may have thin clay coatings, crystals in broken face show bright.	Discoloration only on major discontinuity surfaces [1]
Slight	Rock is generally fresh, joints are stained and discoloration extends into rock up to 1 inch. Joints may contain clay. In granitoid rocks some feldspar crystals are dull and discolored. Rocks ring under hammer if crystalline.	Discoloration on all discontinuity surfaces and on rock
Moderate	Significant portions of rock show discoloration and weathering effects. In granitoid rocks, most feldspars are dull and discolored; some are clayey. Rock has dull sound under hammer and shows significant loss of strength as compared with fresh rock.	Decomposition and/or disintegration < 50% of rock [2]
Moderately Severe	All rock, except quartz discolored or stained. In granitoid rocks, all feldspars dull and discolored and majority show kaolinization. Rock shows severe loss of strength and can be excavated with geologist's pick. Rock goes "clunk" when struck.	Decomposition and/or disintegration > 50%, but not complete
Severe	All rock, except quartz, discolored or stained. Rock "fabric" is clear and evident, but reduced in strength to strong soil. In granitoid rocks, all feldspars kaolinized to some extent. Some fragments of harder rock usually left, such as corestones in basalt.	
Very Severe	All rock, except quartz, discolored or stained. Rock "fabric" is discernible, but mass effectively reduced to "soil" with only fragments of harder rock remaining.	Decomposition and/or disintegration 100% with structure/fabric intact
Complete	Rock is reduced to "soil." Rock "fabric" is not discernible, or only in small scattered locations. Quartz may be present as dikes or stringers.	Decomposition and/or disintegration 100% with structure/fabric destroyed

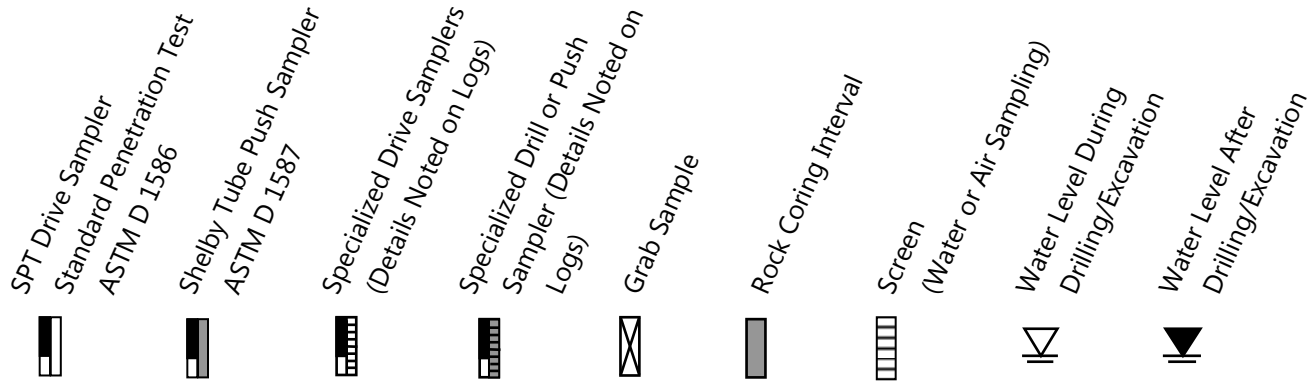
NOTES: [1] Discontinuities consist of any natural break (joint, fracture or fault) or plane of weakness (shear or gouge zone, bedding plane) in a rock mass

[2] Decomposition refers to chemical alteration of mineral grains; disintegration refers to mechanical breakdown

[3] Stage and description from ASCE Manual No. 56 (1976), quality distinction from Murray (1981)

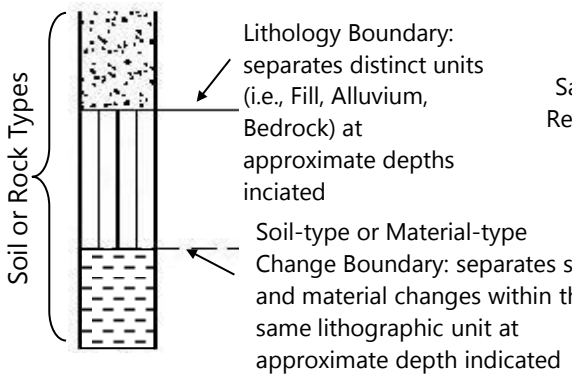
Table A
Key To Test Pit and Boring Log Symbols

SAMPLING DESCRIPTIONS

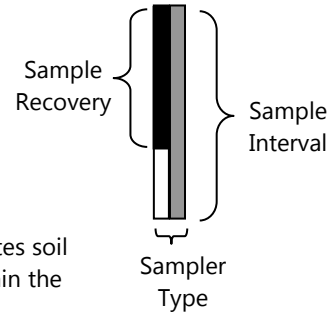


LOG GRAPHICS

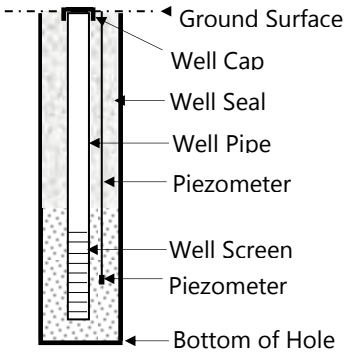
Soil and Rock



Sampling Symbols



Instrumentation Detail



Geotechnical Testing Acronym Explanations

PP	Pocket Penetrometer	HYD	Hydrometer Gradation
TOR	Torvane	SIEV	Sieve Gradation
DCP	Dynamic Cone Penetrometer	DS	Direct Shear
ATT	Atterberg Limits	DD	Dry Density
PL	Plasticity Limit	CBR	California Bearing Ratio
LL	Liquid Limit	RES	Resilient Modulus
PI	Plasticity Index	VS	Vane Shear
P200	Percent Passing US Standard No. 200 Sieve	bgs	Below ground surface
OC	Organic Content	MSL	Mean Sea Level
CON	Consolidation	HCL	Hydrochloric Acid
UC	Unconfined Compressive Strength		

Details of soil and rock classification systems are available on request.

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BORING B-1

PBS PROJECT NUMBER:
73457.000

APPROX. BORING B-1 LOCATION:
45.330437; -121.582503

DEPTH FEET	GRAPHIC LOG	MATERIAL DESCRIPTION	DEPTH	TESTING	SAMPLE TYPE SAMPLE ID	UNCORRECTED N-VALUE / DYNAMIC CONE PENETROMETER / MOISTURE CONTENT % / RQD% / CORE REC%	INSTALLATION AND COMMENTS
0.0		ASPHALT (6 inches)	0.0				Surface Conditions: Asphalt
		BASE ROCK (6 inches)	0.5				
		Medium stiff, brown, lean CLAY (CL); medium plasticity; moist	1.0		S-1	5	
4.0		Stiff, gray to orange, fat CLAY (CH) with sand; high plasticity; fine sand; moist	4.5		S-2	13	
8.0		black manganese nodules; decreased sand			S-3	13	▽ 10/16/19
		Medium stiff, gray, red, and brown, sandy lean CLAY (CL); low plasticity; fine to coarse sand; wet	9.5	P200	S-4	6	P200 = 57%
		Final depth 11.5 feet bgs; boring backfilled with bentonite.	11.5				

0 50 100

DRILLING METHOD: Mud Rotary - Tricone
DRILLED BY: Holt Services, Inc.
LOGGED BY: D. Eibert

BIT DIAMETER: 3 7/8 inches
HAMMER EFFICIENCY PERCENT: 86.5
LOGGING COMPLETED: 10/16/19

FIGURE A1

BORING LOG 73457.000 B1-6 20191029.GPJ PBS_DATATMPL_GEO.GDT PRINT DATE: 12/3/19 RPG

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OREGON CITY PUBLIC WORKS
OREGON CITY, OREGON

BORING B-2

PBS PROJECT NUMBER:
73457.000

APPROX. BORING B-2 LOCATION:
45.329946; -121.582482

DEPTH FEET	GRAPHIC LOG	MATERIAL DESCRIPTION	DEPTH	TESTING	SAMPLE TYPE SAMPLE ID	UNCORRECTED N-VALUE / DYNAMIC CONE PENETROMETER / MOISTURE CONTENT % / RQD% / CORE REC%	INSTALLATION AND COMMENTS
0.0		NOTE: Lines representing the interface between soil/rock units of differing description are approximate only, inferred where between samples, and may indicate gradual transition.				0 50 100	Surface Conditions: Asphalt
0.0		ASPHALT (3 inches)	0.0				
		BASE ROCK (15 inches)	0.3				
2.0		Medium stiff, orange-red, lean CLAY (CL) with sand; medium plasticity; fine sand; moist	1.5		S-1	6	
4.0		Stiff, orange to gray, fat CLAY (CH) with sand; high plasticity; fine to coarse sand; moist	4.5	ATT	S-2	9	Infiltration testing completed at 5 feet bgs LL = 56 PL = 25 PI = 31 ▽ 10/16/19
6.0							
8.0		Interbedded, stiff/loose, gray to purple, sandy fat CLAY (CH) and clayey SAND (SC); medium to high plasticity; fine to coarse sand; wet (severely weathered bedrock)	7.0		S-3	9	
10.0		becomes gray, pale purple, and orange			S-4	8	
12.0		Final depth 11.5 feet bgs; boring backfilled with bentonite.	11.5				
14.0							
16.0							
18.0							
20.0							
22.0							
24.0							
26.0							
28.0							
30.0						0 50 100	

DRILLING METHOD: Hollow-Stem Auger
DRILLED BY: Holt Services, Inc.
LOGGED BY: D. Eibert

BIT DIAMETER: 6¼ inches; 3 7/8 inches
HAMMER EFFICIENCY PERCENT: 86.5
LOGGING COMPLETED: 10/16/19

FIGU

Pag

BORING LOG 73457.000_B1-6_20191029.GPJ PBS_DATATMPL_GEO.GDT PRINT DATE: 12/3/19 RPG

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OREGON CITY PUBLIC WORKS
OREGON CITY, OREGON

BORING B-3

PBS PROJECT NUMBER:
73457.000

APPROX. BORING B-3 LOCATION:
45.329498; -121.582449

DEPTH FEET	GRAPHIC LOG	MATERIAL DESCRIPTION	DEPTH	TESTING	SAMPLE TYPE SAMPLE ID	UNCORRECTED N-VALUE / DYNAMIC CONE PENETROMETER / MOISTURE CONTENT % / RQD% / CORE REC%	INSTALLATION AND COMMENTS
0.0		ASPHALT (12 inches)	0.0				Surface Conditions: Asphalt
		BASE ROCK (2 inches)	1.0 / 1.2				
2.0		Medium stiff, brown to red, lean CLAY (CL) with sand and manganese nodules; medium plasticity; fine to medium sand; moist			S-1	6	
4.0		Very stiff, red-brown, sandy lean CLAY (CL); medium plasticity; fine to coarse sand; moist (severely weathered bedrock)	4.5		S-2	19	
6.0							
8.0		becomes medium stiff; low to medium plasticity; fine to medium sand; wet			S-3	6	▽ 10/16/19
		Medium dense, red to gray, clayey SAND (SC); low plasticity; fine to medium sand; wet (severely weathered bedrock)	9.0				
10.0					S-4	20	
12.0		Final depth 11.5 feet bgs; boring backfilled with bentonite.	11.5				
14.0							
16.0							
18.0							
20.0							
22.0							
24.0							
26.0							
28.0							
30.0							

NOTE: Lines representing the interface between soil/rock units of differing description are approximate only, inferred where between samples, and may indicate gradual transition.

0 50 100

DRILLING METHOD: Mud Rotary - Tricone
DRILLED BY: Holt Services, Inc.
LOGGED BY: D. Eibert

BIT DIAMETER: 3 7/8 inches
HAMMER EFFICIENCY PERCENT: 86.5
LOGGING COMPLETED: 10/16/19

FIGU

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BORING LOG 73457.000 B1-6 20191029.GPJ PBS_DATATMPL_GEO.GDT PRINT DATE: 12/3/19 RPG

PBS

OREGON CITY PUBLIC WORKS
OREGON CITY, OREGON

BORING B-4

PBS PROJECT NUMBER:
73457.000

APPROX. BORING B-4 LOCATION:
45.329443; -121.582153

DEPTH FEET	GRAPHIC LOG	MATERIAL DESCRIPTION	DEPTH	TESTING	SAMPLE TYPE SAMPLE ID	UNCORRECTED N-VALUE / DYNAMIC CONE PENETROMETER / MOISTURE CONTENT % / RQD% / CORE REC% (0 – 50 – 100)	INSTALLATION AND COMMENTS
		NOTE: Lines representing the interface between soil/rock units of differing description are approximate only, inferred where between samples, and may indicate gradual transition.					Surface Conditions: Asphalt
0.0		ASPHALT (12 inches)	0.0				
		BASE ROCK (6 inches)	1.0				
2.0		Medium stiff, red to orange, sandy lean CLAY (CL); medium plasticity; fine to coarse sand; moist	1.5		S-1	6	
4.0		becomes dark red to brown; low plasticity; moist to wet		P200	S-2	5	Infiltration testing completed at 5 feet bgs P200 = 50%
6.0							
		Soft, dark purple with white veins, lean CLAY (CL) with sand; medium plasticity; fine to medium sand; moist to wet (severely weathered bedrock)	7.0		S-3	4	Switched to mud rotary ▼ 10/17/19
8.0							
10.0		Loose, dark purple with red nodules, clayey SAND (SC); medium plasticity; fine to coarse sand; wet (severely weathered bedrock)	9.5		S-4	6	
12.0		becomes gray with white, black, and orange veins; low plasticity					
14.0							
16.0					S-5	10	
18.0		becomes medium dense, dark red and purple with orange and white veins; fine to medium sand; moist					
20.0					S-6	24	
22.0							Driller notes harder drilling
		Strong (R4), gray BASALT; slightly weathered	23.5 23.8				
24.0		Final depth 23.75 feet bgs due to refusal in basalt; boring backfilled with bentonite.			S-7	50/1	Boring flushed with clean water and left open overnight
26.0							
28.0							
30.0							

DRILLING METHOD: Mud Rotary/Hollow-Stem Auger
DRILLED BY: Holt Services, Inc.
LOGGED BY: D. Eibert

BIT DIAMETER: 6¼ inches; 3 7/8 inches
HAMMER EFFICIENCY PERCENT: 86.5
LOGGING COMPLETED: 10/16/19

FIGURE A4

BORING LOG 73457.000 B1-6 20191029.GPJ PBS_DATATMPL_GEO.GDT PRINT DATE: 12/3/19 RPG

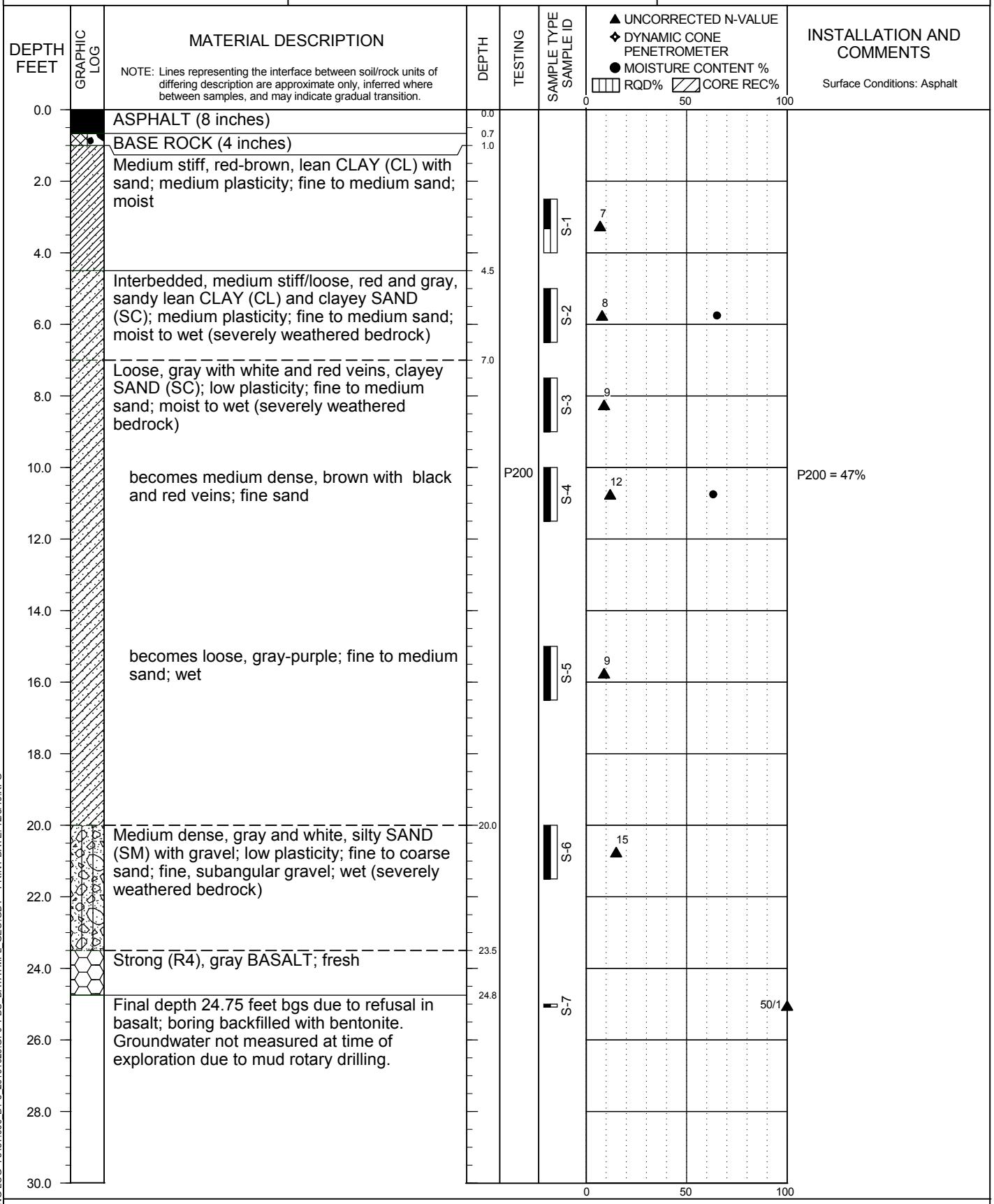
PBS

OREGON CITY PUBLIC WORKS
OREGON CITY, OREGON

BORING B-5

PBS PROJECT NUMBER:
73457.000

APPROX. BORING B-5 LOCATION:
45.329064; -121.581888



DRILLING METHOD: Mud Rotary - Tricone
DRILLED BY: Holt Services, Inc.
LOGGED BY: D. Eibert

BIT DIAMETER: 3 7/8 inches
HAMMER EFFICIENCY PERCENT: 86.5
LOGGING COMPLETED: 10/17/19

FIGURE A5

BORING LOG 73457.000 B1-6 20191029.GPJ PBS_DATATMPL_GEO.GDT PRINT DATE: 12/3/19 RPG

PBS

OREGON CITY PUBLIC WORKS
OREGON CITY, OREGON

BORING B-6

PBS PROJECT NUMBER:
73457.000

APPROX. BORING B-6 LOCATION:
45.329412; -121.581669

DEPTH FEET	GRAPHIC LOG	MATERIAL DESCRIPTION	DEPTH	TESTING	SAMPLE TYPE / SAMPLE ID	UNCORRECTED N-VALUE / DYNAMIC CONE PENETROMETER / MOISTURE CONTENT % / RQD% / CORE REC%	INSTALLATION AND COMMENTS
		NOTE: Lines representing the interface between soil/rock units of differing description are approximate only, inferred where between samples, and may indicate gradual transition.				0 50 100	Surface Conditions: Asphalt
0.0		ASPHALT (8 inches)	0.0				
		BASE ROCK (10 inches)	0.7				
		Medium stiff, red to orange, lean CLAY (CL) with sand and gravel; medium plasticity; fine sand; coarse, angular gravel; moist	1.5		S-1	6	
2.0							
4.0		**FILL**					
		becomes soft			S-2	3	
6.0					S-3		200 psi
							300 psi
8.0		becomes red to brown; fine to coarse sand; fine, rounded gravel			S-4	3	
10.0							
12.0		becomes medium stiff			S-5	6	
		Loose, poorly graded GRAVEL (GP); fine, rounded gravel; moist	13.0				
14.0							
		Final depth 15.0 feet bgs; boring backfilled with bentonite. Groundwater not measured at time of exploration due to mud rotary drilling.	15.0				
16.0							
18.0							
20.0							
22.0							
24.0							
26.0							
28.0							
30.0						0 50 100	

DRILLING METHOD: Mud Rotary - Tricone
DRILLED BY: Holt Services, Inc.
LOGGED BY: D. Eibert

BIT DIAMETER: 3 7/8 inches
HAMMER EFFICIENCY PERCENT: 86.5
LOGGING COMPLETED: 10/17/19

FIGU

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BORING LOG 73457.000 B1-6 20191029.GPJ PBS_DATATMPL_GEO.GDT PRINT DATE: 12/3/19 RPG

Appendix B
Laboratory Testing

Appendix B: Laboratory Testing

B1 GENERAL

Samples obtained during the field explorations were examined in the PBS laboratory. The physical characteristics of the samples were noted and field classifications were modified where necessary. During the course of examination, representative samples were selected for further testing. The testing program for the soil samples included standard classification tests, which yield certain index properties of the soils important to an evaluation of soil behavior. The testing procedures are described in the following paragraphs. Unless noted otherwise, all test procedures are in general accordance with applicable ASTM standards. "General accordance" means that certain local and common descriptive practices and methodologies have been followed.

B2 CLASSIFICATION TESTS

B2.1 Visual Classification

The soils were classified in accordance with the Unified Soil Classification System with certain other terminology, such as the relative density or consistency of the soil deposits, in general accordance with engineering practice. In determining the soil type (that is, gravel, sand, silt, or clay) the term that best described the major portion of the sample is used. Modifying terminology to further describe the samples is defined in Table A-1, Terminology Used to Describe Soil, in Appendix A.

B2.2 Moisture (Water) Contents

Natural moisture content determinations were made on samples of the fine-grained soils (that is, silts, clays, and silty sands). The natural moisture content is defined as the ratio of the weight of water to dry weight of soil, expressed as a percentage. The results of the moisture content determinations are presented on the logs of the borings in Appendix A and on Figure B2, Summary of Laboratory Data, in Appendix B.

B2.3 Atterberg Limits

Atterberg limits were determined on select samples for the purpose of classifying soils into various groups for correlation. The results of the Atterberg limits test, which included liquid and plastic limits, are plotted on Figure B1, Atterberg Limits Test Results, and on the explorations logs in Appendix A where applicable.

B2.4 Grain-Size Analyses (P200 Wash)

Washed sieve analyses (P200) were completed on samples to determine the portion of soil samples passing the No. 200 Sieve (i.e., silt and clay). The results of the P200 test results are presented on the exploration logs in Appendix A and on Figure B2, Summary of Laboratory Data, in Appendix B.

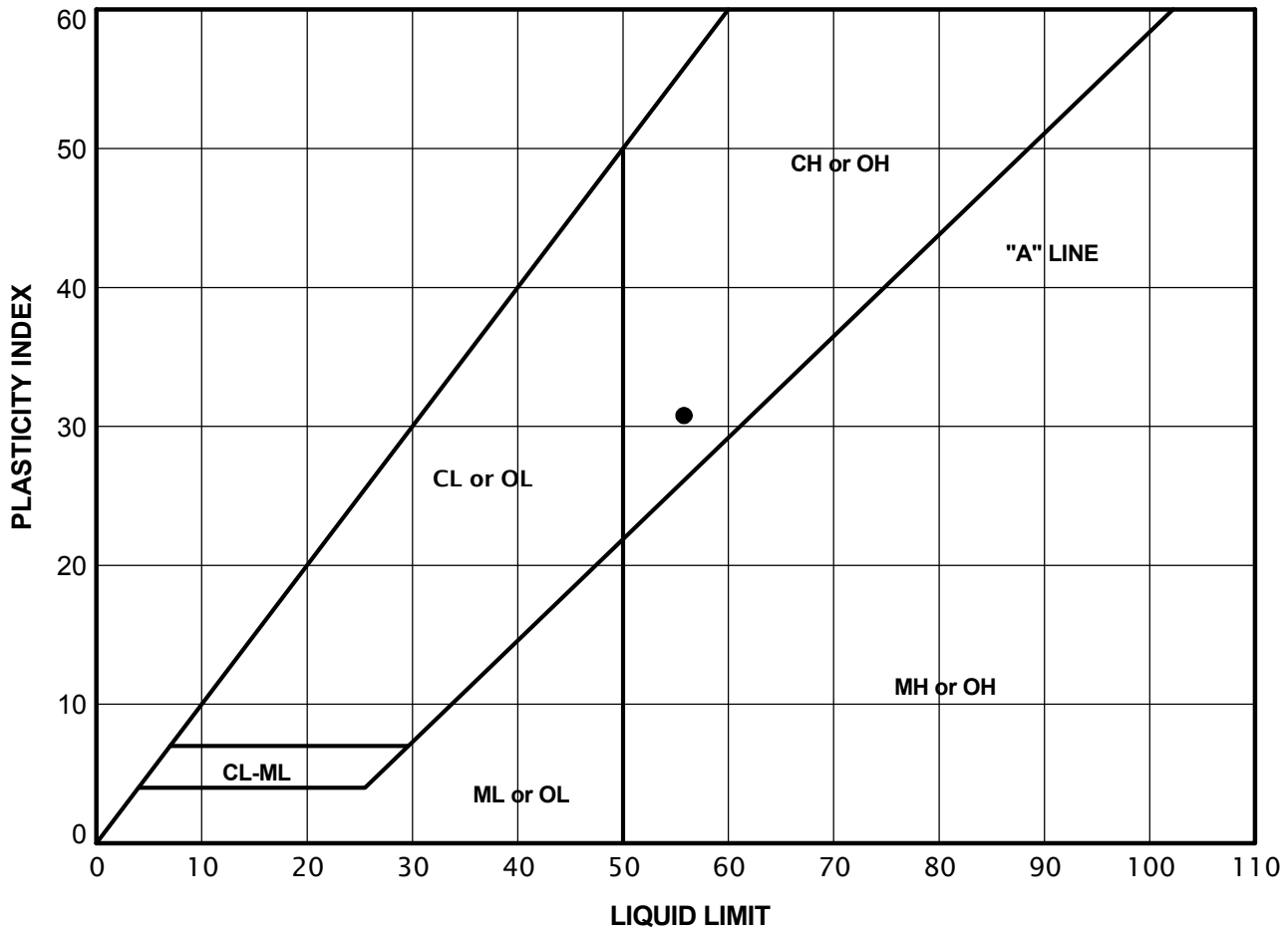
PBS

ATTERBERG LIMITS TEST RESULTS

OREGON CITY PUBLIC WORKS
OREGON CITY, OREGON

PBS PROJECT NUMBER:
73457.000

TEST METHOD: ASTM D4318



KEY	EXPLORATION NUMBER	SAMPLE NUMBER	SAMPLE DEPTH (FEET)	NATURAL MOISTURE CONTENT (PERCENT)	PERCENT PASSING NO. 40 SIEVE (PERCENT)	LIQUID LIMIT	PLASTIC LIMIT	PLASTICITY INDEX
●	B-2	S-2	5.0	32.8	NA	56	25	31

__ATTERBERG LIMITS 73457.000_B1-6_20191029.GPJ PBS_DATATMPL_GEO.GDT PRINT DATE: 11/18/19:RPG

SUMMARY OF LABORATORY DATA

OREGON CITY PUBLIC WORKS
OREGON CITY, OREGON

PBS PROJECT NUMBER:
73457.000

SAMPLE INFORMATION				MOISTURE CONTENT (PERCENT)	DRY DENSITY (PCF)	SIEVE			ATTERBERG LIMITS		
EXPLORATION NUMBER	SAMPLE NUMBER	SAMPLE DEPTH (FEET)	ELEVATION (FEET)			GRAVEL (PERCENT)	SAND (PERCENT)	P200 (PERCENT)	LIQUID LIMIT (PERCENT)	PLASTIC LIMIT (PERCENT)	PLASTICITY INDEX (PERCENT)
B-1	S-1	2.5		32.4							
B-1	S-4	10		60.1				57			
B-2	S-2	5		32.8					56	25	31
B-3	S-1	2.5		41.9							
B-4	S-2	5		68.7				50			
B-4	S-4	10		76.7							
B-5	S-2	5		65.0							
B-5	S-4	10		63.1				47			
B-6	S-4	8.5		27.9							

FIGU

__LAB SUMMARY 73457.000_B1-6_20191029.GPJ PBS_DATATMPL_GEO.GDT PRINT DATE: 11/18/19:RPG

Harper
Houf Peterson
Righellis Inc.

Oregon City Public Works Facility

SEA-112

Preliminary Stormwater Management Report

April 08, 2020

Prepared For:

Scott Edwards Architecture
2525 E. Burnside St
Portland, OR 97214

SEA-112

Prepared By:

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SEPT. 13, 2016
ALEXANDER J. SIMPSON

EXPIRES: 06/30/2020

HHPR

ENGINEERS ◆ PLANNERS
LANDSCAPE ARCHITECTS ◆ SURVEYORS

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Project Description

The City of Oregon City is redeveloping the existing 4.81 acre site at 13895 Fir Street in Oregon City, OR for use as a new public works site that will also house City engineering and parks staff. The site was formerly a beverage distributing warehouse and office facility. It is zoned General Industrial and contains a high water table overlay. As part of this project, a portion of the existing office building will be demolished, remodeled, and expanded paved site circulation, staff parking and fleet parking will be constructed.

Minor public sidewalk and driveway reconstruction is proposed. No public stormwater improvements are part of this project.

Low impact development site approaches (LID) “stormwater planter – filtration” are proposed to treat the impervious and pervious surface runoff. The LID facilities will also provide stormwater flow control for their respective basin areas.

Proposed stormwater management improvements are detailed further in this report. Refer to the Appendix for EX-1 vicinity exhibit, EX-2 existing (pre-development) conditions, EX-3 proposed (post-development) basin maps, EX-4 downstream analysis exhibit, and the WES BMP calculator printouts along with additional calculations and information.

Purpose and Objectives

The purpose of this drainage report is to present options for best management practices (BMP) for conveyance, detention, infiltration and water quality treatment to be installed as part of this Oregon City Public Works project. The City of Oregon City Stormwater and Grading Design Standards (July 2019) have been used as design requirements and guidelines.

Existing Site Description

The existing site is generally mild sloped, with multiple low points throughout the site that currently collect and dispose stormwater through the existing system. The site contains an existing conveyance system that consists of catch basins and pipes. There is an existing public stormwater system located within an easement that conveys stormwater from the adjacent property to the east, through the site, and continues to the west. This public stormwater system is proposed to remain. Existing stormwater from building roof and parking area is collected in downspouts and catch basins and conveyed to the public storm system at the western edge of the site. There are no existing stormwater treatment or flow control facilities on site.

Soils Characteristics

The Natural Resources Conservation Service (NRCS) with the United States Department of Agriculture (USDA) has classified the soils within Clackamas County in the Soil Survey of Clackamas County Manual. Soils are categorized into Hydrologic Soil Groups based on estimated runoff from precipitation. These groupings assume the soils are saturated and receive precipitation from long-duration storms. This rainfall to runoff relationship is complex and includes the Drainage and Permeability characteristics of the soil. Pre-developed conditions for the site are the existing building, parking lot and landscape areas. According to the USDA web soil survey, the site consists of soil group: 8B – Bornstedt silt loam (Soil Group C).

Upon further exploration and site-specific geotechnical exploration and analysis, the site is underlain primarily by clayey soils. Based on the variability of infiltration rates at the site, which ranged from 0.0 to 0.75 inch per hour, and the moderate to high plasticity of site soils, the geotechnical engineer's opinion is that site soils should be classified as USDA hydrologic Soil Group D for stormwater design. Please reference the geotechnical report and addendum for further information.

Infiltration

Site-specific infiltration testing was completed by the geotechnical engineer in two locations at depths of 5-ft below ground surface. This is approximately the depth at which the bottom of a stormwater planter will be placed. The testing revealed negligible infiltration rates ranging from 0.0 to 0.75 inch per hour.

Groundwater

Refer to the geotechnical report for detailed boring logs and investigation. Per the report, "Static groundwater was encountered during our explorations at a depth of approximately 8 feet bgs. Please note that groundwater levels can fluctuate during the year depending on climate, irrigation season, extended periods of precipitation, drought, and other factors."

Therefore, based on this information, coupled with the low to negligible infiltration rates, stormwater infiltration is not feasible for this site. The proposed stormwater planters will be impermeable lined.

Proposed Improvements and Impervious Surfaces

Proposed onsite impervious surface area consists of the parking lot, drive aisles, sidewalks, plazas and building. See Table 1 below for a summary of site areas:

Table 1: Total Site Area			
	Impervious Area	**Pervious Area**	**Total**
Existing	177,135 SF (4.07 ac)	32,376 SF (0.74 ac)	209,511 SF (4.81 ac)
Proposed	186,535 SF (4.28 ac)	22,976 SF (0.53 ac)	209,511 SF (4.81 ac)

Stormwater Management

Table 2: City of Oregon City Stormwater Management Requirements	
Design Requirement	City of Oregon City Criteria
Conveyance Design Storm	10-Year; 24-hour SBUH Method for Pipe
Treatment Area	All Disturbed Impervious Area + New Impervious Area
Treatment Storm	1.0" / 24-hour storm per City of Oregon City
Detention	Peak Flow Duration matching between 42% of the 2-year up through the 10-year storm event

The WES BMP calculator is an acceptable method of sizing stormwater facilities per the City's manual. This project utilizes the WES BMP calculator to size stormwater facilities and meet requirements.

Table 2a – City of Oregon City Precipitation-Frequency Estimates

Frequency	Precipitation
WQ; 24-hr	1.0 inches
2-yr; 24-hr	2.80 inches
10-yr; 24-hr	3.50 inches
25-yr; 24-hr	4.00 inches

Existing Basin Characteristics

The existing site's stormwater basins are conveyed to various low points throughout the site which are collected in catch basins and piped to the public storm system to the west. Existing basins consist primarily of impervious building roof and asphalt pavement.

The required stormwater management area is determined by calculating the disturbed impervious area that is replaced with impervious area, and any new impervious area. See exhibit EX-2 in the Appendix for an illustration of this area. See Table 3 below for a summary of the required stormwater management area.

Table 3: Required Stormwater Management Area	
	Dist. + New Impervious Area
Required	44,516 SF (1.02 ac)

Proposed Basin Characteristics

The proposed site's stormwater management basins are broken into four basins A-D. These basins were thoughtfully chosen because they convey a significant amount of stormwater to an existing low point on the site. This is done in an effort to work in harmony with the existing site's topography and stormwater system, reduce grading, and provide the maximum amount of stormwater management in an economical way. See exhibit EX-3 in the Appendix for an illustration of these proposed management basin areas. See Table 4 below for a summary of the proposed basin areas depicting the treatment area is greater than the required area:

Table 4: Proposed Basin Areas			
Basin	**Impervious Area**	**Facility Type**	**Facility Size**
A	9,985 SF	Planter	345 SF
B	27,840 SF	Planter	840 SF
C	11,850 SF	Planter	425 SF
D	11,200 SF	Planter	600 SF
TOTAL PROVIDED	60,875 SF (1.40 ac)		2,210 SF

Water Quality

The City of Oregon City water quality treatment criteria will be met by treatment of the site runoff through LID vegetated planter facilities. Treatment will occur via biofiltration and is met through the use of the WES BMP Calculator. The proposed LID planter facilities will consist of an overflow set 12 inches above the topsoil growing media elevation. This will allow for 12” of ponding depth and filtration through the soil media prior to overflow. The planters consists of an 18” depth section of growing filtration soil media, with 15” of drain rock below. A perforated underdrain pipe is set at the bottom to ensure full drawdown. The water quality event has been routed through each LID facility in the WES BMP calculator to ensure that the event does not cause stormwater to enter the overflow structure during the water quality storm event. Treated stormwater will be collected in the underdrain system and routed to site conveyance. Studies from the International Stormwater BMP Database (July 2012) indicate that bio filtration BMPs are good candidates for treatment of phosphorus, TSS and algae and mercury / metals.

Landscaping and trees are retained and proposed throughout the site to the maximum extent feasible. Above-ground vegetated stormwater facilities will benefit from tree canopy during the summer months to mitigate stormwater temperature rise. Underdrain systems will be necessary for collecting and routing stormwater that will filter through the proposed soil media but will not infiltrate the underlying native soils. Impervious liners are proposed on all facilities.

The WES BMP calculations can be located in the Appendix.

BMP design constrains include area limitations, existing topography, and existing soil permeability. The City of Oregon City Public Works department has strict requirements for developed sites and desire for safety, efficient use of the site, large vehicle turning movements and future opportunities.

Proper delineation and erosion and sediment control will be installed to protect the proposed facilities from potentially being compacted and/or inundated with sediment during construction.

Following treatment and detention, stormwater will ultimately discharge to the public storm system at the west side of the site. Refer to the Appendix for a proposed storm drainage schematic. See Table 4 above for a summary of stormwater management basins.

Detention / Flow Control

All proposed LID planter facilities are designed to allow for 12” of ponding to provide flow control while stormwater is infiltrating through the soil media. Flow control for the site is required to meet peak flow duration matching between 42% of the 2-year up through the 10-year storm event. The WES BMP calculator has been used to size the facilities to ensure that this requirement is met. See Table 4 above for a summary of stormwater management basins.

Conveyance

The proposed storm pipe system is designed to have the capacity to convey the runoff from a 10-year storm event return frequency storm event without ponding. The site storm system was designed to convey all of the impervious area and contributing pervious area for the entire site.

A minimum pipe size and slope will be maintained throughout the system. The intent is to maintain a minimum free flow velocity of 3.0 fps in all pipes. See the Appendix for pipe sizing calculations (minimum pipe slopes & sizes required to meet these conditions).

A conduit Flow Mannings “n” = 0.013 for pipe flow is used in all calculations.

The time of concentration (tc) is defined as the time for runoff to travel from the furthermost point of the watershed to the point in question. Time of concentration can be estimated from several formulas. The minimum time of concentration is 5 minutes in developed urban areas and the maximum is 100 minutes in rural areas. A time of concentration of 5 minutes is used for design of the stormwater basins in this project.

Downstream Analysis

Per Oregon City stormwater standards section 5.2.4 a preliminary downstream analysis has been completed to ensure that the downstream stormwater infrastructure has adequate capacity to convey the 10-year/24-hours storm event. The analysis shall extend until the project contributes less than 15% of the total basin or 1,500 feet, whichever is greater. Reference exhibit EX-4 in the Appendix for a basin map and existing stormwater infrastructure.

Several sources of information were used to complete this downstream analysis. A survey was completed of the site to confirm the directly adjacent stormwater sizes. City GIS and Metro Data were also used for this analysis. Per current City of Oregon City GIS mapped storm system records, the downstream pipe system consists of 30” diameter concrete storm pipe from the site for a distance of approximately 1,500 feet before outfalling to what appears to be a stormwater pond within an easement or tract adjacent to 19384 Molalla Ave.

This proposed development is part of the Caufield Basin, and the ultimate downstream infrastructure analyzed with this analysis (at a point 1,500 ft. downstream) conveys a basin area of approximately 32.2 acres. The proposed development site at 4.81 acres is approximately 14.9% of the total contributing basins 32.2 acres. The project increases the total site impervious area by approximately 9,400 SF (0.21 acres) which is negligible within the overall approximate basin of 32.2 acres (0.6% increase of the basin). Therefore the conveyance design storm is analyzed for the 10-year, 24-hour storm event per Table 5-1 Conveyance System Design Storms of the Oregon City Stormwater and Grading Design Standards. The Santa Barbara Urban Hydrograph method (SBUH) was used to estimate runoff from the overall basin, as the receiving basin is greater than 25 acres. Due to the variability of soil types and site coverages, a composite curve number was calculated assuming 85% of the basin is impervious surfaces and 15% of the basin area is pervious surfaces. A time of concentration of 5 minutes was used since the basin is largely developed/built-out and consists of pavement that drains to stormwater inlets, and this results in a conservative peak flow result.

The 10-yr/24-hour SBUH hydrograph was computed using this overall basin area and routed through a 30” dia. concrete storm pipe to check conveyance adequacy. As seen in the Appendix, the existing 30” dia. storm pipe system at the limit of 1,500 feet has sufficient capacity to convey the 10-yr/24-hour storm event. As a result, no adverse impacts to the downstream system are expected as a result of this development.

High-Risk Site Uses

The site contains an existing fuel-dispensing facility that is proposed to remain. The fueling area is hydraulically isolated through the use of grading and a trench drain that is piped to an oil-water separator unit prior to connection to the site's stormwater system. No modifications or upgrades are proposed to this facility.

A vehicle wash station is proposed to be constructed within the warehouse building. Therefore, this station is covered and will be hydraulically isolated from all other areas. The area will include a drain connection to the sanitary sewer system.

Any exterior bulk storage for the site will be limited to materials classified as low-risk or exempt (such as lumber, covered gravel, pipe, and concrete products) per the City of Oregon City's Stormwater Manual, Table 6-1. Any materials classified as high-risk such as fertilizer, pesticides, and corrosive materials will be stored inside the warehouse building.

BMP Operation and Maintenance

Proposed stormwater management facilities will be maintained by the Owner, Oregon City Public Works.

All facilities shall be maintained per the O&M plan included in the Appendix.

Conclusion

The proposed stormwater management plan will achieve pollutant removal and flow control to the maximum extent practicable via vegetated stormwater planters. The proposed facilities satisfy City of Oregon City stormwater quality and water quantity requirements. As designed, this project shall not create any adverse impacts to the downstream storm system.

APPENDIX

EX-1

EX-2

EX-3

EX-4

WES BMP PRINTOUTS

DOWNSTREAM ANALYSIS CALCULATIONS

NRCS WEB SOIL SURVEY

SITE SPECIFIC GEOTECHNICAL SOIL GROUP ADDENDUM

OPERATIONS & MAINTENANCE: STORMWATER PLANTER

0 500 1000 2000
SCALE: 1" = 1000

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OREGON CITY PUBLIC WORKS

Job Number: 19112

13895 FIR STREET
OREGON CITY, OR 97045
PROJECT ADDRESS

ISSUE LAND USE SUBMITTAL
ISSUE 04.10.2020

Drawing:

VICINITY MAP

Sheet No:

EX

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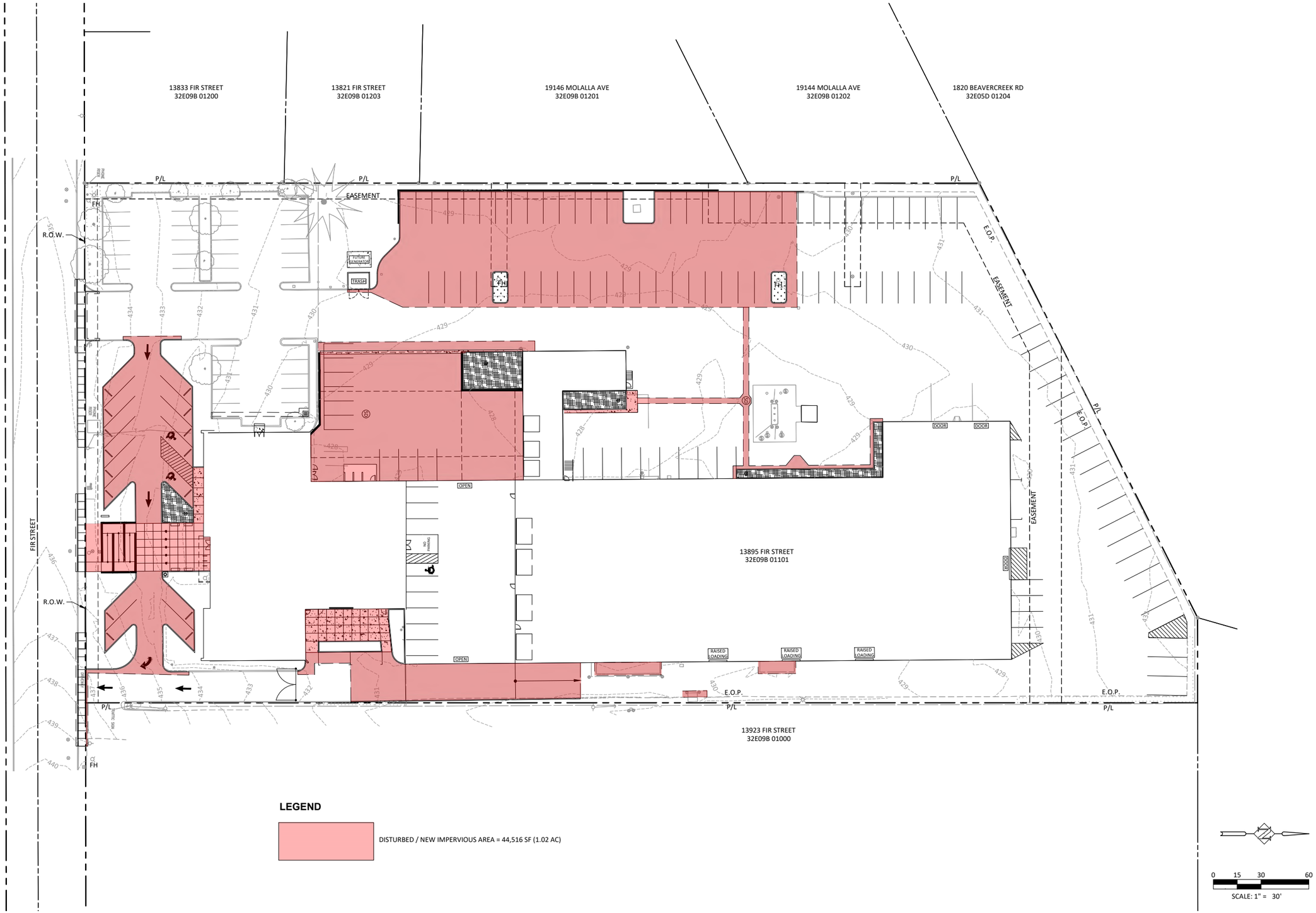

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OREGON CITY PUBLIC WORKS

Job Number: 19112

13895 FIR STREET
OREGON CITY, OR 97045
PROJECT ADDRESS

REGISTERED PROFESSIONAL ENGINEER 87,502 OREGON
PRELIMINARY
SEPT. 13, 2016
ALEXANDER J. SIMPSON
EXPIRES: 06/30/2020

ISSUE	**LAND USE SUBMITTAL**
ISSUE	**04.10.2020**

Drawing:

PRE-DEVELOPED DISTURBED AREA STORMWATER EXHIBIT

Sheet No:

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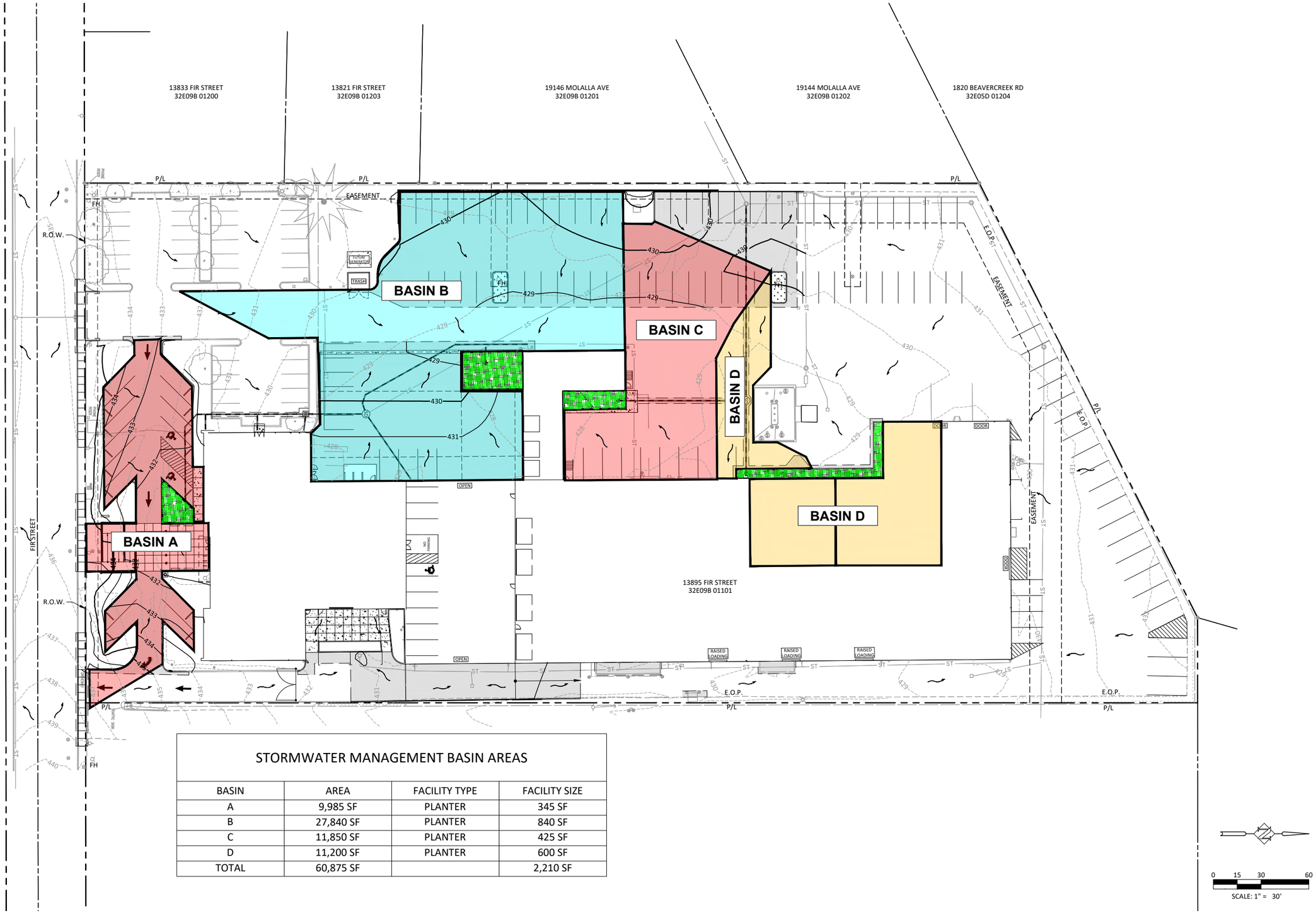

STORMWATER MANAGEMENT BASIN AREAS			
BASIN	AREA	FACILITY TYPE	FACILITY SIZE
A	9,985 SF	PLANTER	345 SF
B	27,840 SF	PLANTER	840 SF
C	11,850 SF	PLANTER	425 SF
D	11,200 SF	PLANTER	600 SF
TOTAL	60,875 SF		2,210 SF

0 15 30 60
SCALE: 1" = 30'

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EXPIRES: 06/30/2020

ISSUE	LAND USE SUBMITTAL
ISSUE	04.10.2020

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POST-DEVELOPED STORMWATER EXHIBIT

Sheet No:

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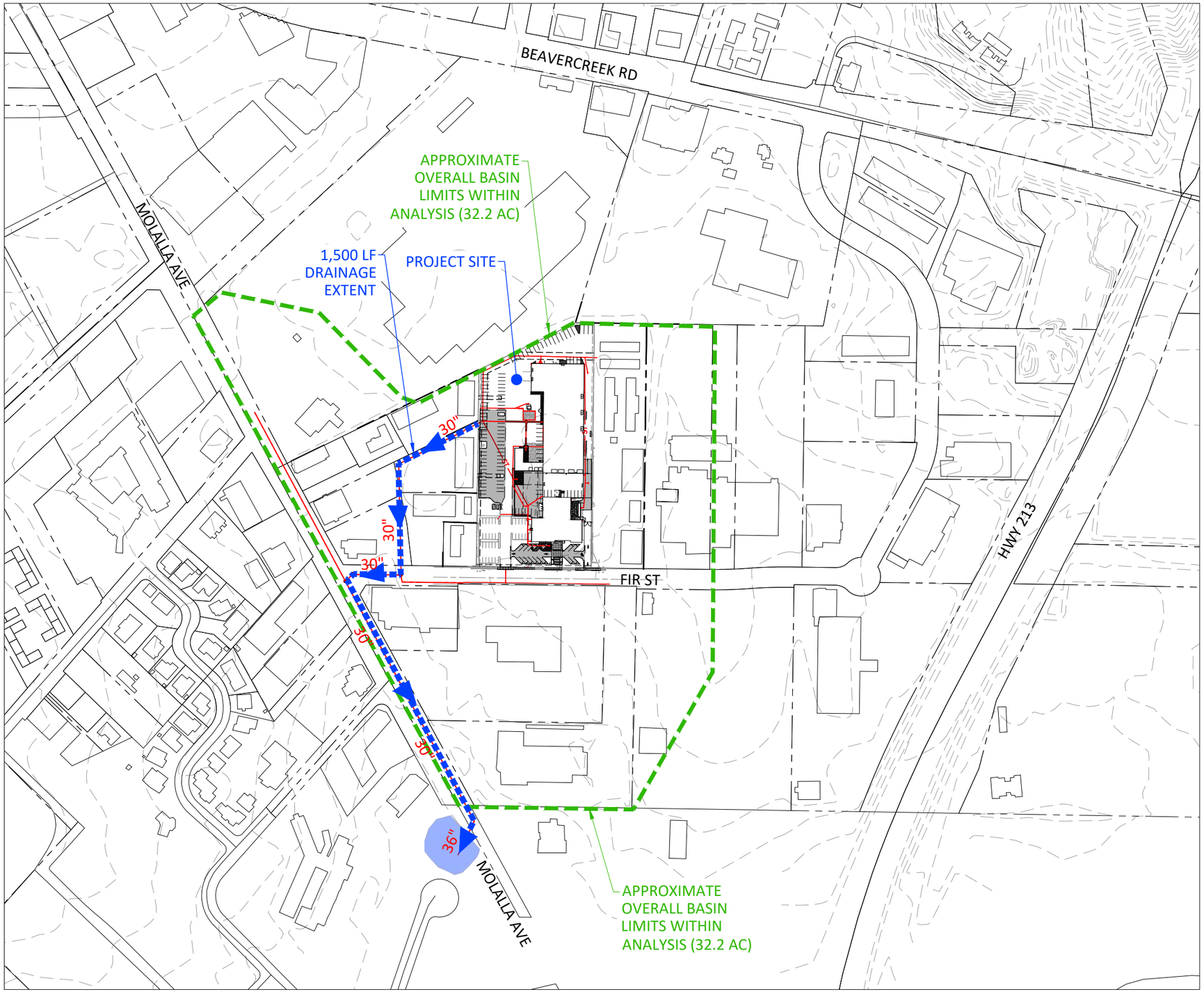

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ISSUE	04.10.2020

Drawing:

DOWNSTREAM ANALYSIS STORMWATER EXHIBIT

Sheet No:

EX

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WES BMP PRINTOUTS

WES BMP Sizing Software Version 1.6.0.2, May 2018

WES BMP Sizing Report

Project Information

Project Name	Oregon City Public Works
Project Type	Addition
Location	13895 Fir St Oregon City, OR
Stormwater Management Area	63085
Project Applicant	Scott Edwards Architecture
Jurisdiction	CCSD1NCSA

Drainage Management Area

Name	Area (sq-ft)	Pre-Project Cover	Post-Project Cover	DMA Soil Type	BMP
Basin A	9,985	Forested	ConventionalConcrete	D	Planter A
Basin B	27,840	Forested	ConventionalConcrete	D	Planter B
Basin C	11,850	Forested	ConventionalConcrete	D	Planter C
Basin D	11,200	Forested	ConventionalConcrete	D	Planter D

LID Facility Sizing Details

LID ID	Design Criteria	BMP Type	Facility Soil Type	Minimum Area (sq-ft)	Planned Areas (sq-ft)	Orifice Diameter (in)
Planter A	FlowControlAndTreatment	Stormwater Planter - Filtration	Lined	299.6	345.0	1.1
Planter B	FlowControlAndTreatment	Stormwater Planter - Filtration	Lined	835.2	840.0	1.9
Planter C	FlowControlAndTreatment	Stormwater Planter - Filtration	Lined	355.5	425.0	1.2
Planter D	FlowControlAndTreatment	Stormwater Planter - Filtration	Lined	336.0	600.0	1.2

Pond Sizing Details

1. FCWQT = Flow control and water quality treatment, WQT = Water quality treatment only

2. Depth is measured from the bottom of the facility and includes the three feet of media (drain rock, separation layer and growing media).

3. Maximum volume of the facility. Includes the volume occupied by the media at the bottom of the facility.

4. Maximum water storage volume of the facility. Includes water storage in the three feet of soil media assuming a 40 percent porosity.

Santa Barbara Urban Hydrograph - 10 yr. Design Storm

MINIMUM PIPE SLOPES & CAPACITIES

Project: Oregon City Public Works
Client:
Job No.: SEA-112
Design: HHPR Check:
Date: 04/08/20 Rev:

Storm = SBUH Runoff (10-yr)
Distribution = NRCS 24-hr Type IA
Default 'n' = 0.013

Pipe Sizing (via Manning's equation, full flow)

Pipe	Slope %	Dia. in (in)	n	Q_2 Cap. (cfs)	V (fps)	V>=3
A	**1.10**	**6**	0.013	0.59	3.00	OK
B	**0.80**	**8**	0.013	1.08	3.10	OK
C	**0.50**	**12**	0.013	2.52	3.21	OK

DOWNSTREAM ANALYSIS CALCULATIONS

(REFERENCE EX-4 FOR BASIN MAP)

Hydrograph Report

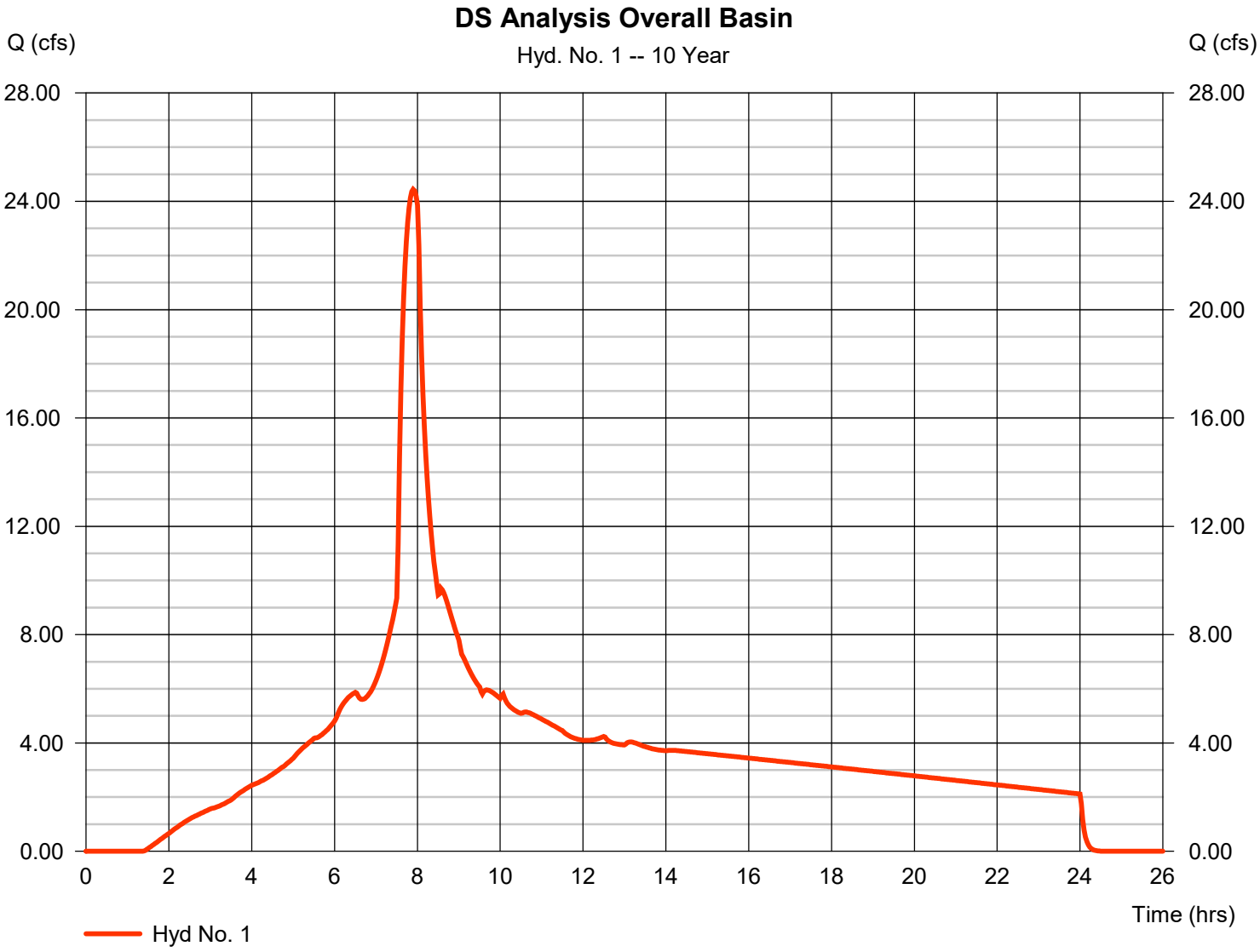
Hyd. No. 1

DS Analysis Overall Basin

Hydrograph type	=	SBUH Runoff	Peak discharge	=	24.44 cfs
Storm frequency	=	10 yrs	Time to peak	=	7.90 hrs
Time interval	=	2 min	Hyd. volume	=	343,536 cuft
Drainage area	=	32.200 ac	Curve number	=	95*
Basin Slope	=	0.0 %	Hydraulic length	=	0 ft
Tc method	=	User	Time of conc. (Tc)	=	5.00 min
Total precip.	=	3.50 in	Distribution	=	Type IA
Storm duration	=	24 hrs	Shape factor	=	n/a

* Composite (Area/CN) = [(27.400 x 98) + (4.800 x 80)] / 32.200

Assumes 85% Impervious cover & 15% Landscape cover within overall basin



Channel Report

Hydraflow Express Extension for Autodesk® Civil 3D® by Autodesk, Inc. Wednesday, Apr 8 2020

30-inch Ultimate Pipe

Circular

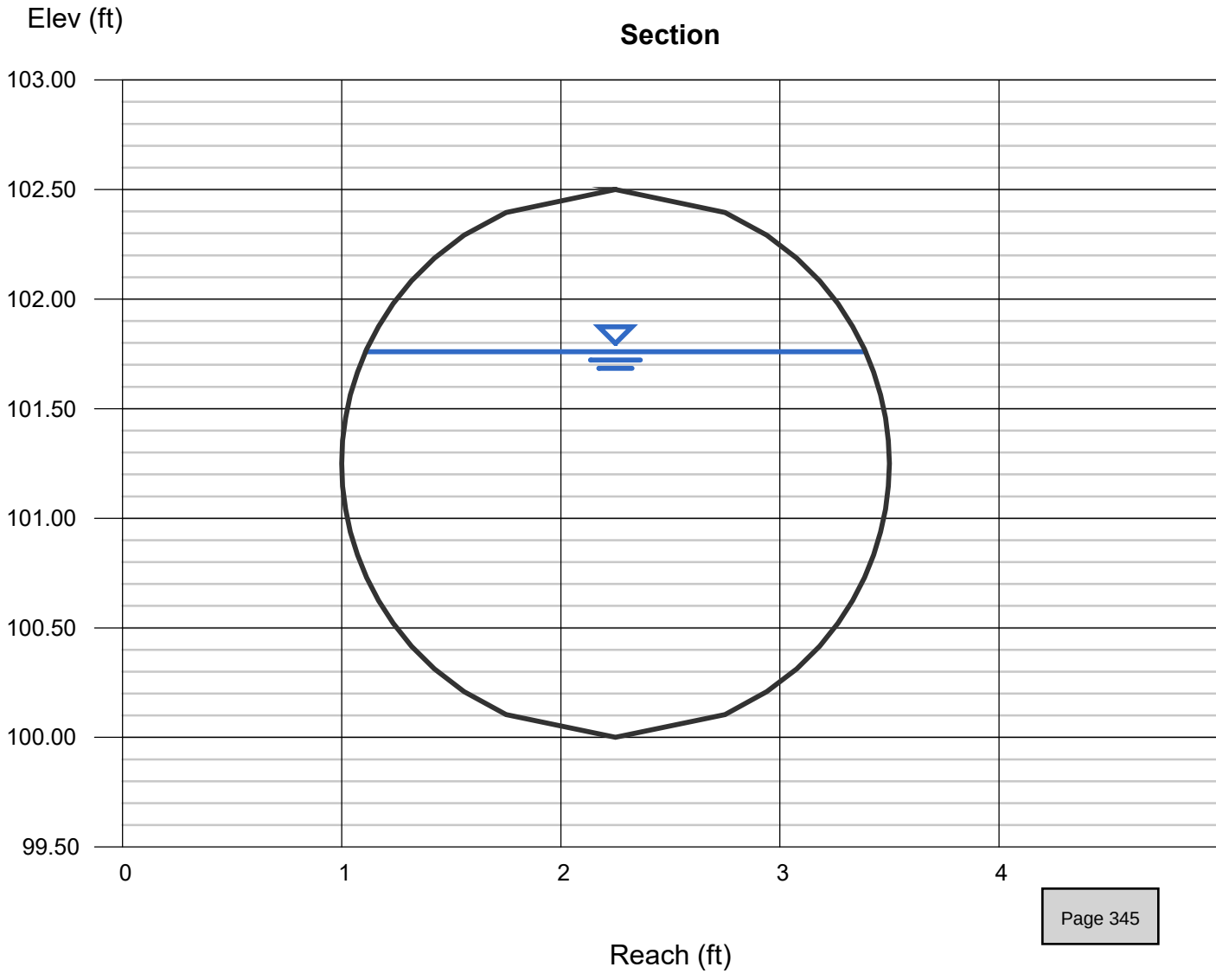
Diameter (ft)	= 2.50
Invert Elev (ft)	= 100.00
Slope (%)	= 0.50
N-Value	= 0.013

Calculations

Compute by:	Known Q
Known Q (cfs)	= 24.44

Highlighted

Depth (ft)	= 1.76
Q (cfs)	= 24.44
Area (sqft)	= 3.70
Velocity (ft/s)	= 6.60
Wetted Perim (ft)	= 4.99
Crit Depth, Yc (ft)	= 1.69
Top Width (ft)	= 2.28
EGL (ft)	= 2.44



NRCS WEB SOIL SURVEY

Soil Map—Clackamas County Area, Oregon

Map Scale: 1:1,300 if printed on A portrait (8.5" x 11") sheet.

N

Meters: 0 15 30 60 90

Feet: 0 50 100 200 300

Map projection: Web Mercator Corner coordinates: WGS84 Edge tics: UTM Zone 10N WGS84

MAP LEGEND

Area of Interest (AOI)
- Area of Interest (AOI)

Soils
- Soil Map Unit Polygons
- Soil Map Unit Lines
- Soil Map Unit Points

Special Point Features
- Blowout
- Borrow Pit
- Clay Spot
- Closed Depression
- Gravel Pit
- Gravelly Spot
- Landfill
- Lava Flow
- Marsh or swamp
- Mine or Quarry
- Miscellaneous Water
- Perennial Water
- Rock Outcrop
- Saline Spot
- Sandy Spot
- Severely Eroded Spot
- Sinkhole
- Slide or Slip
- Sodic Spot
- Spoil Area
- Stony Spot
- Very Stony Spot
- Wet Spot
- Other
- Special Line Features

Water Features
- Streams and Canals

Transportation
- Rails
- Interstate Highways
- US Routes
- Major Roads
- Local Roads

Background
- Aerial Photography

MAP INFORMATION

The soil surveys that comprise your AOI were mapped at 1:20,000.

Warning: Soil Map may not be valid at this scale.

Enlargement of maps beyond the scale of mapping can cause misunderstanding of the detail of mapping and accuracy of soil line placement. The maps do not show the small areas of contrasting soils that could have been shown at a more detailed scale.

Please rely on the bar scale on each map sheet for map measurements.

Source of Map: Natural Resources Conservation Service
Web Soil Survey URL:
Coordinate System: Web Mercator (EPSG:3857)

Maps from the Web Soil Survey are based on the Web Mercator projection, which preserves direction and shape but distorts distance and area. A projection that preserves area, such as the Albers equal-area conic projection, should be used if more accurate calculations of distance or area are required.

This product is generated from the USDA-NRCS certified data as of the version date(s) listed below.

Soil Survey Area: Clackamas County Area, Oregon
Survey Area Data: Version 15, Sep 10, 2019

Soil map units are labeled (as space allows) for map scales 1:50,000 or larger.

Date(s) aerial images were photographed: Jun 13, 2019—Jul 25, 2019

The orthophoto or other base map on which the soil lines were compiled and digitized probably differs from the background imagery displayed on these maps. As a result, some minor shifting of map unit boundaries may be evident.

Map Unit Legend

Map Unit Symbol	Map Unit Name	Acres in AOI	Percent of AOI
8B	Bornstedt silt loam, 0 to 8 percent slopes	4.9	100.0%
Totals for Area of Interest		**4.9**	**100.0%**

Clackamas County Area, Oregon

8B—Bornstedt silt loam, 0 to 8 percent slopes

Map Unit Setting

National map unit symbol: 227t
Elevation: 300 to 650 feet
Mean annual precipitation: 48 to 65 inches
Mean annual air temperature: 50 to 52 degrees F
Frost-free period: 140 to 200 days
Farmland classification: All areas are prime farmland

Map Unit Composition

Bornstedt and similar soils: 85 percent
Minor components: 6 percent
Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Bornstedt

Setting

Landform: Hillslopes, terraces
Landform position (two-dimensional): Summit, footslope
Landform position (three-dimensional): Interfluve, tread
Down-slope shape: Linear
Across-slope shape: Linear
Parent material: Mixed old alluvium

Typical profile

H1 - 0 to 8 inches: silt loam
H2 - 8 to 33 inches: silty clay loam
H3 - 33 to 71 inches: silty clay

Properties and qualities

Slope: 0 to 8 percent
Depth to restrictive feature: More than 80 inches
Natural drainage class: Moderately well drained
Capacity of the most limiting layer to transmit water (Ksat): Moderately low to moderately high (0.06 to 0.20 in/hr)
Depth to water table: About 24 to 36 inches
Frequency of flooding: None
Frequency of ponding: None
Available water storage in profile: Moderate (about 8.8 inches)

Interpretive groups

Land capability classification (irrigated): None specified
Land capability classification (nonirrigated): 2e
Hydrologic Soil Group: C
Forage suitability group: Moderately Well Drained < 15% Slopes (G002XY004OR)
Hydric soil rating: No

Minor Components

Borges

Percent of map unit: 5 percent
Landform: Depressions on terraces, hillslopes
Landform position (two-dimensional): Footslope
Landform position (three-dimensional): Base slope, tread
Down-slope shape: Linear
Across-slope shape: Linear
Hydric soil rating: Yes

Aquults

Percent of map unit: 1 percent
Landform: Depressions
Hydric soil rating: Yes

Data Source Information

Soil Survey Area: Clackamas County Area, Oregon
Survey Area Data: Version 15, Sep 10, 2019

SITE SPECIFIC GEOTECHNICAL SOIL GROUP ADDENDUM

April 7, 2020

City of Oregon City
122 S Center Street
Oregon City, Oregon 97045

Regarding: Geotechnical Engineering Report Addendum No. 1
Oregon City Public Works
13895 Fir Street
Oregon City, Oregon
PBS Project 73457.000

PBS Engineering and Environmental Inc. (PBS) completed a geotechnical engineering evaluation for the Oregon City Public Works project located at 13895 Fir Street in Oregon City, Oregon, and presented the results in a geotechnical engineering report (GER) dated December 4, 2019.[1] This addendum was prepared to provide additional information regarding the United States Department of Agriculture (USDA) soil classification for the soils present at the site for use by the civil engineer in designing the stormwater system. This letter should be considered an addendum to and used only in conjunction with the full GER for the project.

INFILTRATION TESTING

PBS previously completed infiltration at the site that included two cased-hole, falling head infiltration tests in borings B-2 and B-4 at a depth of 5 feet below the ground surface (bgs). The infiltration tests were conducted within the 6.25-inch inside diameter, hollow-stem auger used to drill the borings. The auger was filled with water to achieve a minimum 1-foot-high column of water. After a period of saturation, the height of the water column in the pipe was then measured initially and at regular, timed intervals. Results of our field infiltration testing are presented in Table 1.

Table 1. Infiltration Test Results

Test Location	Depth (feet bgs)	Field Measured Infiltration Rate (in/hr)	Soil Classification	USDA Hydrologic Soil Group	Recommended Hydrologic Soil Group*
B-2	5	0	Fat CLAY (CH)	C	D
B-4	5	0.75	Sandy CLAY (CL)	C	D

*The recommended hydrologic soil group classification is based on infiltration rates observed in the field and lab test results

The infiltration rates above are not permeabilities/hydraulic conductivities, but field-measured rates and do not include correction factors related to long-term infiltration rates. We recommend the designer include correction factors to account for the expected level of maintenance, type of system, and sediment control. Field-measured infiltration rates are typically reduced by a minimum factor of 2 to 4 for use in design.

[1] PBS Engineering and Environmental Inc. (December 4, 2019). Geotechnical Engineering Report, Oregon City Public Works, 13895 Fir Street, Oregon City, Oregon. Prepared for City of Oregon City. PBS Project 73457.000.

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Soil types can vary significantly over relatively short distances. The infiltration rates noted above are representative of one discrete location and depth. Installation of infiltration systems within the layer the field rate was measured is considered critical to proper performance of the systems.

The United States Department of Agriculture (USDA) categorizes soils in four hydrologic soil groups, A through D, and are designated mainly by particle size and hydraulic conductivity. Table 2 below shows general characteristics of each group as they are identified by the USDA. The site is mapped as Bornstedt silt loam and classified as Soil Group C.

Table 2. USDA Hydrologic Soil Group Parameters[2]

Soil Properties	Hydrologic Soil Group			
	A	B	C	D
Saturated Hydraulic Conductivity (k) (inches/hour)	k>5.67	1.42<k<5.67	0.14<k<1.42	k<0.14

CONCLUSIONS

Based on the variability of Infiltration rates at the site, which ranged from 0.0 to 0.75 inch per hour, and the moderate to high plasticity of site soils, PBS' current opinion is that site soils should be classified as USDA hydrologic Soil Group D for stormwater design.

LIMITATIONS

The limitations of the GER for the project apply to the information contained in this addendum letter.

CLOSING

We trust this letter meets your current needs. Please contact Ryan White at 503.539.5028 or Ryan.White@pbsusa.com with any questions or comments.

Sincerely,

Dave Eibert, GIT
Staff Geologist

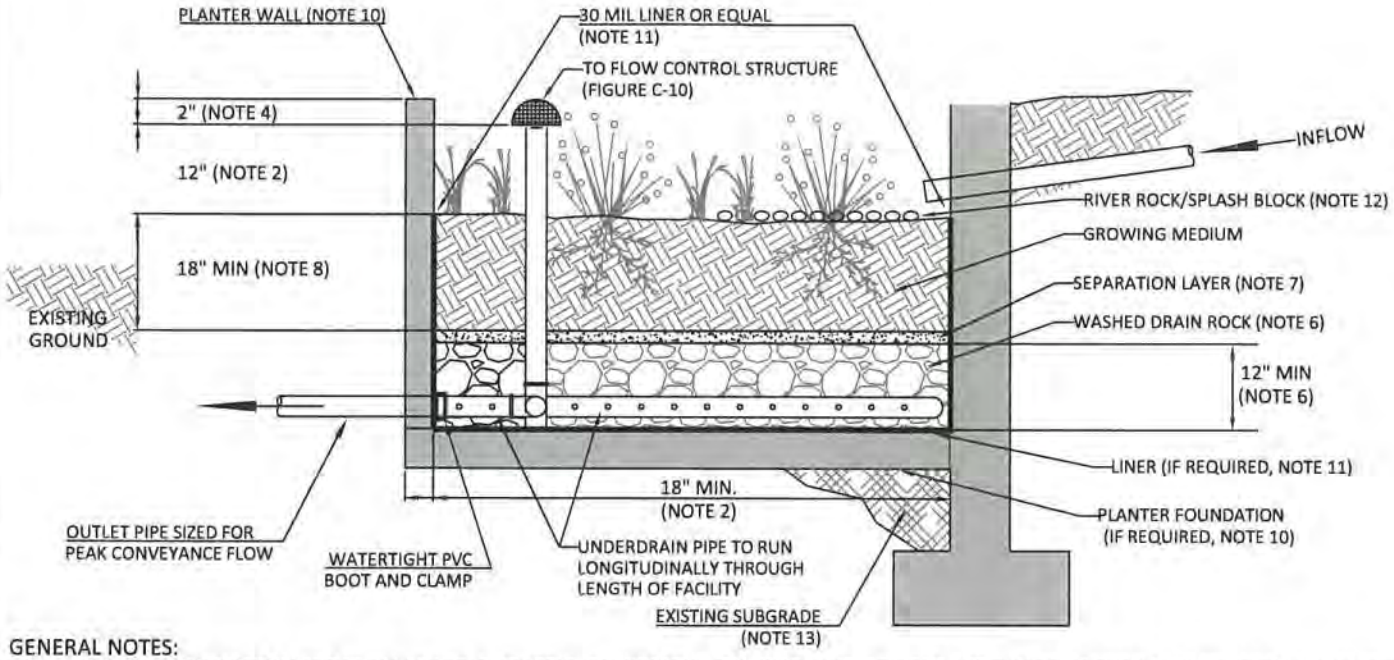
Ryan White, PE, GE
Principal/Geotechnical Engineering Group Manager

DE:RW:rg

[2] United States Department of Agriculture. National Engineering Handbook: Part 630.0701 Chapter 7. Washington DC. January 2009

OPERATIONS & MAINTENANCE
STORMWATER PLANTER

* SEE CITY'S STANDARD DRAWINGS FOR LOCATING PLANTERS IN THE PUBLIC RIGHT-OF-WAY.



GENERAL NOTES:

1. **PROVIDE PROTECTION** FROM ALL VEHICLE TRAFFIC, EQUIPMENT STAGING, AND FOOT TRAFFIC IN PROPOSED INFILTRATION AREAS PRIOR TO, DURING AND AFTER CONSTRUCTION.
2. **DIMENSIONS:**
   -WIDTH: 18" MINIMUM
   -DEPTH OF PLANTER (FROM TOP OF GROWING MEDIUM TO OVERFLOW ELEVATION): 12"
   -SLOPE OF PLANTER: 0.5% OR LESS
3. **SETBACKS**
   -PLANTERS MUST BE MINIMUM OF 5 FEET FROM PROPERTY LINE.
4. **OVERFLOW:**
   -INLET ELEVATION MUST ALLOW FOR 2" OF FREEBOARD, MINIMUM. PROTECT FROM DEBRIS AND SEDIMENT WITH STRAINER OR GRATE.
   -IDENTIFY EMERGENCY OVERFLOW ROUTE ON THE STORMWATER MANAGEMENT PLAN.
5. **PIPING:**
   -PERFORATED UNDERDRAIN PIPING: SHALL BE ABS SCH. 40, DUCTILE IRON, OR PVC SCH.40, 6" MINIMUM DIAMETER. PIPING MUST HAVE 1% GRADE AND FOLLOW THE UNIFORM PLUMBING CODE. PVC NOT ALLOWED ABOVE GROUND.
   -OVERFLOW PIPING: SHALL BE ABS SCH.40, DUCTILE IRON, OR PVC SCH.40 AND SHALL NOT BE PERFORATED. MIMIMUM DIAMETER IS 6". PIPING MUST HAVE 1% GRADE AND FOLLOW THE UNIFORM PLUMBING CODE. PVC NOT ALLOWED ABOVE GROUND.
6. **DRAIN ROCK:**
   -SIZE FOR FLOW-THROUGH PLANTER: 1 1/2" - 3/4" WASHED
   -DEPTH: 12" MINIMUM
7. **SEPARATION** BETWEEN DRAIN ROCK AND GROWING MEDIUM: SHALL BE A 3" LAYER OF 3/4" - 1/4" OPEN GRADED AGGREGATE.
8. **GROWING MEDIUM:**
   -DEPTH: 18" MINIMUM
   -SEE APPENDIX A FOR SPECIFICATION OR USE SAND/LOAM/COMPOST 3-WAY MIX.
   -FACILITY SURFACE AREA MAY BE REDUCED BY 20% WHEN GROWING MEDIA DEPTH IS INCREASED TO 30" OR MORE.
9. **VEGETATION:** FOLLOW LANDSCAPE PLANS OR REFER TO PLANTING REQUIREMENTS IN APPENDIX A.
10. **PLANTER FOUNDATION AND WALLS:**
    -MATERIALS SHALL BE 4" REINFORCED CONCRETE, STONE, BRICK, OR OTHER DURABLE MATERIAL.
    -CONCRETE, BRICK, OR STONE WALLS SHALL BE INCLUDED ON FOUNDATION PLANS.
    -INSTALL INVERTED CURB AS NEEDED BETWEEN PLANTER AND ROAD SUBGRADE.
    -WALL HEIGHTS GREATER THAN 24" ABOVE GRADE REQUIRE HANDRAIL.
11. **WATERPROOF LINER (IF REQUIRED):**
    -LINER SHALL BE 30 MIL PVC OR EQUIVALENT, FOR FLOW THROUGH FACILITIES.
    -A WATERPROOF LINER IS NOT REQUIRED IF THE FOUNDATION OR WALL MATERIAL IS WATERPROOF REINFORCED CONCRETE OR APPROVED EQUAL.
12. **INSTALL RIVER ROCK** SPLASH PAD TO TRANSITION FROM INLET TO GROWING MEDIUM. SIZE OF ROCK SHALL BE 1" - 3".
13. **SEASONAL HIGH GROUNDWATER SEPARATION:**
    -SEPARATION DISTANCE AS REQUIRED BY THE CITY.
14. **SUBMIT RETAINING WALL DESIGN** IN ACCORDANCE WITH APPLICABLE STRUCTURAL CODES FOR REVIEW AND APPROVAL.

Stormwater Planter - Filtration
Figure C-1

Stormwater Planters
Operations & Maintenance Plan

What to Look For	What to Do
Structural Components, including inlets and outlets/overflows, shall freely convey stormwater.	
Clogged inlets or outlets	-Remove sediment and debris from catch basins, trench drains and curb inlets and pipes to maintain at least 50% conveyance capacity at all times.
Cracked Drain Pipes	-Repair/seal cracks. Replace when repair is insufficient.
Check Dams	-Maintain 4 to 10 inch deep rock check dams at design intervals.
Vegetation	
Dead or strained vegetation	-Replant per original planting plan, or substitute from Appendix A. -Irrigate as needed. Mulch banks annually. DO NOT apply fertilizers, herbicides, or pesticides.
Tall Grass and Vegetation	-Cut back grass and prune overgrowth 1-2 times per year. Remove cuttings.
Weeds	-Manually remove weeds. Remove all plant debris.
Growing/Filter Medium, including soil and gravels, shall sustain healthy plant cover and infiltrate within 72 hours.	
Gullies	-Fill, lightly compact, and plant vegetation to disperse flow.
Erosion	-Replace splash blocks or inlet gravel/rock.
Slope Slippage	-Stabilize 3:1 slopes/banks with plantings from Appendix A.
Ponding	-Rake, till, or amend to restore infiltration rate.

Annual Maintenance Schedule:

Summer. Make any structural repairs. Improve filter medium as needed. Clear drain. Irrigate as needed.
Fall. Replant exposed soil and replace dead plants. Remove sediment and plant debris.
Winter. Monitor infiltration/flow-through rates. Clear inlets and outlets/overflows to maintain conveyance.
Spring. Remove sediment and plant debris. Replant exposed soil and replace dead plants. Mulch.
All seasons. Weed as necessary. Clean scuppers or curb inlets as needed.
Maintenance Records: Record date, description, and contractor (if applicable) for all structural repairs, landscape maintenance, and facility cleanout activities. Keep work orders and invoices on file and make available upon request of the inspector.
Access: Maintain ingress/egress to design standards.
Infiltration/Flow Control: All facilities shall drain within 72 hours. Record time/date, weather, and site conditions when ponding occurs.
Pollution Prevention: All sites shall implement best management practices to prevent hazardous or solid wastes or excessive oil and sediment from contaminating stormwater. Contact emergency response agencies for immediate assistance responding to spills. Record time/date, weather, and site conditions if site activities contaminate stormwater.
Vectors (Mosquitoes & Rodents): Stormwater facilities shall not harbor mosquito larvae or rats that pose a threat to public health or that undermine the facility structure. Monitor standing water for small wiggling sticks perpendicular to the water's surface. Note holes/burrows in and around facilities. Call Clackamas County Vector Control for immediate assistance to eradicate vectors. Record time/date, weather, and site conditions when vector activity observed.

SITE SPECIFIC GEOTECHNICAL REPORT BY PBS GEOTECHNICAL ENGINEERS

Geotechnical Engineering Report

Oregon City Public Works
13895 Fir Street
Oregon City, Oregon

Prepared for:
City of Oregon City
122 S Center Street
Oregon City, Oregon

December 4, 2019
PBS Project 73457.000

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PBSUSA.

Geotechnical Engineering Report

Oregon City Public Works
13895 Fir Street
Oregon City, Oregon

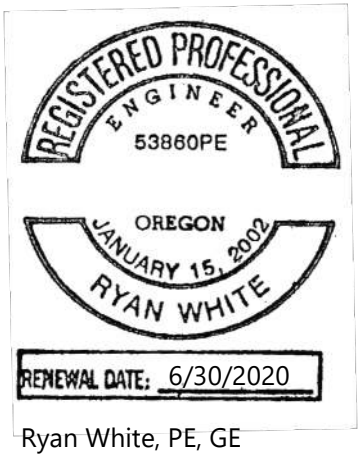
Prepared for:
City of Oregon City
122 S Center Street
Oregon City, Oregon

December 4, 2019
PBS Project 73457.000

Prepared by:

Exp. 7/1/2020

Shaun Cordes, RG, CEG
Project Engineering Geologist



Ryan White, PE, GE
Principal/Geotechnical Engineering Group Manager

Reviewed by:

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Principal Geotechnical Engineer

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Figure 2. Site Plan
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Figure 4. Geologic Map
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Figure 6. Historical Seismicity
Figure 7. Regional Fault Map

APPENDICES

Appendix A: Field Explorations

Table A-1. Terminology Used to Describe Soil and Rock
Table A-2. Key to Test Pit and Boring Log Symbols
Figures A1–A6. Logs for Borings B-1 through B-6

Appendix B: Laboratory Testing

Figure B1. Atterberg Limits Test Results
Figure B2. Summary of Laboratory Data

1 INTRODUCTION

1.1 General

This report presents results of PBS Engineering and Environmental Inc. (PBS) geotechnical engineering services for the proposed facility addition to the existing structures located at 13895 Fir Street in Oregon City, Oregon (site). The general site location is shown on the Vicinity Map, Figure 1. The locations of PBS' explorations in relation to existing and proposed site features are shown on the Site Plan, Figure 2.

1.2 Purpose and Scope

The purpose of PBS' services was to develop geotechnical design and construction recommendations in support of the planned facility addition. This was accomplished by performing the following scope of services.

1.2.1 Literature and Records Review

PBS reviewed various published geologic maps of the area for information regarding geologic conditions and hazards at or near the site.

1.2.2 Subsurface Explorations

Six borings were advanced to depths ranging from approximately 11.5 to 25 feet below the existing ground surface (bgs) within the development footprint. The borings were logged and representative soil samples collected by a member of the PBS geotechnical engineering staff. The approximate boring locations are shown on the Site Plan, Figure 2. The interpreted boring logs are presented as Figures A1 through A6 in Appendix A, Field Explorations.

1.2.3 Field Infiltration Testing

Cased-hole, falling-head field infiltration tests were completed in borings B-2 and B-4 within the proposed development at a depth of 5 feet bgs. Infiltration testing was monitored by PBS geotechnical engineering staff.

1.2.4 Soils Testing

Soil samples were returned to our laboratory and classified in general accordance with the Unified Soil Classification System (ASTM D2487) and/or the Visual-Manual Procedure (ASTM D2488). Laboratory tests included natural moisture contents, grain-size analyses, and Atterberg limits. Laboratory test results are included in the exploration logs in Appendix A, Field Explorations; and in Appendix B, Laboratory Testing.

1.2.5 Geotechnical Engineering Analysis

Data collected during the subsurface exploration, literature research, and testing were used to develop site-specific geotechnical design parameters and construction recommendations.

1.2.6 Report Preparation

This Geotechnical Engineering Report summarizes the results of our explorations, testing, and analyses, including information relating to the following:

- Field exploration logs and site plan showing approximate exploration locations
- Laboratory test results
- Infiltration test results
- Groundwater considerations
- Seismic site hazard study that includes:
    - Discussion of geologic and seismic hazards impacting the site
    - Location of nearby faults

  - Evaluation of liquefaction potential
- Shallow foundation design recommendations:
  - Minimum embedment
  - Allowable bearing pressure
  - Estimated settlement (total and differential)
  - Sliding coefficient
- Earthwork and grading, cut, and fill recommendations:
  - Structural fill materials and preparation, and reuse of on-site soils
  - Wet weather considerations
  - Utility trench excavation and backfill requirements
  - Temporary and permanent slope inclinations
- Seismic design criteria in accordance with the 2019 Oregon Structural Specialty Code (OSSC)
- Slab and pavement subgrade preparation recommendations
- Recommended asphalt concrete (AC) pavement sections

1.3 Project Understanding

PBS understands that the City of Oregon City Public Works Division intends to construct a new office building and parking areas at the currently developed, 8.4-acre site located along Fir Street. Construction of the new office building will include demolition of the existing office, including the southern section of the existing structure, and other modifications to the existing warehouse. The new office building will be a two-story, presumably wood-framed structure, with a first-floor footprint of approximately 10,000 square feet. Upgrades to the existing development will include new structures to create covered parking areas west of the existing facility, new drive lanes, reconfiguration of parking areas, and stormwater facilities. Currently, the project plans are in the preliminary stages of design. We encourage the design team to consult PBS when project plans are finalized.

2 SITE CONDITIONS

2.1 Surface Description

The site is located in Oregon City above the Willamette River on a relatively flat plateau. The site is bordered to the south by Fir Street, and to the north, east, and west by commercial properties. Review of available LiDAR data indicates the site elevation ranges from 430 feet above mean sea level (amsl) at the northern end of the lot and 433 feet amsl at the southern end of the lot near Fir Street (DOGAMI, 2019a).

2.2 Geologic Setting

The site is located on a plateau adjacent to the Willamette River water gap that separates the Portland Basin from the Willamette Valley. The Portland Basin and Willamette Valley form a tectonic depression within the physiographic province of the Puget-Willamette Lowland that separates the Cascade Range from the Coast Range, and extends from the Puget Sound to Eugene, Oregon (Yeats et al., 1996). The Puget-Willamette Lowland is situated along the Cascadia Subduction Zone (CSZ) where oceanic rocks of the Juan de Fuca Plate are subducting beneath the North American Plate, resulting in deformation and uplift of the Coast Range and volcanism in the Cascade Range (Figure 3). Northwest-trending faults accommodating clockwise rotation of the North American Plate are found throughout the Puget-Willamette lowland (USGS, 2006).

Basement rocks beneath the site and the highlands surrounding the Willamette River water gap consist of Miocene age volcanic rocks of the Columbia River Basalt Group overlain by younger Miocene to Pliocene age

sedimentary rocks of the Troutdale Formation, and ultimately Pliocene age Boring volcanic field rocks (Madin, 2009; O'Connor et al., 2001). The Columbia River Basalt Group originated as massive flood basalts flowing westward toward the Pacific Ocean from volcanic vents in eastern Oregon and Washington (Madin, 2009). These flood basalts were subsequently buried by Troutdale Formation sediments associated with westward draining ancestral river systems. Younger basalt flows of the Boring volcanic field make up the upper most sequence of bedrock and the modern-day plateau surface now occupied by the city of Oregon City.

The site is mapped as underlain by Pliocene age basalt of Canemah, a sub member of the Boring volcanic field rocks (Madin, 2009). These rocks are described as dark gray, medium-grained diktytaxitic olivine basalt. Exposed outcrops within the vicinity are massive, with well-developed crude columns measuring 1.5 to 5 feet across. Weathering of the basalt produces accumulations of red clay that extend from the surface to roughly 20 feet bgs. From cross sections in the area and associated well logs in the vicinity, we anticipate that this basalt persists to depths of roughly 180 feet bgs.

2.3 Subsurface Conditions

The site was explored by drilling six borings, designated B-1 through B-6, to depths of 11.5 to 24.75 feet bgs. The drilling was performed by Holt Services, Inc., of Vancouver, Washington, using a truck-mounted CME-75 drill rig and mud-rotary drilling techniques.

PBS has summarized the subsurface units as follows:

ASPHALT and BASE ROCK:	Asphalt concrete (AC) and base rock was encountered in borings B-1 through B-6. The AC and base rock section thicknesses ranged from 3 to 12 inches and 2 to 15 inches, respectively.
FILL:	Fill composed of lean clay and fine, rounded gravel (pea gravel) was encountered just below the asphalt and base rock in boring B-6, extending to a depth of greater than 15 feet bgs. The fill was soft/loose to medium stiff with SPT N-values of 3 to 6.
CLAY (CL and CH), SANDY CLAY (CL) and CLAY with SAND (CL):	Clay was encountered just below the base rock in borings B-1 through B-5 and ranged from lean clay (CL) to sandy lean clay (CL), as well as fat clay (CH). The clay was generally red to orange and reddish brown with medium plasticity and contained fine to coarse sand. These clays were medium stiff to stiff, with SPT N-values ranging from 5 to 13.
WEATHERED BEDROCK:	Preserved bedrock fabric was observed in B-2, B-3, B-4, and B-5 beneath the clay and sandy clay. The bedrock was severely weathered to the point that it could be described as a soil and classified as lean clay (CL), fat clay (CH), sandy lean clay (CL), clayey sand (SC), and silty sand (SM). These materials varied from low to medium plasticity with colors varying from red, orange, brown, purple, and gray. These materials generally increased in sand and stiffness with depth from medium stiff/loose to very stiff/medium dense, with SPT N-values ranging from 8 to 24. These materials often appeared as interbedded due to the degree of differential weathering.
BASALT BEDROCK:	Hard (R4) basalt bedrock was encountered beneath the clayey sand and silty sand in B-4 and B-5 at a depth of approximately 24 feet bgs.

2.4 Groundwater

Static groundwater was encountered during our explorations at a depth of approximately 8 feet bgs. Please note that groundwater levels can fluctuate during the year depending on climate, irrigation season, extended periods of precipitation, drought, and other factors.

2.5 Infiltration Testing

PBS completed a cased-hole, falling head infiltration test in borings B-2 and B-4 at a depth of 5 feet bgs. The infiltration tests were conducted within the 6.25-inch inside diameter, hollow-stem auger used to drill the borings. The auger was filled with water to achieve a minimum 1-foot-high column of water. After a period of saturation, the height of the water column in the pipe was then measured initially and at regular, timed intervals. Results of our field infiltration testing are presented in Table 1.

Table 1. Infiltration Test Results

Test Location	Depth (feet bgs)	Field Measured Infiltration Rate (in/hr)	Soil Classification
B-2	5	0	FAT CLAY (CH)
B-4	5	0.75	SANDY CLAY (CL)

The infiltration rates listed in Table 1 are not permeabilities/hydraulic conductivities, but field-measured rates and do not include correction factors related to long-term infiltration rates. We recommend the designer include correction factors to account for the expected level of maintenance, type of system, and sediment control. Field-measured infiltration rates are typically reduced by a minimum factor of 2 to 4 for use in design.

Soil types can vary significantly over relatively short distances. The infiltration rates noted above are representative of one discrete location and depth. Installation of infiltration systems within the layer the field rate was measured is considered critical to proper performance of the systems.

3 GEOLOGIC HAZARDS

Geologic and seismic hazards are defined as conditions associated with the geologic and seismic environment that could influence existing and/or proposed improvements. Geologic and seismic hazards that could affect the site's development are identified below and should be considered during the planning process.

3.1 Seismicity and Faulting

3.1.1 Historical Seismicity

Regional historical seismicity information was acquired from the Advanced National Seismic System (ANSS) Comprehensive Catalog, hosted by the Northern California Earthquake Data Center (NCEDC), and is presented on Figure 6. These data include earthquakes with magnitudes exceeding M 2.5, within a 150-km radius of the city of Oak Grove, Oregon, and recorded between 1963 and 2017 (NCEDC, 2017). Magnitudes within the ANSS dataset are recorded as local magnitude, surface-wave magnitude, body-wave magnitude, moment magnitude, and magnitude of completeness.

The most significant historic earthquake within the Portland region occurred on March 25, 1993, approximately 40 km south of the site, producing a M 5.6 earthquake known as the Scotts Mills earthquake. The Scotts Mills earthquake is one of the largest historical earthquakes observed in the region and caused damage to structures as far as Salem and Yamhill, Oregon (Wong et al., 1993).

3.1.1.1 Seismic Sources

Several types of seismic sources exist in the Pacific Northwest, which are outlined below. Volcanic sources beneath the Cascade Range are not considered further in this study. Cascade Range earthquakes rarely exceed about M 5.0 in size and are believed be far enough removed to not pose a threat to the site.

3.1.1.2 Cascadia Subduction Zone (CSZ) – Interface Earthquakes

The CSZ represents the boundary between the subducting Juan de Fuca tectonic plate and the overriding North American tectonic plate (Figure 3). Recurrence intervals for subduction zone earthquakes are based on studies of the geologic record, with studies estimating a recurrence interval between 500 to 530 years (Goldfinger et al., 2012). Geologic evidence and written records from Japan suggest the most recent earthquake occurred in January 1700. The 1700 earthquake probably ruptured much of the approximate 620-mile (1,000 km) length of the CSZ and was estimated at moment magnitudes of M_W 9.0. The horizontal distance from the edge of the CSZ megathrust is located approximately 135 miles (220 km) from Oregon City, Oregon, and the depth to slab is an estimated at less than 50 km (USGS, 2019; Hayes, 2018). The current US Geological Survey risk-based maximum credible earthquake for CSZ megathrust is M_W 9.0±0.2 (USGS, 2008).

3.1.1.3 Intraslab Earthquakes

Intraslab earthquakes occur within the subducting slab. They are problematic in the sense that they do not have a surface expression or rupture the ground surface and their seismicity generates deformation along many faults within the slab (Kirby et al., 2002). The CSZ has generated significant intraslab destructive earthquakes including the 2001 M_W 6.8 Nisqually earthquake in the Puget lowland. The estimated depth to the subducting Juan de Fuca plate under Portland is less than 50 km (Blair et al., 2011). Therefore, intraslab earthquakes are a seismic hazard that must be considered.

3.1.2 Crustal Earthquakes and Faults

At least 55 faults or fault zones are present in northwest Oregon and southwest Washington. Studies of small earthquakes in the region indicate most crustal earthquake activity is occurring at depths of 10 to 20 km (Yelin and Patton, 1991).

Review of the Oregon Statewide Geohazard Viewer (HazVu) indicates the site is located within close proximity (less than 25 km) to several active faults (DOGAMI, 2019; USGS, 2019; Figure 7). These faults include the Oatfield fault (approximately 5.6 km north), Portland Hills fault (approximately 5.7 km northeast), Damascas-Tickle fault zone (approximately 6.8 km northeast), Canby-Molalla fault (approximately 8.4 km south-southwest), East Bank fault (approximately 13.5 km north), and the Beaverton fault zone (approximately 23.7 km northwest).

The fault zones within 25 km of the site are listed in Table 2.

Table 2. Faults within the Site Vicinity

Fault Zone Name	Proximity to Site (Surface Projection in km)	USGS Fault Number
Oatfield fault	<4	No. 875
Portland Hills fault	5.5	No. 877
Damascas-Tickle fault zone	6.8	No. 879
Canby-Molalla fault	8.4	No. 716
Grant Butte fault	17.1	No. 878
East Bank fault	20	No. 876
Beaverton fault zone	23.7	No. 715

3.1.3 Seismic Hazards

Other site-specific seismic hazards considered include earthquake-induced landslides, fault rupture, liquefaction and lateral spreading, and earthquake shaking. Based on the flat surface topography and geology at the site, the risk from landslides and earthquake-induced landslides is low. The site is within close proximity to one local fault (approximately 0.5 km); therefore, the risk of fault rupture is low but not absent. Due to the location of the site, the risk of seiche and tsunami inundation is absent. Review of Oregon HazVu indicates the site is located within a zone of non-liquefiable soils; therefore, the risk of liquefaction and lateral spreading is low (Mabey et al., 1997). Severe earthquake ground shaking will occur during a code-based seismic event on the CSZ as well as from local faults. Based on our current project understanding, our opinion is that effects of earthquake ground motions can be accounted for by using code-based design procedures and the code-based design response spectrum.

3.1.3.1 Liquefaction and Lateral Spreading

Liquefaction is defined as a decrease in the shear resistance of loose, saturated, cohesionless soil (e.g., sand) or low plasticity silt soils, due to the buildup of excess pore pressures generated during an earthquake. This results in a temporary transformation of the soil deposit into a viscous fluid. Liquefaction can result in ground settlement, foundation bearing capacity failure, and lateral spreading of ground.

Based on a review of the Oregon Statewide Geohazard Viewer (HazVu), the site is not located in a mapped liquefaction hazard area. This is consistent with subsurface conditions encountered in our explorations.

4 CONCLUSIONS AND RECOMMENDATIONS

4.1 Geotechnical Design Considerations

Shallow subsurface conditions at the site consist predominantly of clay. Based on our observations and analyses, conventional foundation support on shallow spread footings is feasible for the proposed new building. Excavation with conventional equipment is feasible at the site.

Soft to medium stiff clay and loose, fine, gravel fill was encountered to a depth of 15 feet bgs in boring B-6. Due to the presence of fine gravel at a depth of 13 feet, there was concern this may represent a utility trench and the boring was terminated. However, this condition may not be limited to a trench, and the lateral extent of the fill is currently unknown. Footings located in this area should not be supported on undocumented fill. Unsuitable soils should be removed and backfilled with compacted structural fill and these subgrades should be evaluated by PBS prior to pouring footings.

The grading and final development plans for the project had not been completed when this report was prepared. Once completed, PBS should be engaged to review the project plans and update our recommendations as necessary.

4.2 Shallow Foundations

Shallow spread footings bearing on native medium stiff or to stiff clay may be used to support loads associated with the proposed development, provided the recommendations in this report are followed. Footings should not be supported on undocumented fill.

4.2.1 Minimum Footing Widths / Design Bearing Pressure

Continuous wall and isolated spread footings should be at least 18 and 24 inches wide, respectively. Footings should be sized using a maximum allowable bearing pressure of 2,500 pounds per square foot (psf). This is a net bearing pressure and the weight of the footing and overlying backfill can be disregarded in calculating footing sizes. The recommended allowable bearing pressure applies to the total of dead plus long-term live loads. Allowable bearing pressures may be increased by one-third for seismic and wind loads.

Footings will settle in response to column and wall loads. Based on our evaluation of the subsurface conditions and our analysis, we estimate post-construction settlement will be less than 1 inch for the column and perimeter foundation loads. Differential settlement will be on the order of one-half of the total settlement.

4.2.2 Footing Embedment Depths

PBS recommends that all footings be founded a minimum of 18 inches below the lowest adjacent grade. The footings should be founded below an imaginary line projecting upward at a 1H:1V (horizontal to vertical) slope from the base of any adjacent, parallel utility trenches or deeper excavations.

4.2.3 Footing Preparation

Excavations for footings should be carefully prepared to a neat and undisturbed state. A representative from PBS should confirm suitable bearing conditions and evaluate all exposed footing subgrades. Observations should also confirm that loose or soft materials have been removed from new footing excavations and concrete slab-on-grade areas. Localized deepening of footing excavations may be required to penetrate soft, loose, wet, or deleterious materials.

PBS recommends a layer of compacted, crushed rock be placed over the footing subgrades to help protect them from disturbance due to foot traffic and the elements. The footing subgrade should be in a dense or stiff condition prior to pouring concrete. Based on our experience, approximately 4 inches of compacted crushed rock will be suitable beneath the footings.

4.2.4 Lateral Resistance

Lateral loads can be resisted by passive earth pressure on the sides of footings and grade beams, and by friction at the base of the footings. A passive earth pressure of 250 pounds per cubic foot (pcf) may be used for footings confined by native soils and new structural fills. The allowable passive pressure has been reduced by a factor of two to account for the large amount of deformation required to mobilize full passive resistance. Adjacent floor slabs, pavements, or the upper 12-inch depth of adjacent unpaved areas should not be considered when calculating passive resistance. For footings supported on native soils or new structural fills, use a coefficient of friction equal to 0.35 when calculating resistance to sliding. These values do not include a factor of safety (FS).

4.3 Floor Slabs

Satisfactory subgrade support for building floor slabs can be obtained from the native clay or structural fill subgrades prepared in accordance with our recommendations presented in the Site Preparation, Wet/Freezing Weather and Wet Soil Conditions, and Select Granular Fill sections of this report. A minimum 6-inch-thick layer of imported granular material should be placed and compacted over the prepared subgrade. Thicker aggregate sections may be necessary where undocumented fill is present, soft/loose soils are present at subgrade elevation, and/or during wet conditions. Imported granular material should be composed of crushed rock or crushed gravel that is relatively well graded between coarse and fine, contains no deleterious materials, has a maximum particle size of 1 inch, and has less than 5 percent by dry weight passing the US Standard No. 200 Sieve.

Floor slabs supported on a subgrade and base course prepared in accordance with the preceding recommendations may be designed using a modulus of subgrade reaction (k) of 100 pounds per cubic inch (pci).

4.4 Seismic Design Considerations

4.4.1 Code-Based Seismic Design Parameters

The current seismic design criteria for this project are based on the 2019 Oregon Structural Specialty Code (OSSC). Based on subsurface conditions encountered in our explorations, Site Class C is appropriate for use in design. The seismic design criteria, in accordance with the 2019 OSSC, are summarized in Table 3.

Table 3. 2019 OSSC Seismic Design Parameters

Parameter	Short Period	1 Second
Maximum Credible Earthquake Spectral Acceleration	S_s = 0.80 g	S_1 = 0.36 g
Site Class	C	
Site Coefficient	F_a = 1.2	F_v = 1.5
Adjusted Spectral Acceleration	S_{MS} = 0.96 g	S_{M1} = 0.55 g
Design Spectral Response Acceleration Parameters	S_{DS} = 0.64 g	S_{D1} = 0.36 g

g= Acceleration due to gravity

4.5 Temporary and Permanent Slopes

All temporary cut slopes should be excavated with a smooth-bucket excavator, with the slope surface repaired if disturbed. In addition, upslope surface runoff should be rerouted to not run down the face of the slopes. Equipment should not be allowed to induce vibration or infiltrate water above the slopes, and no surcharges are allowed within 15 feet of the slope crest.

4.5.1 Erosion Control

Permanent cut and fill slopes up to 10 feet high can be inclined at 2H:1V in medium stiff to stiff clay or compacted structural fill. If slow seepage is present, use of a rock blanket or a suitably revegetated, reinforced erosion control blanket may be required. PBS should be consulted if seepage is present; additional erosion control measures, such as additional drainage elements, and/or flatter slopes, may also be required. Exposed soils that are soft or loose may also require these measures. Fill slopes should be over-built and cut back into compacted structural fill at the design inclination using a smooth-bucket excavator. Erosion control is critical to maintaining slopes.

4.6 Ground Moisture

4.6.1 General

The perimeter ground surface and hard-scape should be sloped to drain away from all structures and away from adjacent slopes. Gutters should be tight-lined to a suitable discharge and maintained as free-flowing. All crawl spaces should be adequately ventilated and sloped to drain to a suitable, exterior discharge.

4.6.2 Perimeter Footing Drains

Due to the relatively low permeability of site soils and the potential for shallow or perched groundwater at the site, we recommend perimeter foundation drains be installed around all proposed structures.

The foundation subdrainage system should include a minimum 4-inch diameter perforated pipe in a drain rock envelope. A non-woven geotextile filter fabric, such as Mirafi 140N or equivalent, should be used to completely wrap the drain rock envelope, separating it from the native soil and footing backfill materials. The invert of the perimeter drain lines should be placed approximately at the bottom of footing elevation. Also, the subdrainage system should be sealed at the ground surface. The perforated subdrainage pipe should be laid to drain by gravity into a non-perforated solid pipe and finally connected to the site drainage stem at a suitable location. Water from downspouts and surface water should be independently collected and routed to a storm sewer or other positive outlet. This water must not be allowed to enter the bearing soils.

4.6.3 Vapor Flow Retarder

A continuous, impervious barrier must be installed over the ground surface under slabs of all structures. Barriers should be installed per the manufacturer's recommendations.

4.7 Existing Pavement

The roadway pavement consists of AC over crushed aggregate base course. The measured section thicknesses are provided in Table 4.

Table 4. Existing Pavement Section Approximate Thicknesses

Exploration Boring	AC (in)	Base Course (in)
B-1	6	6
B-2	3	15
B-3	12	2
B-4	12	6
B-5	8	4
B-6	8	10

4.8 Pavement Design

Depending on the extent of site improvements and the condition of the existing AC pavement, considering the existing pavement section thickness (except at B-2), it may be possible for the pavement to remain in place.

The provided pavement recommendations were developed based on our experience with similar developments and references the associated Oregon Department of Transportation (ODOT) specifications for construction. The minimum pavement section thickness can be updated to reflect site-specific traffic data if it is available.

The minimum recommended pavement section thicknesses are provided in Table 5. Depending on weather conditions at the time of construction, a thicker aggregate base course section could be required to support construction traffic during preparation and placement of the pavement section.

Table 5. Minimum AC Pavement Sections

Traffic Loading	AC (inches)	Base Course (inches)	Subgrade
Pull-in Car Parking Only	3.5	12	Stiff subgrade as verified by PBS personnel*
Drive Lanes and Access Roads	5	12	

* Subgrade must pass proofroll

The asphalt cement binder should be selected following ODOT SS 00744.11 – Asphalt Cement and Additives. The AC should consist of ½-inch hot mix asphalt concrete (HMAC) with a maximum lift thickness of 3 inches. The AC should conform to ODOT SS 00744.13 and 00744.14 and be compacted to 91 percent of the maximum theoretical density (Rice value) of the mix, as determined in accordance with ASTM D2041.

Heavy construction traffic on new pavements or partial pavement sections (such as base course over the prepared subgrade) will likely exceed the design loads and could potentially damage or shorten the pavement life; therefore, we recommend construction traffic not be allowed on new pavements, or that the contractor take appropriate precautions to protect the subgrade and pavement during construction.

If construction traffic is to be allowed on newly constructed road sections, an allowance for this additional traffic will need to be made in the design pavement section.

5 CONSTRUCTION RECOMMENDATIONS

5.1 Site Preparation

Construction of the proposed structure will involve clearing and grubbing of the existing vegetation or demolition of possible existing structures. Demolition should include removal of existing pavement, utilities, etc., throughout the proposed new development. Underground utility lines or other abandoned structural elements should also be removed. The voids resulting from removal of foundations or loose soil in utility lines should be backfilled with compacted structural fill. The base of these excavations should be excavated to firm native subgrade before filling, with sides sloped at a minimum of 1H:1V to allow for uniform compaction. Materials generated during demolition should be transported off site or stockpiled in areas designated by the owner's representative.

5.1.1 Dry Weather Conditions

Clay soils should be covered within 4 hours of exposure by a minimum of 4 inches of crushed rock or plastic sheeting during the dry season. Exposure of these materials should be coordinated with the geotechnical engineer so that the subgrade suitability can be evaluated prior to being covered.

5.1.2 Proofrolling/Subgrade Verification

Following site preparation and prior to placing aggregate base over shallow foundation, floor slab, and pavement subgrades, the exposed subgrade should be evaluated either by proofrolling or another method of subgrade verification. The subgrade should be proofrolled with a fully loaded dump truck or similar heavy, rubber-tire construction equipment to identify unsuitable areas. If evaluation of the subgrades occurs during wet conditions, or if proofrolling the subgrades will result in disturbance, they should be evaluated by PBS

using a steel foundation probe. We recommend that PBS be retained to observe the proofrolling and perform the subgrade verifications. Unsuitable areas identified during the field evaluation should be compacted to a firm condition or be excavated and replaced with structural fill.

5.1.3 Wet/Freezing Weather and Wet Soil Conditions

Due to the presence of fine-grained silt and sands in the near-surface materials at the site, construction equipment may have difficulty operating on the near-surface soils when the moisture content of the surface soil is more than a few percentage points above the optimum moisture required for compaction. Soils disturbed during site preparation activities, or unsuitable areas identified during proofrolling or probing, should be removed and replaced with compacted structural fill.

Site earthwork and subgrade preparation should not be completed during freezing conditions, except for mass excavation to the subgrade design elevations.

Protection of the subgrade is the responsibility of the contractor. Construction of granular haul roads to the project site entrance may help reduce further damage to the pavement and disturbance of site soils. The actual thickness of haul roads and staging areas should be based on the contractors' approach to site development, and the amount and type of construction traffic. The imported granular material should be placed in one lift over the prepared undisturbed subgrade and compacted using a smooth-drum, non-vibratory roller. A geotextile fabric should be used to separate the subgrade from the imported granular material in areas of repeated construction traffic. The geotextile should meet the specifications of ODOT SS Section 02320.10 and SS 02320.20, Table 02320-1 for soil separation. The geotextile should be installed in conformance with ODOT SS 00350.00 – Geosynthetic Installation.

5.2 Excavation

The near-surface soils at the site can be excavated with conventional earthwork equipment. Sloughing and caving should be anticipated. All excavations should be made in accordance with applicable Occupational Safety and Health Administration (OSHA) and state regulations. The contractor is solely responsible for adherence to the OSHA requirements. Trench cuts should stand relatively vertical to a depth of approximately 4 feet bgs, provided no groundwater seepage is present in the trench walls. Open excavation techniques may be used provided the excavation is configured in accordance with the OSHA requirements, groundwater seepage is not present, and with the understanding that some sloughing may occur. Trenches/excavations should be flattened if sloughing occurs or seepage is present. Use of a trench shield or other approved temporary shoring is recommended if vertical walls are desired for cuts deeper than 4 feet bgs. If dewatering is used, we recommend that the type and design of the dewatering system be the responsibility of the contractor, who is in the best position to choose systems that fit the overall plan of operation.

5.3 Structural Fill

The extent of site grading is currently unknown; however, PBS estimates that cuts and fills will be on the order of up to 2 feet. Structural fill should be placed over subgrade that has been prepared in conformance with the Site Preparation and Wet/Freezing Weather and Wet Soil Conditions sections of this report. Structural fill material should consist of relatively well-graded soil, or an approved rock product that is free of organic material and debris, and contains particles not greater than 4 inches nominal dimension.

The suitability of soil for use as compacted structural fill will depend on the gradation and moisture content of the soil when it is placed. As the amount of fines (material finer than the US Standard No. 200 Sieve) increases, soil becomes increasingly sensitive to small changes in moisture content and compaction becomes more difficult to achieve. Soils containing more than about 5 percent fines cannot consistently be compacted to a

dense, non-yielding condition when the water content is significantly greater (or significantly less) than optimum.

5.3.1 On-Site Soil

On-site soils encountered in our explorations are generally suitable for placement as structural fill during warm, dry weather when moisture contents can be maintained by air drying and/or addition of water. Due to the moderate to high plasticity of clay soils encountered at the site, reuse of on-site soil as structural fill may not be economically feasible. Several days of frequent mixing during dry, sunny weather could be required to moisture condition site soils to near optimum moisture for compaction. The fine-grained fraction of the site soils are moisture sensitive, and during wet weather, may become unworkable because of excess moisture content. The material should be placed in lifts with a maximum uncompacted thickness of approximately 8 inches and compacted to at least 92 percent of the maximum dry density, as determined by ASTM D1557 (modified proctor).

5.3.2 Borrow Material

Borrow material for general structural fill construction should meet the requirements set forth in ODOT SS 00330.12 – Borrow Material. When used as structural fill, borrow material should be placed in lifts with a maximum uncompacted thickness of approximately 8 inches and compacted to not less than 92 percent of the maximum dry density, as determined by ASTM D1557.

5.3.3 Select Granular Fill

Selected granular backfill used during periods of wet weather for structural fill construction should meet the specifications provided in ODOT SS 00330.14 – Selected Granular Backfill. The imported granular material should be uniformly moisture conditioned to within about 2 percent of the optimum moisture content and compacted in relatively thin lifts using suitable mechanical compaction equipment. Selected granular backfill should be placed in lifts with a maximum uncompacted thickness of 8 to 12 inches and be compacted to not less than 95 percent of the maximum dry density, as determined by ASTM D1557.

5.3.4 Crushed Aggregate Base

Crushed aggregate base course below floor slabs, spread footings, and asphalt concrete pavements should be clean crushed rock or crushed gravel that contains no deleterious materials and meets the specifications provided in ODOT SS 02630.10 – Dense-Graded Aggregate, and has less than 5 percent by dry weight passing the US Standard No. 200 Sieve. The crushed aggregate base course should be placed in lifts with a maximum uncompacted thickness of 8 to 12 inches and be compacted to at least 95 percent of the maximum dry density, as determined by ASTM D1557.

5.3.5 Utility Trench Backfill

Pipe bedding placed to uniformly support the barrel of pipe should meet specifications provided in ODOT SS 00405.12 – Pipe Zone Bedding. The pipe zone that extends from the top of the bedding to at least 8 inches above utility lines should consist of material prescribed by ODOT SS 00405.13 – Pipe Zone Material. The pipe zone material should be compacted to at least 90 percent of the maximum dry density, as determined by ASTM D1557, or as required by the pipe manufacturer.

Under pavements, paths, slabs, or beneath building pads, the remainder of the trench backfill should consist of well-graded granular material with less than 10 percent by dry weight passing the US Standard No. 200 Sieve, and should meet standards prescribed by ODOT SS 00405.14 – Trench Backfill, Class B or D. This material should be compacted to at least 92 percent of the maximum dry density, as determined by ASTM D1557 or as required by the pipe manufacturer. The upper 2 feet of the trench backfill should be compacted to at least 95

percent of the maximum dry density, as determined by ASTM D1557. Controlled low-strength material (CLSM), ODOT SS 00405.14 – Trench Backfill, Class E, can be used as an alternative.

Outside of structural improvement areas (e.g., pavements, sidewalks, or building pads), trench material placed above the pipe zone may consist of general structural fill materials that are free of organics and meet ODOT SS 00405.14 – Trench Backfill, Class A. This general trench backfill should be compacted to at least 90 percent of the maximum dry density, as determined by ASTM D1557, or as required by the pipe manufacturer or local jurisdictions.

5.3.6 Stabilization Material

Stabilization rock should consist of pit or quarry run rock that is well-graded, angular, crushed rock consisting of 4- or 6-inch-minus material with less than 5 percent passing the US Standard No. 4 Sieve. The material should be free of organic matter and other deleterious material. ODOT SS 00330.16 – Stone Embankment Material can be used as a general specification for this material with the stipulation of limiting the maximum size to 6 inches.

6 ADDITIONAL SERVICES AND CONSTRUCTION OBSERVATIONS

In most cases, other services beyond completion of a final geotechnical engineering report are necessary or desirable to complete the project. Occasionally, conditions or circumstances arise that require additional work that was not anticipated when the geotechnical report was written. PBS offers a range of environmental, geological, geotechnical, and construction services to suit the varying needs of our clients.

PBS should be retained to review the plans and specifications for this project before they are finalized. Such a review allows us to verify that our recommendations and concerns have been adequately addressed in the design.

Satisfactory earthwork performance depends on the quality of construction. Sufficient observation of the contractor's activities is a key part of determining that the work is completed in accordance with the construction drawings and specifications. We recommend that PBS be retained to observe general excavation, stripping, fill placement, footing subgrades, and/or pile installation. Subsurface conditions observed during construction should be compared with those encountered during the subsurface explorations. Recognition of changed conditions requires experience; therefore, qualified personnel should visit the site with sufficient frequency to detect whether subsurface conditions change significantly from those anticipated.

7 LIMITATIONS

This report has been prepared for the exclusive use of the addressee, and their architects and engineers, for aiding in the design and construction of the proposed development and is not to be relied upon by other parties. It is not to be photographed, photocopied, or similarly reproduced, in total or in part, without express written consent of the client and PBS. It is the addressee's responsibility to provide this report to the appropriate design professionals, building officials, and contractors to ensure correct implementation of the recommendations.

The opinions, comments, and conclusions presented in this report are based upon information derived from our literature review, field explorations, laboratory testing, and engineering analyses. It is possible that soil, rock, or groundwater conditions could vary between or beyond the points explored. If soil, rock, or groundwater conditions are encountered during construction that differ from those described herein, the client is responsible for ensuring that PBS is notified immediately so that we may reevaluate the recommendations of this report.

Unanticipated fill, soil and rock conditions, and seasonal soil moisture and groundwater variations are commonly encountered and cannot be fully determined by merely taking soil samples or completing explorations such as soil borings. Such variations may result in changes to our recommendations and may require additional funds for expenses to attain a properly constructed project; therefore, we recommend a contingency fund to accommodate such potential extra costs.

The scope of work for this subsurface exploration and geotechnical report did not include environmental assessments or evaluations regarding the presence or absence of wetlands or hazardous substances in the soil, surface water, or groundwater at this site.

If there is a substantial lapse of time between the submission of this report and the start of work at the site, if conditions have changed due to natural causes or construction operations at or adjacent to the site, or if the basic project scheme is significantly modified from that assumed, this report should be reviewed to determine the applicability of the conclusions and recommendations presented herein. Land use, site conditions (both on and off site), or other factors may change over time and could materially affect our findings; therefore, this report should not be relied upon after three years from its issue, or in the event that the site conditions change.

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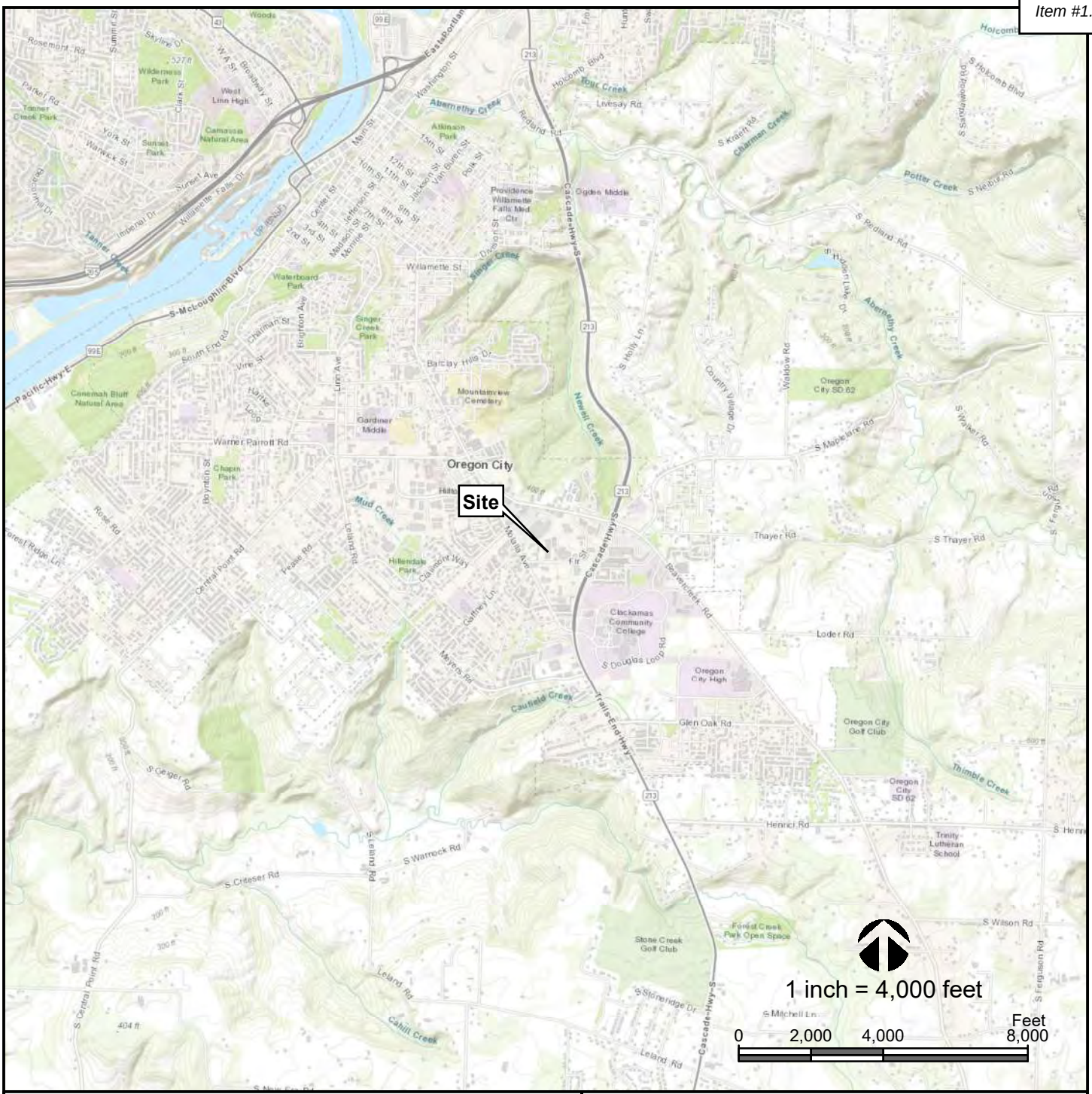
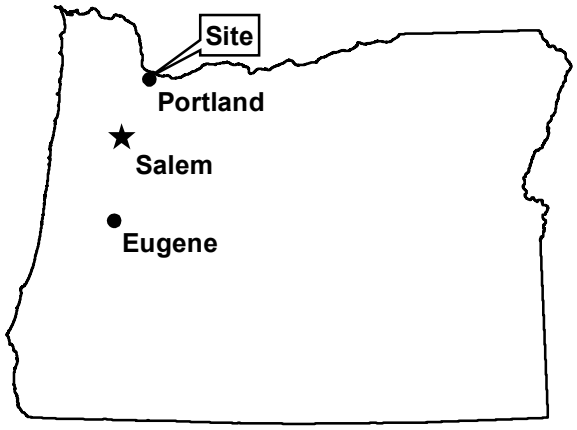
Figures





VICINITY MAP

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FIGURE
1

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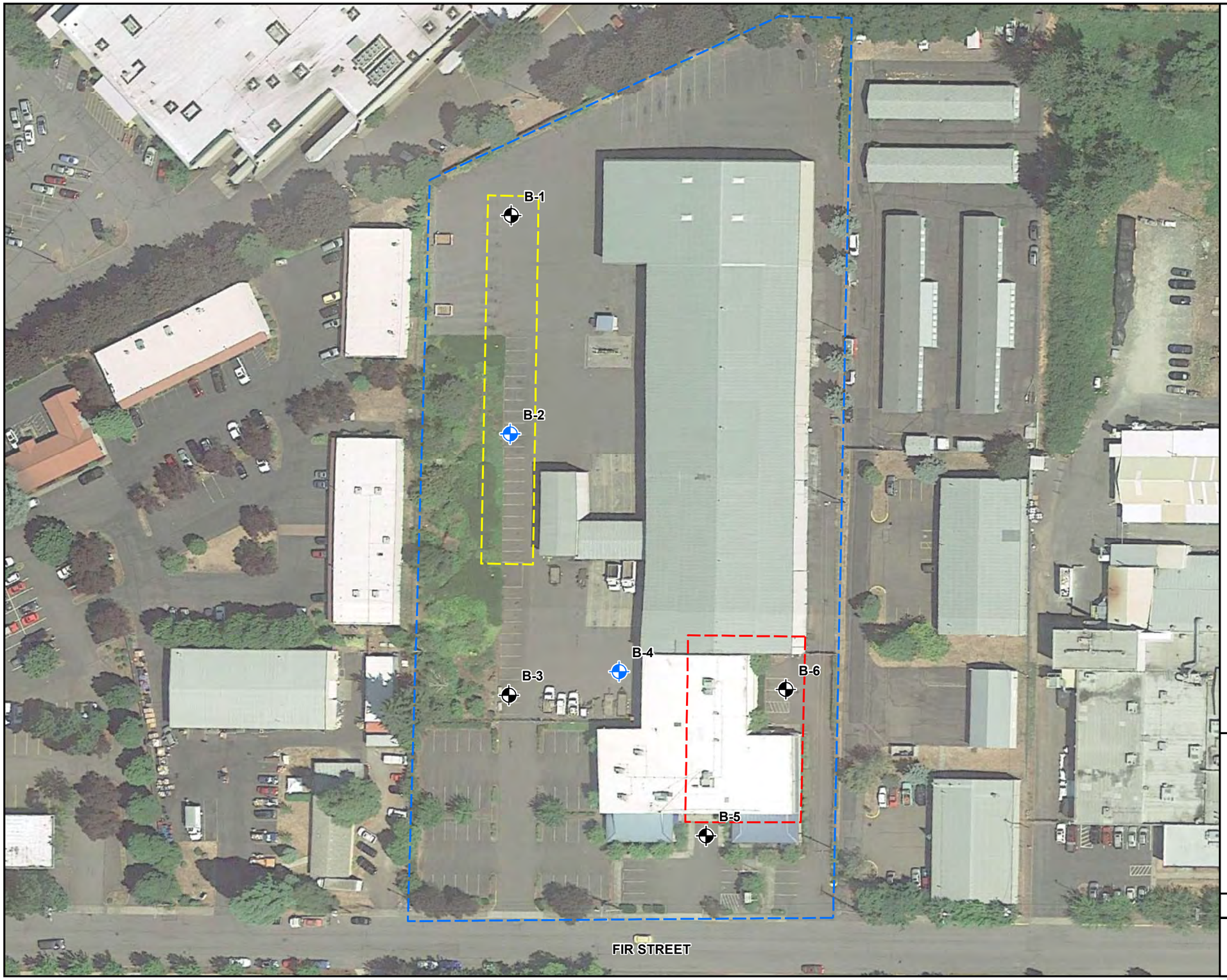

EXPLANATION

- B-1 - Boring name and approximate location
- B-2 - Boring name and approximate location with infiltration test
- Proposed Building
- Proposed covered parking
- Approximate site boundary

1 inch = 75 feet

0 37.5 75 Feet 150

SITE PLAN

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OREGON CITY, OREGON

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FIGURE
2

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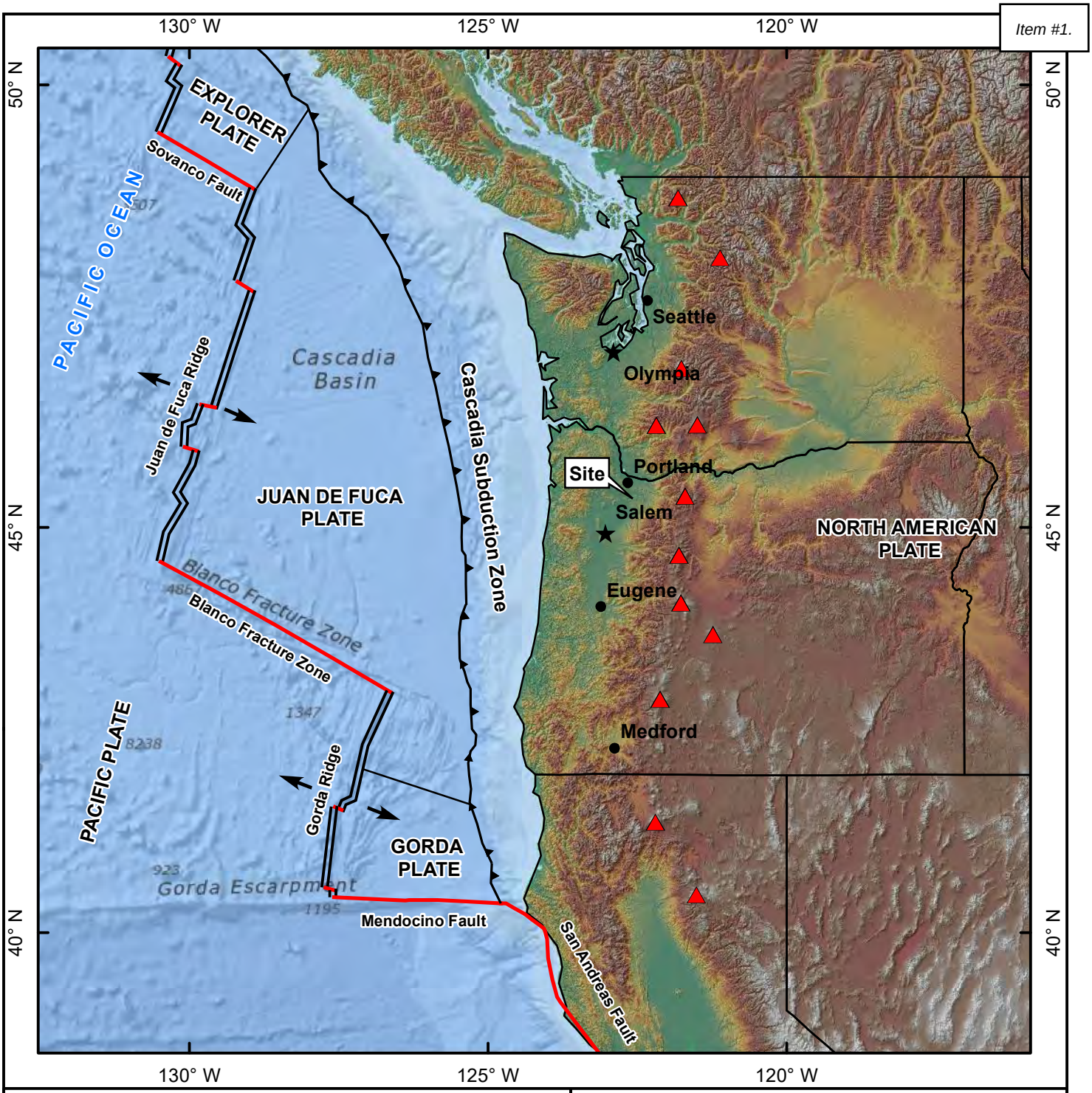

EXPLANATION

- Volcano
- Transform boundary
- Spreading ridge
- Thrust fault

Sources:
1) SRTM 30-meter DEM
2) ESRI World Oceans Basemap
3) USGS Tectonic Plate Boundaries

TECTONIC SETTING OF THE PACIFIC NORTHWEST

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FIGURE
3

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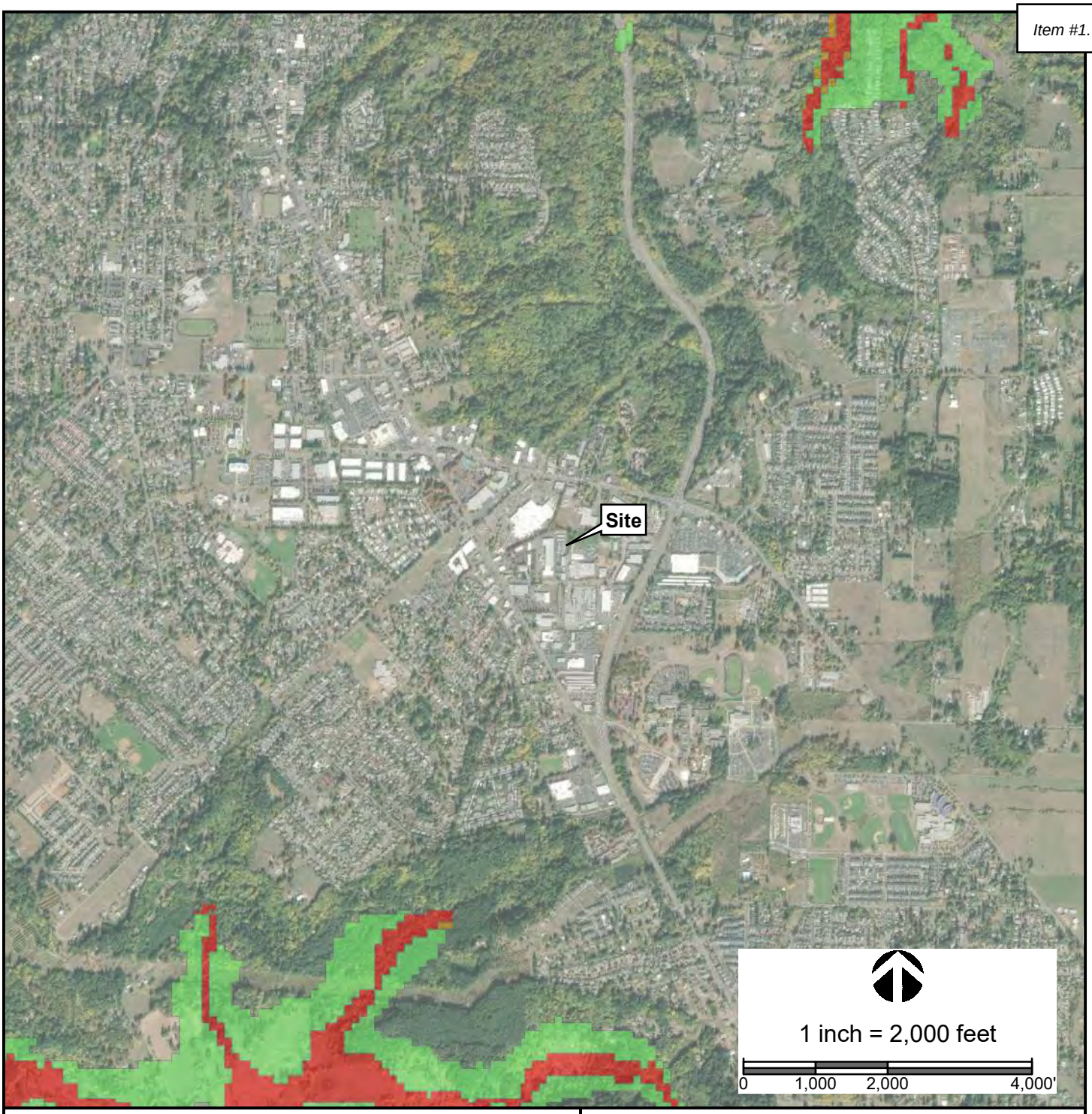

EXPLANATION

- Liquefaction susceptibility: Moderate to high
- Liquefaction susceptibility: Very low to low
- Liquefaction susceptibility: Very low
- Liquefaction susceptibility: Bedrock

Sources: Mabey et al. (1997) DOGAMI IMS-01

LIQUEFACTION SUSCEPTIBILITY MAP

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FIGURE
5

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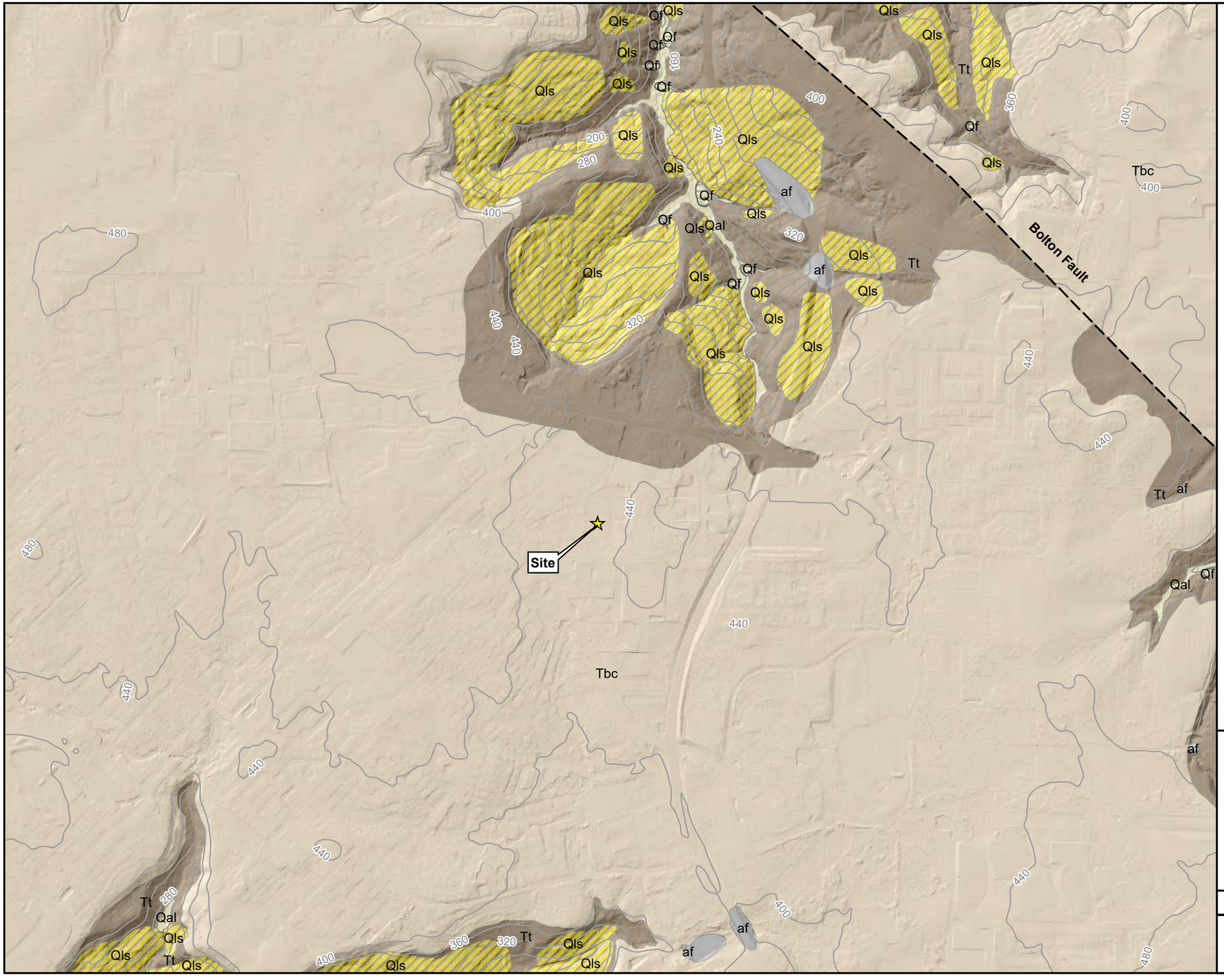

EXPLANATION

- Site
- Fault - approximately located
- 40-foot elevation contour
- af - Artificial fill
- Qal - Alluvial deposits (Quaternary) - gravel, sand, silt, and clay deposited in the active channels and floodplains.
- Qf - Fan or flow deposits (Quaternary) - mixed sand, silt, clay. gravel, and soil deposited by earthflows or debris flows.
- Qls Landslides (Quaternary) - chaotically mixed and deformed masses of rock and colluvium.
- Tbc - Basalt of Canemah (Pliocene) - flows of gray medium-grained, diktytaxitic olivine basalt.
- Tt - Troutdale Formation (Miocene-Pliocene) - sandstone, siltstone, and mudstone, and minor conglomerate and tuff.

EXPLANATION

Notes:
1) Geologic map data derived from GMS-119
2) 40-foot contours from Oregon City 7.5-minute Quadrangle
3) Hillshade basemap produced from DOGAMI LiDAR

1 inch = 1,000 feet

0 500 1,000 2,000ft

GEOLOGIC MAP

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OREGON CITY, OREGON

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FIGURE
4

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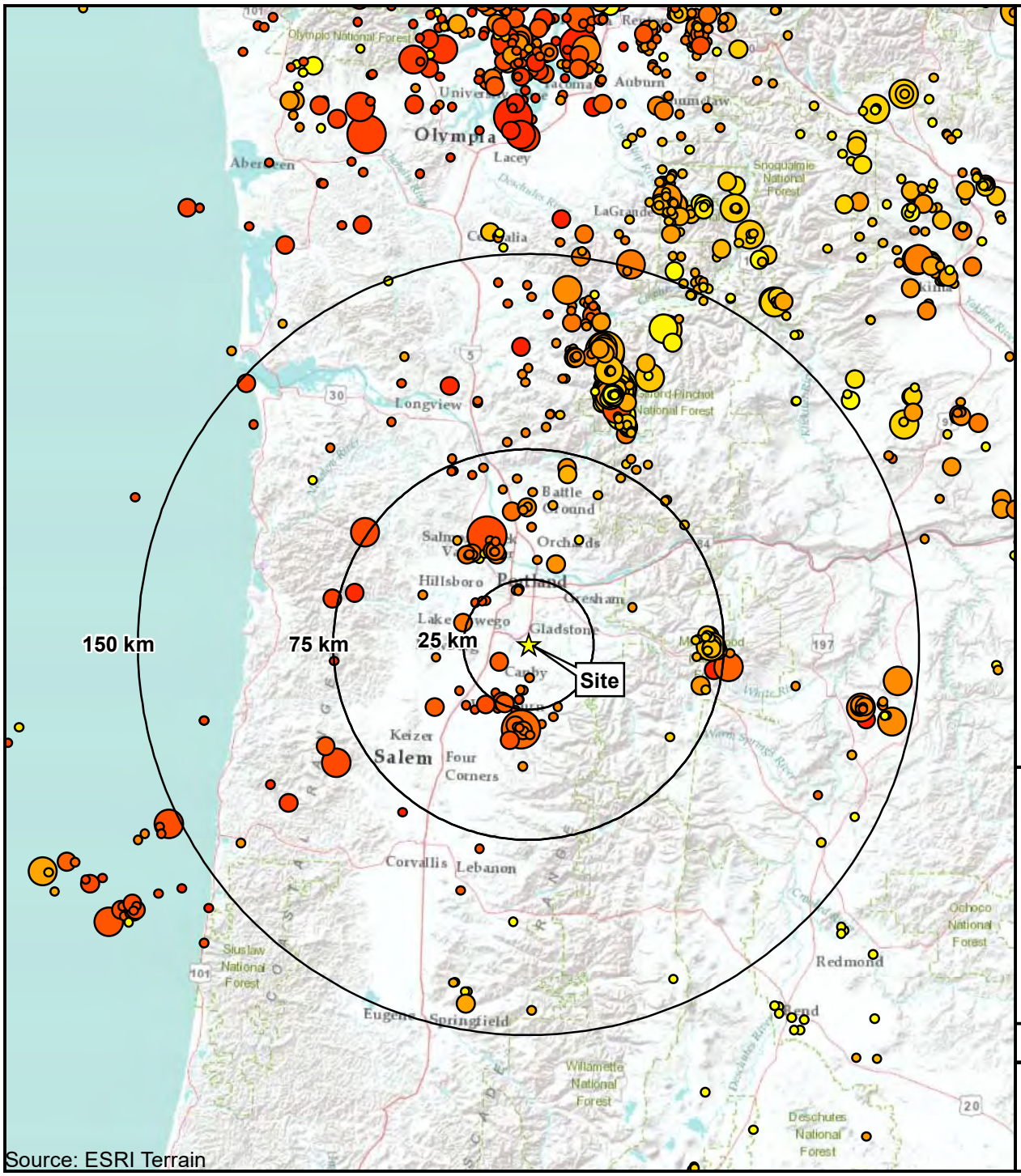

EXPLANATION

☆ Site location

Independent Seismicity (1963-2017)

- M 2.5 - 3.0
- M 3.1 - 4.0
- M 4.1 - 5.0
- M >5.1

Depth in kilometers (km)

Low : 0 km

High: 100 km

1 inch = 60 kilometers

0 15 30 60km

HISTORICAL SEISMICITY

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OREGON CITY, OREGON

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FIGURE 6

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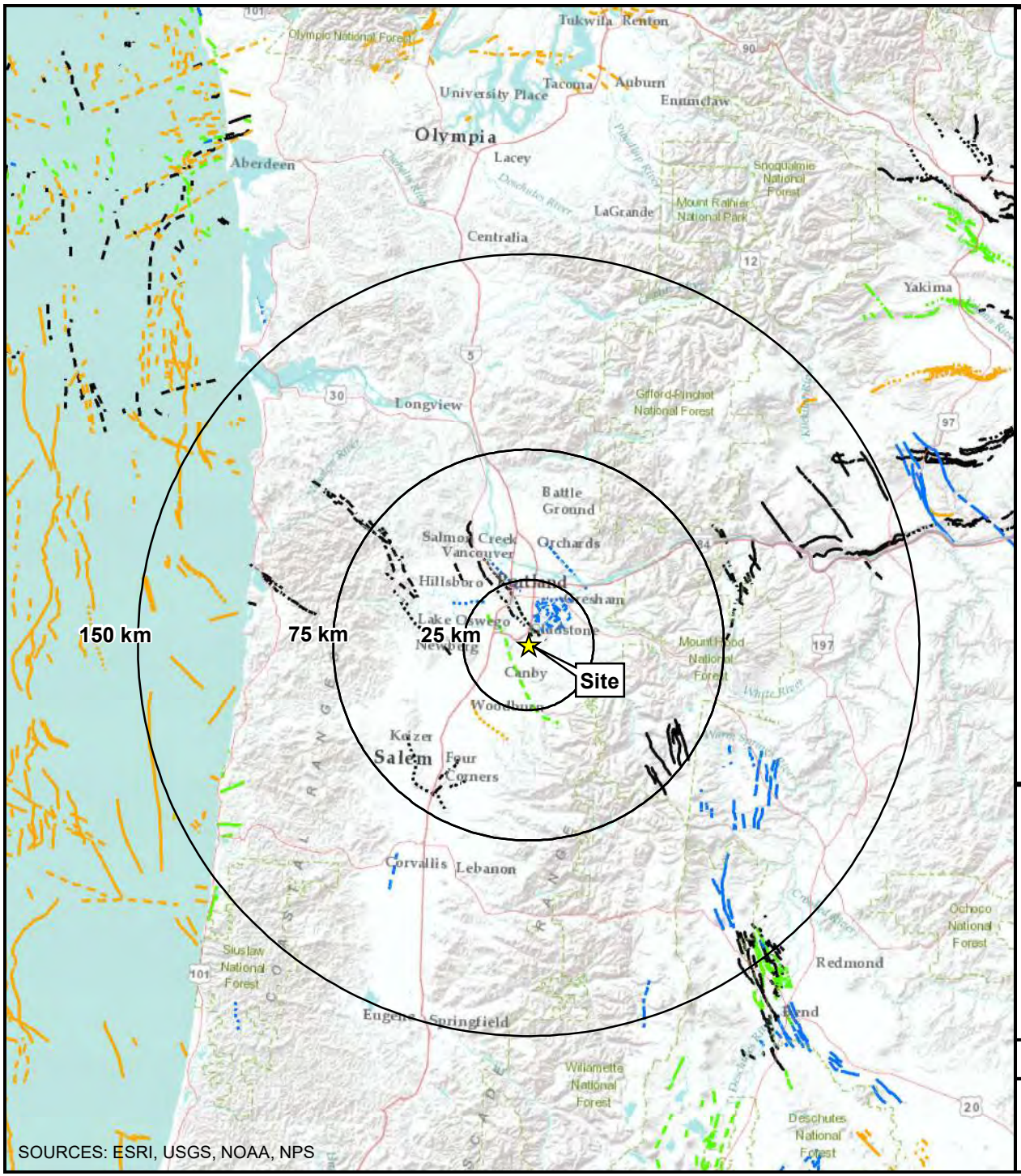

SOURCES: ESRI, USGS, NOAA, NPS

EXPLANATION

☆ Site location

USGS (2006) Quaternary fault traces; solid where well constrained, dashed where moderately constrained, and dotted where inferred

- < 15,000 years - latest Quaternary
- < 130,000 years - late Quaternary
- < 750,000 years - middle and late Quaternary
- < 1.6 million years - undifferentiated Quaternary

1 inch = 60 kilometers

0 15 30 60km

REGIONAL FAULT MAP

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OREGON CITY, OREGON

DATE: DEC 2019 · PROJECT: 73457.000

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FIGURE

7

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Appendix A
Field Explorations

Appendix A: Field Explorations

A1 GENERAL

PBS explored subsurface conditions at the project site by advancing six borings to depths of up to approximately 24.75 feet bgs on October 16 and 17, 2019. The approximate locations of the explorations are shown on Figure 2, Site Plan. The procedures used to advance the borings, collect samples, and other field techniques are described in detail in the following paragraphs. Unless otherwise noted, all soil sampling and classification procedures followed engineering practices in general accordance with relevant ASTM procedures. "General accordance" means that certain local drilling and descriptive practices and methodologies have been followed.

A2 BORINGS

A2.1 Drilling

Borings were advanced using a truck-mounted CME-75 drill rig provided and operated by Holt Services, Inc., of Vancouver, Washington, using mud rotary drilling techniques. The borings were observed by a member of the PBS geotechnical staff, who maintained a detailed log of the subsurface conditions and materials encountered during the course of the work.

A2.2 Sampling

Disturbed soil samples were taken in the borings at selected depth intervals. The samples were obtained using a standard 2-inch outside diameter, split-spoon sampler following procedures prescribed for the standard penetration test (SPT). Using the SPT, the sampler is driven 18 inches into the soil using a 140-pound hammer dropped 30 inches. The number of blows required to drive the sampler the last 12 inches is defined as the standard penetration resistance (N-value). The N-value provides a measure of the relative density of granular soils such as sands and gravels, and the consistency of cohesive soils such as clays and plastic silts. The disturbed soil samples were examined by a member of the PBS geotechnical staff and then sealed in plastic bags for further examination and physical testing in our laboratory.

A2.3 Boring Logs

The boring logs show the various types of materials that were encountered in the borings and the depths where the materials and/or characteristics of these materials changed, although the changes may be gradual. Where material types and descriptions changed between samples, the contacts were interpreted. The types of samples taken during drilling, along with their sample identification number, are shown to the right of the classification of materials. The N-values and natural water (moisture) contents are shown farther to the right.

A3 MATERIAL DESCRIPTION

Initially, samples were classified visually in the field. Consistency, color, relative moisture, degree of plasticity, and other distinguishing characteristics of the soil samples were noted. Afterward, the samples were reexamined in the PBS laboratory, various standard classification tests were conducted, and the field classifications were modified where necessary. The terminology used in the soil classifications and other modifiers are defined in Table A-1, Terminology Used to Describe Soil.

PBS

Table A-2
Terminology Used to Describe Soil and Rock

Soil Descriptions

Soils exist in mixtures with varying proportions of components. The predominant soil, i.e., greater than 50 percent based on total dry weight, is the primary soil type and is capitalized in our log descriptions (SAND, GRAVEL, SILT, or CLAY). Smaller percentages of other constituents in the soil mixture are indicated by use of modifier words in general accordance with the ASTM D2488-06 Visual-Manual Procedure. "General Accordance" means that certain local and common descriptive practices may have been followed. In accordance with ASTM D2488-06, group symbols (such as GP or CH) are applied on the portion of soil passing the 3-inch (75mm) sieve based on visual examination. The following describes the use of soil names and modifying terms used to describe fine- and coarse-grained soils.

Fine-Grained Soils (50% or greater fines passing 0.075 mm, No. 200 sieve)
The primary soil type, i.e., SILT or CLAY is designated through visual-manual procedures to evaluate soil toughness, dilatency, dry strength, and plasticity. The following outlines the terminology used to describe fine-grained soils, and varies from ASTM D2488 terminology in the use of some common terms.

Primary soil NAME, Symbols, and Adjectives			Plasticity Description	Plasticity Index (PI)
SILT (ML & MH)	**CLAY (CL & CH)**	**ORGANIC SOIL (OL & OH)**		
SILT		Organic SILT	Non-plastic	0 – 3
SILT		Organic SILT	Low plasticity	4 – 10
SILT/Elastic SILT	Lean CLAY	Organic SILT/ Organic CLAY	Medium Plasticity	10 – 20
Elastic SILT	Lean/Fat CLAY	Organic CLAY	High Plasticity	20 – 40
Elastic SILT	Fat CLAY	Organic CLAY	Very Plastic	>40

Modifying terms describing secondary constituents, estimated to 5 percent increments, are applied as follows:

Description	% Composition	
With Sand	% Sand ≥ % Gravel	15% to 25% plus No. 200
With Gravel	% Sand < % Gravel	
Sandy	% Sand ≥ % Gravel	≤30% to 50% plus No. 200
Gravelly	% Sand < % Gravel	

Borderline Symbols, for example CH/MH, are used when soils are not distinctly in one category or when variable soil units contain more than one soil type. **Dual Symbols,** for example CL-ML, are used when two symbols are required in accordance with ASTM D2488.

Soil Consistency terms are applied to fine-grained, plastic soils (i.e., PI ≥ 7). Descriptive terms are based on direct measure or correlation to the Standard Penetration Test N-value as determined by ASTM D1586-84, as follows. SILT soils with low to non-plastic behavior (i.e., PI < 7) may be classified using relative density.

Consistency Term	SPT N-value	Unconfined Compressive Strength	
		tsf	kPa
Very soft	Less than 2	Less than 0.25	Less than 24
Soft	2 – 4	0.25 – 0.5	24 – 48
Medium stiff	5 – 8	0.5 – 1.0	48 – 96
Stiff	9 – 15	1.0 – 2.0	96 – 192
Very stiff	16 – 30	2.0 – 4.0	192 – 383
Hard	Over 30	Over 4.0	Over 383

PBS

Table A-1
Terminology Used to Describe Soil and Rock

Soil Descriptions

Coarse - Grained Soils (less than 50% fines)

Coarse-grained soil descriptions, i.e., SAND or GRAVEL, are based on the portion of materials passing a 3-inch (75mm) sieve. Coarse-grained soil group symbols are applied in accordance with ASTM D2488-06 based on the degree of grading, or distribution of grain sizes of the soil. For example, well-graded sand containing a wide range of grain sizes is designated SW; poorly graded gravel, GP, contains high percentages of only certain grain sizes. Terms applied to grain sizes follow.

Material NAME	Particle Diameter	
	Inches	Millimeters
SAND (SW or SP)	0.003 – 0.19	0.075 – 4.8
GRAVEL (GW or GP)	0.19 – 3	4.8 – 75
Additional Constituents:		
Cobble	3 – 12	75 – 300
Boulder	12 – 120	300 – 3050

The primary soil type is capitalized, and the fines content in the soil are described as indicated by the following examples. Percentages are based on estimating amounts of fines, sand, and gravel to the nearest 5 percent. Other soil mixtures will have similar descriptive names.

Example: Coarse-Grained Soil Descriptions with Fines

>5% to < 15% fines (Dual Symbols)	≥15% to < 50% fines
Well graded GRAVEL with silt: GW-GM	Silty GRAVEL: GM
Poorly graded SAND with clay: SP-SC	Silty SAND: SM

Additional descriptive terminology applied to coarse-grained soils follow.

Example: Coarse-Grained Soil Descriptions with Other Coarse-Grained Constituents

Coarse-Grained Soil Containing Secondary Constituents	
With sand or with gravel	≥ 15% sand or gravel
With cobbles; with boulders	Any amount of cobbles or boulders.

Cobble and boulder deposits may include a description of the matrix soils, as defined above.

Relative Density terms are applied to granular, non-plastic soils based on direct measure or correlation to the Standard Penetration Test N-value as determined by ASTM D1586-84.

Relative Density Term	SPT N-value
Very loose	0 – 4
Loose	5 – 10
Medium dense	11 – 30
Dense	31 – 50
Very dense	> 50

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Table A-2
Terminology Used to Describe Soil and Rock

Rock Descriptions

Scale of Rock Strength

Description	Designation	Unconfined Compressive Strength, psi	Unconfined Compressive Strength, MPa	Field Identification
Extremely weak rock	R0	35 – 150	0.25 – 1	Indented by thumbnail.
Very weak rock	R1	150 – 725	1 – 5	Crumbles under firm blows with point of geology pick; can be peeled by a pocket knife.
Weak rock	R2	725 – 3,500	5 – 25	Can be peeled with a pocket knife; shallow indentation made by firm blow with point of geological hammer.
Medium weak rock	R3	3,500 – 7,000	25 – 50	Cannot by scraped or peeled with a pocket knife; specimen can be fractured with a single firm blow of geological hammer.
Strong rock	R4	7,000 – 15,000	50 – 100	Specimen requires more than one blow with a geological hammer to fracture it.
Very strong rock	R5	15,000 – 36,000	100 – 250	Specimen requires many blows of geological hammer to fracture it.
Extremely strong rock	R6	> 36,000	> 250	Specimen can only be chipped with geological hammer.

Descriptive Terminology for Joint Spacing or Bedding

Descriptive Term	Spacing of Joints	
Very close	< 2 inches	< 50 mm
Close	2 inches – 1 foot	50 mm – 300 mm
Moderately close	1 foot – 3 feet	300 mm – 1 m
Wide	3 feet –10 feet	1 m – 3 m
Very wide	> 10 feet	> 3 m

Descriptive Terminology for Vesicularity

Descriptive Term	Percent voids by volume
Dense	< 1%
Slightly vesicular	1 – 10%
Moderately vesicular	10 – 30%
Highly vesicular	30 – 50%
Scoriaceous	> 50%

Correlation of RQD and Rock Quality

Rock Quality Descriptor	RQD Value
Very poor	0 – 25
Poor	25 – 50
Fair	50 – 75
Good	75 – 90

PBS

Table A-2
Terminology Used to Describe Soil and Rock

Rock Descriptions

Scale of Rock Weathering

Stage	Description	Quality Distinction
Fresh	Rock is fresh, crystals are bright, few joints may show slight staining as a result of ground water.	No discoloration
Very Slight	Rock is generally fresh, joints are stained, some joints may have thin clay coatings, crystals in broken face show bright.	Discoloration only on major discontinuity surfaces [1]
Slight	Rock is generally fresh, joints are stained and discoloration extends into rock up to 1 inch. Joints may contain clay. In granitoid rocks some feldspar crystals are dull and discolored. Rocks ring under hammer if crystalline.	Discoloration on all discontinuity surfaces and on rock
Moderate	Significant portions of rock show discoloration and weathering effects. In granitoid rocks, most feldspars are dull and discolored; some are clayey. Rock has dull sound under hammer and shows significant loss of strength as compared with fresh rock.	Decomposition and/or disintegration < 50% of rock [2]
Moderately Severe	All rock, except quartz discolored or stained. In granitoid rocks, all feldspars dull and discolored and majority show kaolinization. Rock shows severe loss of strength and can be excavated with geologist's pick. Rock goes "clunk" when struck.	Decomposition and/or disintegration > 50%, but not complete
Severe	All rock, except quartz, discolored or stained. Rock "fabric" is clear and evident, but reduced in strength to strong soil. In granitoid rocks, all feldspars kaolinized to some extent. Some fragments of harder rock usually left, such as corestones in basalt.	
Very Severe	All rock, except quartz, discolored or stained. Rock "fabric" is discernible, but mass effectively reduced to "soil" with only fragments of harder rock remaining.	Decomposition and/or disintegration 100% with structure/fabric intact
Complete	Rock is reduced to "soil." Rock "fabric" is not discernible, or only in small scattered locations. Quartz may be present as dikes or stringers.	Decomposition and/or disintegration 100% with structure/fabric destroyed

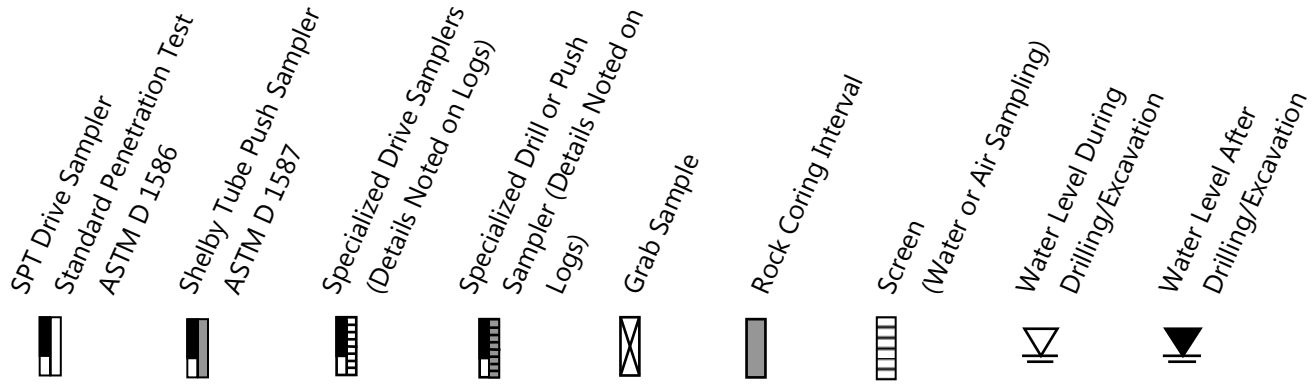
NOTES: [1] Discontinuities consist of any natural break (joint, fracture or fault) or plane of weakness (shear or gouge zone, bedding plane) in a rock mass

[2] Decomposition refers to chemical alteration of mineral grains; disintegration refers to mechanical breakdown

[3] Stage and description from ASCE Manual No. 56 (1976), quality distinction from Murray (1981)

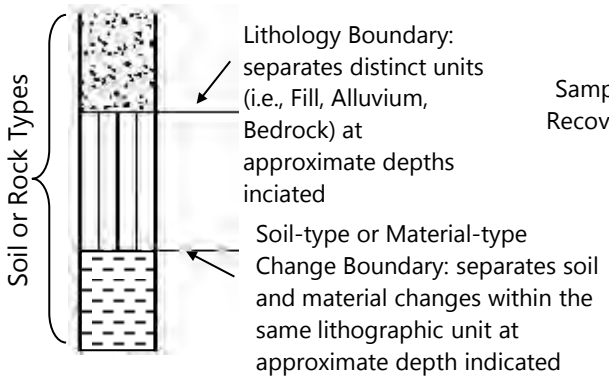
Table A
Key To Test Pit and Boring Log Symbols

SAMPLING DESCRIPTIONS

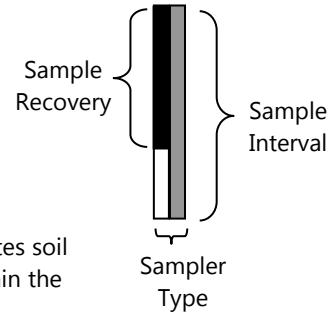


LOG GRAPHICS

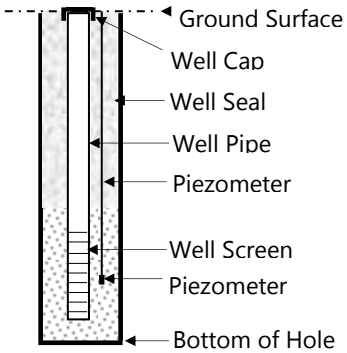
Soil and Rock



Sampling Symbols



Instrumentation Detail



Geotechnical Testing Acronym Explanations

PP	Pocket Penetrometer	HYD	Hydrometer Gradation
TOR	Torvane	SIEV	Sieve Gradation
DCP	Dynamic Cone Penetrometer	DS	Direct Shear
ATT	Atterberg Limits	DD	Dry Density
PL	Plasticity Limit	CBR	California Bearing Ratio
LL	Liquid Limit	RES	Resilient Modulus
PI	Plasticity Index	VS	Vane Shear
P200	Percent Passing US Standard No. 200 Sieve	bgs	Below ground surface
OC	Organic Content	MSL	Mean Sea Level
CON	Consolidation	HCL	Hydrochloric Acid
UC	Unconfined Compressive Strength		

Details of soil and rock classification systems are available on request.

PBS

OREGON CITY PUBLIC WORKS
OREGON CITY, OREGON

BORING B-1

PBS PROJECT NUMBER:
73457.000

APPROX. BORING B-1 LOCATION:
45.330437; -121.582503

DEPTH FEET	GRAPHIC LOG	MATERIAL DESCRIPTION	DEPTH	TESTING	SAMPLE TYPE SAMPLE ID	UNCORRECTED N-VALUE / DYNAMIC CONE PENETROMETER / MOISTURE CONTENT % / RQD% / CORE REC%	INSTALLATION AND COMMENTS
0.0		ASPHALT (6 inches)	0.0				Surface Conditions: Asphalt
		BASE ROCK (6 inches)	0.5				
		Medium stiff, brown, lean CLAY (CL); medium plasticity; moist	1.0		S-1	5	
4.0		Stiff, gray to orange, fat CLAY (CH) with sand; high plasticity; fine sand; moist	4.5		S-2	13	
8.0		black manganese nodules; decreased sand			S-3	13	▽ 10/16/19
		Medium stiff, gray, red, and brown, sandy lean CLAY (CL); low plasticity; fine to coarse sand; wet	9.5	P200	S-4	6	P200 = 57%
		Final depth 11.5 feet bgs; boring backfilled with bentonite.	11.5				

0 50 100

DRILLING METHOD: Mud Rotary - Tricone
DRILLED BY: Holt Services, Inc.
LOGGED BY: D. Eibert

BIT DIAMETER: 3 7/8 inches
HAMMER EFFICIENCY PERCENT: 86.5
LOGGING COMPLETED: 10/16/19

FIGURE A1

BORING LOG 73457.000 B1-6 20191029.GPJ PBS_DATATMPL_GEO.GDT PRINT DATE: 12/3/19 RPG

PBS

OREGON CITY PUBLIC WORKS
OREGON CITY, OREGON

BORING B-2

PBS PROJECT NUMBER:
73457.000

APPROX. BORING B-2 LOCATION:
45.329946; -121.582482

DEPTH FEET	GRAPHIC LOG	MATERIAL DESCRIPTION	DEPTH	TESTING	SAMPLE TYPE SAMPLE ID	UNCORRECTED N-VALUE / DYNAMIC CONE PENETROMETER / MOISTURE CONTENT % / RQD% / CORE REC%	INSTALLATION AND COMMENTS
0.0		NOTE: Lines representing the interface between soil/rock units of differing description are approximate only, inferred where between samples, and may indicate gradual transition.				0 50 100	Surface Conditions: Asphalt
0.0		ASPHALT (3 inches)	0.0				
		BASE ROCK (15 inches)	0.3				
2.0		Medium stiff, orange-red, lean CLAY (CL) with sand; medium plasticity; fine sand; moist	1.5		S-1	6	
4.0		Stiff, orange to gray, fat CLAY (CH) with sand; high plasticity; fine to coarse sand; moist	4.5	ATT	S-2	9	Infiltration testing completed at 5 feet bgs LL = 56 PL = 25 PI = 31 ▽ 10/16/19
6.0							
8.0		Interbedded, stiff/loose, gray to purple, sandy fat CLAY (CH) and clayey SAND (SC); medium to high plasticity; fine to coarse sand; wet (severely weathered bedrock)	7.0		S-3	9	
10.0		becomes gray, pale purple, and orange			S-4	8	
12.0		Final depth 11.5 feet bgs; boring backfilled with bentonite.	11.5				
14.0							
16.0							
18.0							
20.0							
22.0							
24.0							
26.0							
28.0							
30.0						0 50 100	

DRILLING METHOD: Hollow-Stem Auger
DRILLED BY: Holt Services, Inc.
LOGGED BY: D. Eibert

BIT DIAMETER: 6¼ inches; 3 7/8 inches
HAMMER EFFICIENCY PERCENT: 86.5
LOGGING COMPLETED: 10/16/19

FIGU

Pag

BORING LOG 73457.000 B1-6 20191029.GPJ PBS_DATATMPL_GEO.GDT PRINT DATE: 12/3/19 RPG

PBS

OREGON CITY PUBLIC WORKS
OREGON CITY, OREGON

BORING B-3

PBS PROJECT NUMBER:
73457.000

APPROX. BORING B-3 LOCATION:
45.329498; -121.582449

DEPTH FEET	GRAPHIC LOG	MATERIAL DESCRIPTION	DEPTH	TESTING	SAMPLE TYPE SAMPLE ID	UNCORRECTED N-VALUE / DYNAMIC CONE PENETROMETER / MOISTURE CONTENT % / RQD% / CORE REC%	INSTALLATION AND COMMENTS
0.0		ASPHALT (12 inches)	0.0				Surface Conditions: Asphalt
		BASE ROCK (2 inches)	1.0 / 1.2				
2.0		Medium stiff, brown to red, lean CLAY (CL) with sand and manganese nodules; medium plasticity; fine to medium sand; moist			S-1	6	
4.0		Very stiff, red-brown, sandy lean CLAY (CL); medium plasticity; fine to coarse sand; moist (severely weathered bedrock)	4.5		S-2	19	
6.0		becomes medium stiff; low to medium plasticity; fine to medium sand; wet			S-3	6	▽ 10/16/19
8.0		Medium dense, red to gray, clayey SAND (SC); low plasticity; fine to medium sand; wet (severely weathered bedrock)	9.0		S-4	20	
10.0		Final depth 11.5 feet bgs; boring backfilled with bentonite.	11.5				
12.0							
14.0							
16.0							
18.0							
20.0							
22.0							
24.0							
26.0							
28.0							
30.0							

NOTE: Lines representing the interface between soil/rock units of differing description are approximate only, inferred where between samples, and may indicate gradual transition.

0 50 100

DRILLING METHOD: Mud Rotary - Tricone
DRILLED BY: Holt Services, Inc.
LOGGED BY: D. Eibert

BIT DIAMETER: 3 7/8 inches
HAMMER EFFICIENCY PERCENT: 86.5
LOGGING COMPLETED: 10/16/19

FIGURE A2

BORING LOG 73457.000 B1-6 20191029.GPJ PBS_DATATMPL_GEO.GDT PRINT DATE: 12/3/19 RPG

PBS

OREGON CITY PUBLIC WORKS
OREGON CITY, OREGON

BORING B-4

PBS PROJECT NUMBER:
73457.000

APPROX. BORING B-4 LOCATION:
45.329443; -121.582153

DEPTH FEET	GRAPHIC LOG	MATERIAL DESCRIPTION	DEPTH	TESTING	SAMPLE TYPE SAMPLE ID	UNCORRECTED N-VALUE / DYNAMIC CONE PENETROMETER / MOISTURE CONTENT % / RQD% / CORE REC%	INSTALLATION AND COMMENTS
0.0		ASPHALT (12 inches)	0.0				Surface Conditions: Asphalt
		BASE ROCK (6 inches)	1.0				
2.0		Medium stiff, red to orange, sandy lean CLAY (CL); medium plasticity; fine to coarse sand; moist	1.5		S-1	6	
4.0		becomes dark red to brown; low plasticity; moist to wet		P200	S-2	5	Infiltration testing completed at 5 feet bgs P200 = 50%
6.0							
		Soft, dark purple with white veins, lean CLAY (CL) with sand; medium plasticity; fine to medium sand; moist to wet (severely weathered bedrock)	7.0		S-3	4	Switched to mud rotary ▼ 10/17/19
8.0							
10.0		Loose, dark purple with red nodules, clayey SAND (SC); medium plasticity; fine to coarse sand; wet (severely weathered bedrock)	9.5		S-4	6	
12.0		becomes gray with white, black, and orange veins; low plasticity					
14.0							
16.0					S-5	10	
18.0		becomes medium dense, dark red and purple with orange and white veins; fine to medium sand; moist					
20.0					S-6	24	
22.0							Driller notes harder drilling
24.0		Strong (R4), gray BASALT; slightly weathered	23.5 23.8				
		Final depth 23.75 feet bgs due to refusal in basalt; boring backfilled with bentonite.			S-7	50/1	Boring flushed with clean water and left open overnight
26.0							
28.0							
30.0							

NOTE: Lines representing the interface between soil/rock units of differing description are approximate only, inferred where between samples, and may indicate gradual transition.

0 50 100

DRILLING METHOD: Mud Rotary/Hollow-Stem Auger
DRILLED BY: Holt Services, Inc.
LOGGED BY: D. Eibert

BIT DIAMETER: 6¼ inches; 3 7/8 inches
HAMMER EFFICIENCY PERCENT: 86.5
LOGGING COMPLETED: 10/16/19

FIGURE A4

BORING LOG 73457.000 B1-6 20191029.GPJ PBS_DATATMPL_GEO.GDT PRINT DATE: 12/3/19 RPG

PBS

OREGON CITY PUBLIC WORKS
OREGON CITY, OREGON

BORING B-5

PBS PROJECT NUMBER:
73457.000

APPROX. BORING B-5 LOCATION:
45.329064; -121.581888

DEPTH FEET	GRAPHIC LOG	MATERIAL DESCRIPTION	DEPTH	TESTING	SAMPLE TYPE SAMPLE ID	UNCORRECTED N-VALUE / DYNAMIC CONE PENETROMETER / MOISTURE CONTENT % / RQD% / CORE REC% (0 – 50 – 100)	INSTALLATION AND COMMENTS
		NOTE: Lines representing the interface between soil/rock units of differing description are approximate only, inferred where between samples, and may indicate gradual transition.					Surface Conditions: Asphalt
0.0		ASPHALT (8 inches)	0.0				
		BASE ROCK (4 inches)	0.7				
		Medium stiff, red-brown, lean CLAY (CL) with sand; medium plasticity; fine to medium sand; moist	1.0		S-1	7	
4.0		Interbedded, medium stiff/loose, red and gray, sandy lean CLAY (CL) and clayey SAND (SC); medium plasticity; fine to medium sand; moist to wet (severely weathered bedrock)	4.5		S-2	8	
		Loose, gray with white and red veins, clayey SAND (SC); low plasticity; fine to medium sand; moist to wet (severely weathered bedrock)	7.0		S-3	9	
10.0		becomes medium dense, brown with black and red veins; fine sand		P200	S-4	12	P200 = 47%
16.0		becomes loose, gray-purple; fine to medium sand; wet			S-5	9	
20.0		Medium dense, gray and white, silty SAND (SM) with gravel; low plasticity; fine to coarse sand; fine, subangular gravel; wet (severely weathered bedrock)	20.0		S-6	15	
24.0		Strong (R4), gray BASALT; fresh	23.5				
		Final depth 24.75 feet bgs due to refusal in basalt; boring backfilled with bentonite. Groundwater not measured at time of exploration due to mud rotary drilling.	24.8		S-7	50/1	
30.0							

DRILLING METHOD: Mud Rotary - Tricone
DRILLED BY: Holt Services, Inc.
LOGGED BY: D. Eibert

BIT DIAMETER: 3 7/8 inches
HAMMER EFFICIENCY PERCENT: 86.5
LOGGING COMPLETED: 10/17/19

FIGURE A5

BORING LOG 73457.000 B1-6 20191029.GPJ PBS_DATATMPL_GEO.GDT PRINT DATE: 12/3/19 RPG

PBS

OREGON CITY PUBLIC WORKS
OREGON CITY, OREGON

BORING B-6

PBS PROJECT NUMBER:
73457.000

APPROX. BORING B-6 LOCATION:
45.329412; -121.581669

DEPTH FEET	GRAPHIC LOG	MATERIAL DESCRIPTION	DEPTH	TESTING	SAMPLE TYPE SAMPLE ID	UNCORRECTED N-VALUE / DYNAMIC CONE PENETROMETER / MOISTURE CONTENT % / RQD% / CORE REC%	INSTALLATION AND COMMENTS
		NOTE: Lines representing the interface between soil/rock units of differing description are approximate only, inferred where between samples, and may indicate gradual transition.				0 50 100	Surface Conditions: Asphalt
0.0		ASPHALT (8 inches)	0.0				
		BASE ROCK (10 inches)	0.7				
		Medium stiff, red to orange, lean CLAY (CL) with sand and gravel; medium plasticity; fine sand; coarse, angular gravel; moist	1.5		S-1	6	
2.0							
4.0		**FILL**					
		becomes soft			S-2	3	
6.0					S-3		200 psi
							300 psi
8.0		becomes red to brown; fine to coarse sand; fine, rounded gravel			S-4	3	
10.0							
12.0		becomes medium stiff			S-5	6	
		Loose, poorly graded GRAVEL (GP); fine, rounded gravel; moist	13.0				
14.0							
		Final depth 15.0 feet bgs; boring backfilled with bentonite. Groundwater not measured at time of exploration due to mud rotary drilling.	15.0				
16.0							
18.0							
20.0							
22.0							
24.0							
26.0							
28.0							
30.0						0 50 100	

DRILLING METHOD: Mud Rotary - Tricone
DRILLED BY: Holt Services, Inc.
LOGGED BY: D. Eibert

BIT DIAMETER: 3 7/8 inches
HAMMER EFFICIENCY PERCENT: 86.5
LOGGING COMPLETED: 10/17/19

FIGURE A6

BORING LOG 73457.000 B1-6 20191029.GPJ PBS_DATATMPL_GEO.GDT PRINT DATE: 12/3/19 RPG

Appendix B
Laboratory Testing

Appendix B: Laboratory Testing

B1 GENERAL

Samples obtained during the field explorations were examined in the PBS laboratory. The physical characteristics of the samples were noted and field classifications were modified where necessary. During the course of examination, representative samples were selected for further testing. The testing program for the soil samples included standard classification tests, which yield certain index properties of the soils important to an evaluation of soil behavior. The testing procedures are described in the following paragraphs. Unless noted otherwise, all test procedures are in general accordance with applicable ASTM standards. "General accordance" means that certain local and common descriptive practices and methodologies have been followed.

B2 CLASSIFICATION TESTS

B2.1 Visual Classification

The soils were classified in accordance with the Unified Soil Classification System with certain other terminology, such as the relative density or consistency of the soil deposits, in general accordance with engineering practice. In determining the soil type (that is, gravel, sand, silt, or clay) the term that best described the major portion of the sample is used. Modifying terminology to further describe the samples is defined in Table A-1, Terminology Used to Describe Soil, in Appendix A.

B2.2 Moisture (Water) Contents

Natural moisture content determinations were made on samples of the fine-grained soils (that is, silts, clays, and silty sands). The natural moisture content is defined as the ratio of the weight of water to dry weight of soil, expressed as a percentage. The results of the moisture content determinations are presented on the logs of the borings in Appendix A and on Figure B2, Summary of Laboratory Data, in Appendix B.

B2.3 Atterberg Limits

Atterberg limits were determined on select samples for the purpose of classifying soils into various groups for correlation. The results of the Atterberg limits test, which included liquid and plastic limits, are plotted on Figure B1, Atterberg Limits Test Results, and on the explorations logs in Appendix A where applicable.

B2.4 Grain-Size Analyses (P200 Wash)

Washed sieve analyses (P200) were completed on samples to determine the portion of soil samples passing the No. 200 Sieve (i.e., silt and clay). The results of the P200 test results are presented on the exploration logs in Appendix A and on Figure B2, Summary of Laboratory Data, in Appendix B.

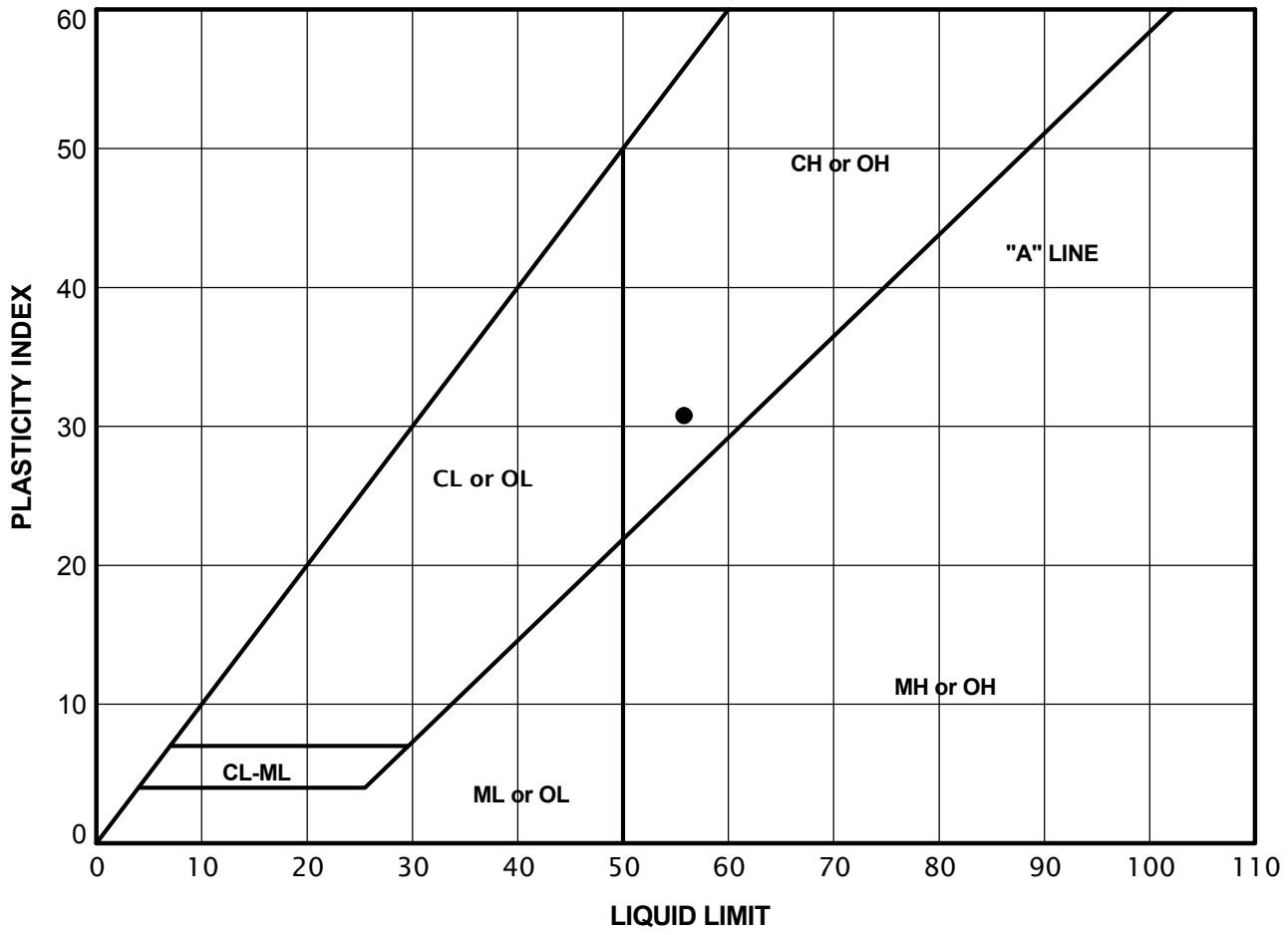
PBS

ATTERBERG LIMITS TEST RESULTS

OREGON CITY PUBLIC WORKS
OREGON CITY, OREGON

PBS PROJECT NUMBER:
73457.000

TEST METHOD: ASTM D4318



KEY	EXPLORATION NUMBER	SAMPLE NUMBER	SAMPLE DEPTH (FEET)	NATURAL MOISTURE CONTENT (PERCENT)	PERCENT PASSING NO. 40 SIEVE (PERCENT)	LIQUID LIMIT	PLASTIC LIMIT	PLASTICITY INDEX
●	B-2	S-2	5.0	32.8	NA	56	25	31

_ATTERBERG LIMITS 73457.000_B1-6_20191029.GPJ PBS_DATATMPL_GEO.GDT PRINT DATE: 11/18/19:RPG

FIGU

SUMMARY OF LABORATORY DATA

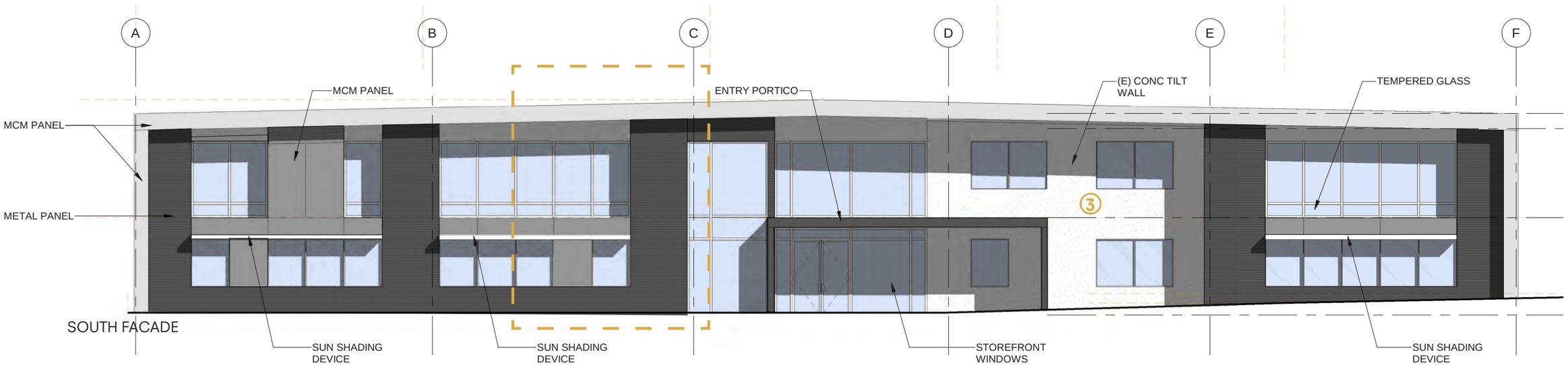
OREGON CITY PUBLIC WORKS
OREGON CITY, OREGON

PBS PROJECT NUMBER:
73457.000

SAMPLE INFORMATION				MOISTURE CONTENT (PERCENT)	DRY DENSITY (PCF)	SIEVE			ATTERBERG LIMITS		
EXPLORATION NUMBER	SAMPLE NUMBER	SAMPLE DEPTH (FEET)	ELEVATION (FEET)			GRAVEL (PERCENT)	SAND (PERCENT)	P200 (PERCENT)	LIQUID LIMIT (PERCENT)	PLASTIC LIMIT (PERCENT)	PLASTICITY INDEX (PERCENT)
B-1	S-1	2.5		32.4							
B-1	S-4	10		60.1				57			
B-2	S-2	5		32.8					56	25	31
B-3	S-1	2.5		41.9							
B-4	S-2	5		68.7				50			
B-4	S-4	10		76.7							
B-5	S-2	5		65.0							
B-5	S-4	10		63.1				47			
B-6	S-4	8.5		27.9							

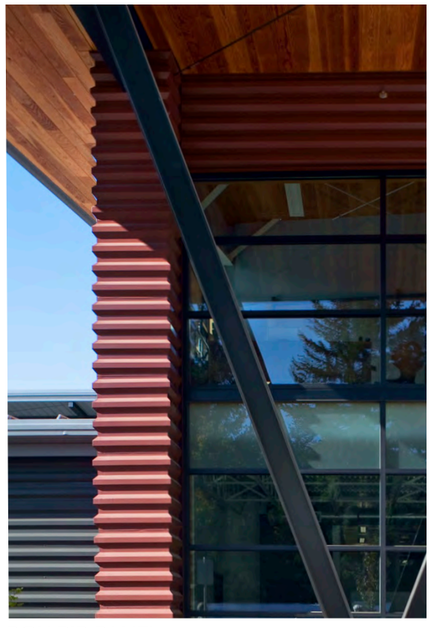
FIGU

__LAB SUMMARY 73457.000_B1-6_20191029.GPJ PBS_DATATMPL_GEO.GDT PRINT DATE: 11/18/19:RPG

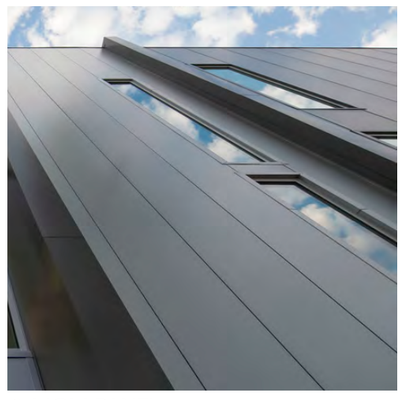


SOUTH FACADE

ENLARGED SOUTH FACADE

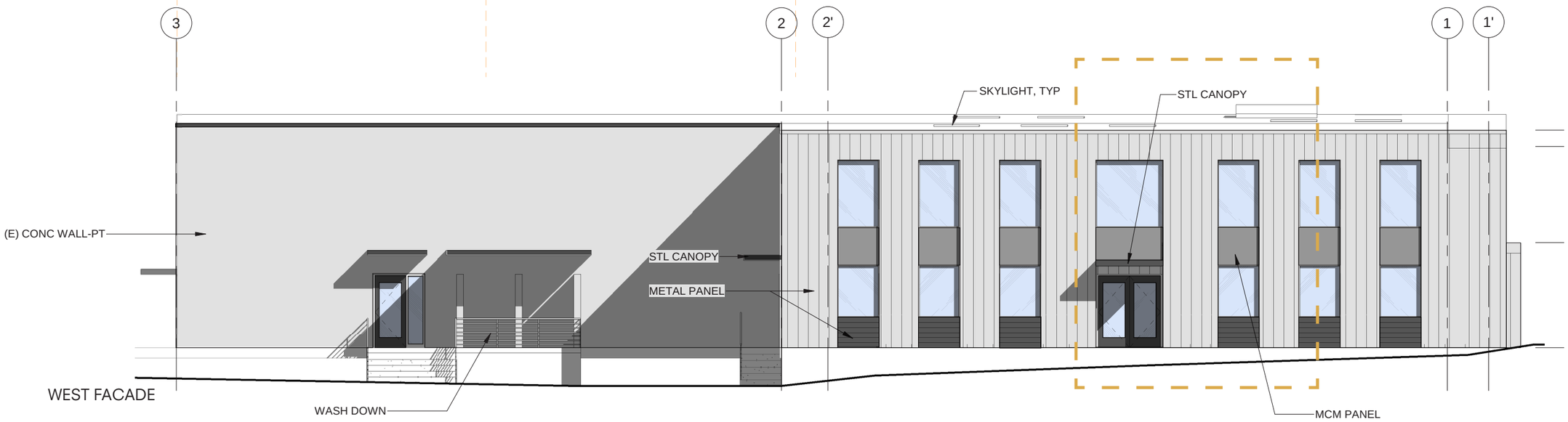


1 BOX RIB PANEL



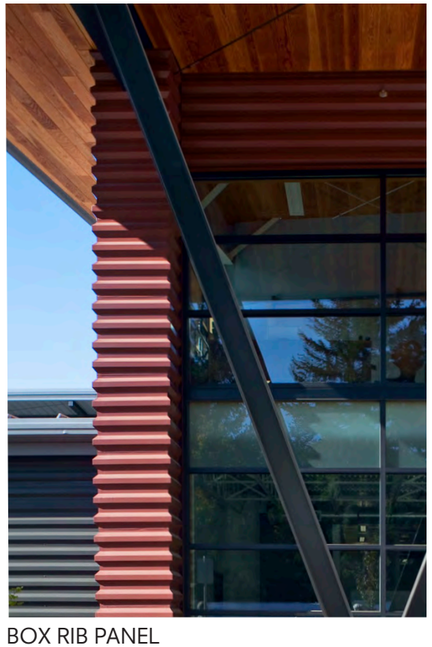
2 MCM PANEL

3 CONCRETE WALL

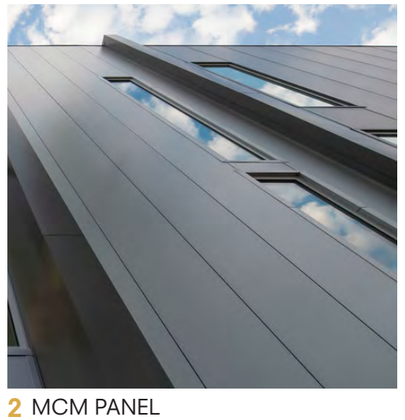


WEST FACADE

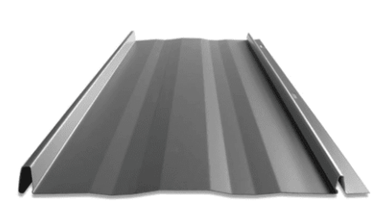
ENLARGED WEST FACADE

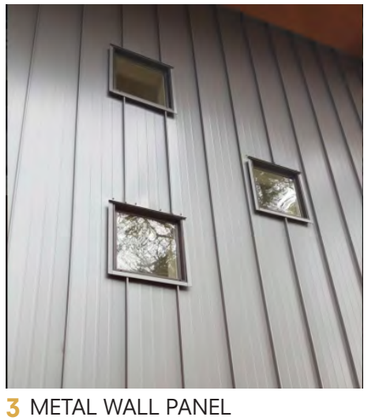


1 BOX RIB PANEL



2 MCM PANEL





3 METAL WALL PANEL

OREGON CITY

Pre-Application Conference Notes

PA 20-03, February 4, 2020

The applicant's submittal did not include building elevations, therefore, compliance with building design standards could not be confirmed. An additional minor pre-app should be submitted in order to review the building design. Any major changes in code, proposed design or layout would also require subsequent pre-application meetings.

Proposed Project: Public Works Operations Center

General Information

- Location: 13895 Fir Street, Oregon City, OR 97045
  Clackamas County Map 3-2E-09B, Tax Lot 1101
- Zoning: General Industrial
- Overlay Districts: High Water Table

Review Process

Site Plan and Design Review applications are processed as **Type II** applications. The applicant has **180 days** from the date of submittal to have a complete application.

Upon a complete application submittal, the applicant is entitled to a decision from the city for a decision of approval, approval with conditions or denial within **120 days** of deeming the application complete, by state law. Type II decisions are rendered by the Community Development Director, with appeal on the record to the City Commission, and then onto LUBA.

Type II decisions are based on the code approval criteria and require limited discretion by the Community Development staff in order to be approved. Staff is not authorized to waive any requirements of the code except for modifications through Chapter 12.04.

If a Variance application is required, the application would reviewed under a Type III process. The applicant has **180 days** from the date of submittal to have a complete application.

Upon a complete application submittal, the applicant is entitled to a decision from the city for a decision of approval, approval with conditions or denial within **120 days** of deeming the application complete, by state law.

Type III decisions require a minimum of one public hearing before the Planning Commission and involve the greatest amount of discretion and evaluation of subjective approval standards, yet are not required to be heard by the City Commission except upon appeal.

General Industrial Zone

- Minimum required setbacks:
  - Front yard: 10 feet minimum setback;
  - Interior side yard: no minimum setback
  - Corner side yard, ten feet minimum setback
  - Rear yard, ten feet minimum setback

- Buffer Zone. If a use in this zone abuts or faces a residential or commercial use, a yard of at least twenty-five feet shall be required on the side abutting or facing the adjacent residential use and commercial uses in order to provide a buffer area, and sight obscuring landscaping thereof shall be subject to site plan review. This would apply for outdoor storage areas, but not for parking lots.
- Outdoor storage within building or yard space other than required setbacks and such occupied yard space shall be enclosed by a sight-obscuring wall or fence of sturdy construction and uniform color or an evergreen hedge not less than six feet in height located outside the required yard, further provided that such wall or fence shall not be used for advertising purposes.
- Any use in which more than half of the business is conducted outdoors requires a conditional use permit. The application should identify all areas that are used for outdoor storage to demonstrate that less than half of the business is conducted outdoors. If more than half of the business is being conducted outdoors (including outdoor storage), a conditional use permit would be required.

Site Plan and Design Review

Landscaping

- A landscaping plan prepared by a registered landscape architect is required to be submitted.
- 15% of the site must be landscaped. The application should include a calculation of landscaping demonstrating compliance with minimum site landscaping. It appears that the proposal does not comply with minimum landscaping requirements. If less than 15% of the site is landscaped, a variance application would be required. Please refer to the variance section of these notes.

Parking and Access

- Parking areas must be located behind, below, or on one or both sides of buildings. Parking areas in front of buildings are not permitted pursuant with OCMC 17.62.050.B.1.
- Legal non-conforming parking lots located in front of buildings can be reconfigured, including the addition of new parking stalls, provided that the reconfiguration does not result in a net increase of impervious surface associated with the parking area (parking stalls, drive aisles, maneuvering and loading areas), and the parking lot maintains compliance with all parking standards including parking lot landscaping, minimum/maximum parking stalls, and dimensional standards.
- Removal of the vestibules in front of the building causes parking that was previously behind the front building line of the building to be in front of the building. This would require a variance. Please refer to the variance section of these notes.
- Connections to adjacent sites through the use of vehicular and pedestrian access easements shall be provided.
- Parcels larger than 3 acres shall provide streets as required in OCMC 16.12.
- Compliance with minimum and maximum parking requirements could not be confirmed. Parking requirements are based on spaces per one thousand square feet of net leasable area:

Use	Minimum Parking Required	Maximum Parking Allowed
Office	2.7	3.33
Warehouse (including outdoor storage)	0.3	0.4

- Within the GI zone, fleet vehicle parking is allowed in addition to the maximum number of parking stalls. Though fleet parking does not count towards parking minimums/maximums, it is still subject to compliance with all other parking lot design standards including landscaping and dimensional standards. Alternatively, an outdoor storage that complies with outdoor storage screening requirements in OCMC 17.36.040 can be established which is not subject to compliance with parking lot standards.

Pedestrian Circulation

- Pathways between all building entrances and the street are required. Pathways between the street and buildings fronting on the street shall be direct and not cross a drive aisle.
- The pedestrian circulation system shall connect all main entrances, parking areas, bicycle parking, recreational areas, and any other pedestrian amenities onsite.
- Pedestrian walkways shall be hard-surfaced, well-drained and at least five feet wide with a surface material that contrasts visually to adjoining surfaces.

Building Design

- The proposal includes an institutional building and is subject to compliance with all standards in OCMC 17.62.055 – Institutional, Office, Multi-Family, Retail and Commercial Building Standards.
- Demolition of the vestibules at the front of the existing structure would trigger compliance with the following standards for siting of structures. If the building remains as is, it would be considered nonconforming with regards to these standards and compliance would not be required.
    - Sites with more than 100 feet of street frontage require that 60% of the site frontage is occupied by structures within 5 feet of the of the property line.
    - A larger front-yard setback may be approved through the site plan and design review process if the setback area incorporates at least one element from the following list for every five feet of increased setback requested:
        - Tables, benches or other approved seating area
        - Cobbled, patterned or paved stone or enhanced concrete
        - Pedestrian scale lighting
        - Sculpture/public art
        - Fountains/water feature
        - At least 20 SF of landscaping or planter boxes for each tenant façade fronting on the activity area
        - Outdoor café
        - Enhanced landscaping or additional landscaping
        - Other elements as approved by the Community Development Director that can meet the intent of this section.
- Proposed building elevations were not submitted, therefore, compliance with the following standards could not be confirmed. Demolition of the vestibules at the front of the existing building would trigger compliance with these standards. If the building remained as is and no changes were proposed to the front façade, the pre-existing building would be considered non-conforming with regard to these standards and compliance would not be required.
    - OCMC 17.62.055.E. Building Orientation
      All buildings along the street frontage shall face the front most architecturally significant facade toward the street and have a functional primary entrance facing the street. Primary building entrances shall be clearly defined and recessed or framed by a sheltering element such as an awning, arcade or portico in order to provide shelter from the summer sun and winter weather.

    - OCMC 17.62.055.F. Entryways
      Entrances shall include a doorway and a minimum of four of the following elements: Display windows; Recesses or projections; Peaked roof or raised parapet over the door; Canopy of at least five feet in depth; Porch; Distinct materials; Architectural details such as tile work and moldings; Pedestrian amenities such as benches, planters or planter boxes; Landscape treatments integrating arbors, low walls, trellis work; or Similar elements. Trellises, canopies and fabric awnings may project up to five feet into front setbacks and

public rights-of-way, provided that the base is not less than eight feet at the lowest point and no higher than ten feet above the sidewalk.

- OCMC 17.62.055.H. Variation in Massing

  Variation in Massing. For street facing facades greater than 120 feet in length a modulation is required which extends through all floors. Decks and roof overhangs may encroach up to three feet per side into the modulation. The modulation shall meet one of the following dimensional requirements:

  1. A minimum depth of two percent of the length of the façade and a minimum width of thirty percent of the length of the façade; or

  2. A minimum depth of four percent of the length of the façade and a minimum width of twenty percent of the length of the façade.

- 17.62.055.I. Building Design Elements

  1. *All front and side facades shall provide a design element or architectural feature that add interest and detail such that there are no blank walls of thirty feet in length or more, measured horizontally. Features that can meet this requirement include:*
     a. Change in building material or texture;
     b. Window or door;
     c. Balcony; or
     d. Pillar or post
  2. *Street facing facades shall include additional design features. For every thirty feet of façade length, three of the following elements are required:*
     a. Decorative materials on more than ten percent of the total wall area (e.g., brick or stonework, shingles, wainscoting, ornamentation, and similar features);
     b. Decorative cornice and/or roof line (e.g., for flat roofs);
     c. Roof gable;
     d. Recessed entry;
     e. Covered canopy entry;
     f. Cupola or tower;
     g. Dormer;
     h. Balcony;
     i. Pillars or posts;
     j. Repeating pattern of building materials;
     k. A change in plane of at least two feet in width and six inches in depth;
     l. Bay or oriel window; or
     m. An alternative feature providing visual relief and detail as approved by the Community Development Director

- 17.62.055.J Windows.

1. The minimum windows requirements are set forth in Table 17.62.055.J. Windows are measured in lineal fashion between 3.5 feet and six feet from the ground. For example, a one hundred foot long building elevation would be required to have at least sixty feet (sixty percent of one hundred feet) of windows in length between the height of 3.5 feet and six feet from the ground.

Table 17.62.055.J Minimum Windows				
Use	*Ground Floor: Front and Street Facing Facades*	*Upper floor(s): Front and Street Facing Facades*	*Ground Floor: Side(s) Facades*	*Upper Floor(s): Side(s) Facades*

Non-Multi-Family (or Portions of Buildings Thereof)	*60%*	*10%*	*30%*	*10%*
Multi-Family (or Portions of Buildings Thereof)	*15%*	*15%*	*10%*	*10%*

2.Reflective, glazed, mirrored or tinted glass is limited to ten percent of the lineal footage of windows on the street facing facade. Highly reflective or glare-producing glass with a reflective factor of one-quarter or greater is prohibited on all building facades. Any glazing materials shall have a maximum fifteen percent outside visual light reflectivity value. No exception shall be made for reflective glass styles that appear transparent when internally illuminated.

3. Side walls that face walkways may include false windows and door openings only when actual doors and windows are not feasible because of the nature of the use of the interior use of the building. False windows located within twenty feet of a right-of-way shall be utilized as display windows with a minimum display depth of thirty-six inches.

- Fences and walls are subject to compliance with OCMC 17.54.100

Outdoor Lighting

- A lighting plan demonstrating compliance with exterior illumination levels and lighting design in OCMC 17.62.065 must be submitted with the land use application.
- The exterior lighting plan shall include plans and specifications for streetlights, parking lot lights, and exterior building lights. The specifications shall include details of the pole, fixture height and design, lamp type, wattage, and spacing of lights.
- Lighting is required in the following locations:
  - Parking lots and vehicular circulation areas
  - Pedestrian walkways, pedestrian plazas, and pedestrian circulation areas.
  - All building entrances
- Glare shall not cause illumination on other properties in excess of a measurement of 0.5 footcandles of light as measured at the property line.

Refuse and Recycling Enclosures

- Refuse and recycling enclosures shall be fully enclosed and visually screened and located in a manner easily and safely accessible to collection vehicles.
- Refuse and recycling enclosures are subject to standards in OCMC 17.62.085.

Lawful Nonconforming Uses, Structures or Lots

- The site is non-conforming for various reasons, including building design, setbacks, parking lot landscaping etc.
- Increases in building square footage and/or off-street parking stalls exceeding $75,000 require proportional upgrades to the non-conforming portions of the site per OCMC 17.58. Please indicate the cost of the project and provide proportional upgrades for ten percent of the value of the proposed development for:
  - Pedestrian circulation systems;
  - Minimum perimeter parking lot landscaping;
  - Minimum interior parking lot landscaping;
  - Minimum site landscaping requirements;
  - Bicycle parking;
  - Screening; and
  - Paving of surface parking and exterior storage and display areas

- The submittal should identify the cost of exterior alterations. If less than $75,000 is directed to increases in building square footage or off-street parking stalls, no upgrades are required. Please note, improvements required as part of the proposed development are not counted towards non-conforming upgrades.

Tree Protection/Mitigation and Street Trees

It is unclear if any tree removal is proposed. Tree removal during the land development process is subject to compliance with tree protection and mitigation standards.

- Street trees are subject to OCMC Chapter 12.08
- A street tree plan demonstrating compliance with OCMC 12.08 is required
- The applicant's submittal should identify species and size of all trees onsite greater than 6" DBH.
- Tree removal is subject to OCMC Chapter 17.41.
- Tree protection , removal and mitigation standards can be found in OCMC Section 17.41.130
- A mitigation plan prepared by a qualified professional (certified arborist, horticulturalist or forester or other environmental professional) is required in accordance with OCMC Chapter 17.41

Variance

- A Variance application may be required for parking in front of the building, landscaping, building modulation and other building design standards.
- Each standard being varied requires a separate variance application.
- Please address the approval criteria as they relate to the proposal and the requirement being varied.
    - That the variance from the requirements is not likely to cause substantial damage to adjacent properties by reducing light, air, safe access, or other desirable or necessary qualities;
    - That the request is the minimum variance that would alleviate the hardship;
    - Granting the variance will equal or exceed the regulation to be modified;
    - Any impacts resulting from the adjustment are mitigated;
    - No practical alternatives have been identified which would accomplish the same purpose and not require a variance.
    - That the variance conforms to the comprehensive plan and the intent of the ordinance being varied.

Traffic Impacts

The applicant will need to have a traffic engineer conduct a transportation study in conformance with the City's *Guidelines for Transportation Impact Analyses* available on the Oregon City website.

Based on the information provided by the applicant, it appears the trip generation exceeds the level at which the project's transportation analysis requirements can be satisfied by submittal of a Transportation Analysis Letter (TAL). A full Transportation Impact Analysis (TIA) will be required. Among other requirements, a full TIA includes conducting traffic counts and operational analysis of impacted intersections will be required. Intersections to be analyzed include the site access and intersections of collector/collector and higher where traffic volumes from the development exceed 20 peak hour trips.

The applicant and his traffic engineer should review the *Guidelines for Transportation Impact Analyses* and the most recent mobility standards as specified in Oregon City Municipal Code section 12.04.205.

If the proposal includes a zone change, the applicant will also need to address the requirements of Oregon's Transportation Planning Rule. Specifically, the applicant shall address the provisions of 660-12-0060 Plan and Land Use Regulation Amendments. When a zone change is proposed, a future year analysis is required

assessing the impact associated with the planning horizon specified in the city's adopted Transportation System Plan.

The applicant's traffic engineer is welcome to contact the city's traffic engineering consultant, John Replinger, at Replinger-Associates@comcast.net or at 503-719-3383.

Other notes:

- A neighborhood association meeting is required for a Site Plan and Design Review and/or a Variance application. You are in the Gaffney Lane Neighborhood Association. Please contact the Gaffney Lane Neighborhood Association to schedule a meeting.

Neighborhood Association:	Gaffney Lane NA
Chair:	Amy Willhite, awillhit@yahoo.com
Secretary/Treasurer:	Amy Willhite, awillhit@yahoo.com
CIC Representative:	Amy Willhite, awillhit@yahoo.com
CIC Alternate Representative:	Vacant
Upcoming Meetings:	March 12, 2020; May 14, 2020; July 9, 2020; September 10, 2020; November 12, 2020
Meeting Location:	The Meadows Courtyard, 13637 Garden Meadows Drive, Oregon City
Meeting Time:	7:00 PM

- Your application was transmitted to the State Historic Preservation Office (SHPO) and affected tribes for review. Comments received have been provided.

Questions from Applicant

The cost for the required nonconforming improvements is limited to 10% of the value of the proposed alteration. Does this mean if the improvements required to achieve conformance exceeds 10% the applicant is not required to meet the standard? (17.58.040.C.2d)

Yes. Upgrades are required up to 10%. If the upgrades cost less than 10% of the project cost, additional upgrades are not required. If upgrades cost more than 10%, the applicant can choose what upgrades to make up to 10%.

Are we in a designated Geologic Hazard area?

No.

Are we in a designated Natural Resource overlay area?

No.

Will the renovated office building require Type II or Type III process including any modifications that might be requested?

It appears that a variance will be required triggering a Type III process. If the proposal can be modified to not require a variance, it would be reviewed through a Type II process.

Are letters of adequate service availability required from utility providers? (17.62.050.A.14)

Please refer to Development Services notes for questions pertaining to utilities.

Will any transit oriented improvements be required? (17.62.050.A.16)

The subject site is not located on a transit route. The pre-application submittal was transmitted to Tri-Met and no comments on the proposal have been received.

Is box ribbed metal paneling considered non-corrugated sheet metal? (17.62.050.A.21b)

If it is not highly reflective, box-ribbed metal paneling would be acceptable. If used for siding, it would be subject to the special material standards for metal siding in OCMC 17.62.050.H.2.

Is the exterior lighting plan required to be prepare/sealed by an electrical engineer? (17.62.040G)
Not necessarily, but it has to be prepared by a lighting professional.
Will the renovated office building design be required to meet section 17.62.055 Institutional and commercial building standards?
Yes. Please refer to the definition of institutional development in OCMC 17.04.595.

Regarding tree removal, are parking lot improvement areas where trees are being removed considered to be within the construction area? (17.41.060B)
Yes.

Are there any known existing trees onsite that have been designated for protection? (17.41.050)
All existing trees are protected by OCMC Chapter 17.41, however, removal is allowed with appropriate mitigation.

From HHPR:
What right-of-way and/or frontage improvements will be required, if any? (17.52.050.A.15)
Please refer to Development Services notes.
Will the three existing driveways be allowed to remain with new development? (12.04.195)
Please refer to Development Services notes.

Construction inspection and field reports. How frequent is expected and how best to handle this (i.e. time & materials contract?).
Does interior parking lot landscaping count toward 15%min total site landscaping? (17.52.060.E)
Yes. Please refer to January 17, 2020 code where this has been clarified.

Planning Review and Application Fees:

The anticipated Planning applications and fees include:

- Minor Site Plan and Design Review: $917
- Full Site Plan and Design Review

Construction Cost	Application Fee
Less than $500,000	$2,292 plus 0.007 x project cost
$500,000 to $3,000,000	$3,819 plus 0.005 x project cost
Over $3,000,000	$12,989 plus 0.003 x project cost
Maximum fee	$60,927

- Modifications: $349 per modification request
- Type II Legal Non-Conforming Review: $892
- Nonconforming Proportional Upgrade Review: $175
- Type III Variance: $2,693 per variance request
- Traffic Impact Analysis:
  - Base fee (50,000-100,000 SF Non-Residential): $3,781
  - Large Study Area/Along Key Corridor: $756
- Mailing Labels: $17 – or provided by applicant
- Incomplete Applications:
  - First Incomplete Submittal: $0
  - Each Incomplete Submittal Thereafter: $308

2020 Fee Schedule

Oregon City Municipal Code Criteria:
Please note the applicable code chapters listed are in the new code currently under review by the City Commission. The most recent version of the code can be found here. The following chapters of the Oregon City Municipal Code (OCMC) may be applicable to this proposal:
OCMC 12.04 – Street, Sidewalks and Public Places
OCMC 12.08 – Public and Street Trees
OCMC 13.12 – Stormwater Management
OCMC 15.48 – Grading, Filling, and Excavating
OCMC 16.12 – Minimum Public Improvements and Design Standards
OCMC 17.36 – GI General Industrial District
OCMC 17.41 – Tree Protection, Preservation, Removal and Replanting Standards
OCMC 17.47 – Erosion and Sediment Control
OCMC 17.50 – Administrative Processes
OCMC 17.52 – Off-Street Parking and Loading
OCMC 17.58 – Lawful Nonconforming Uses, Structures and Lots
OCMC 17.60 – Variances
OCMC 17.62 – Site Plan and Design Review

Applications, Checklists and Links:

- Type II Review Process
- Type III Review Process
- Land Use Application
- Oregon City Adopted Street Tree List
- Oregon City Municipal Code

Planning Division
Diliana Vassileva, Assistant Planner with the Oregon City Planning Division reviewed your pre-application. You may contact Diliana Vassileva at 503.974.5501 or dvassileva@oregoncity.org.

Development Services Division
Sang Pau, Development Project Engineer and Wendy Marshall, Development Projects Manager, with the Oregon City Development Services Division reviewed your pre-application. You may contact Sang Pau at 503.974.5518 or spau@orcity.org.

Building Division
Your application was transmitted to Building Official, Mike Roberts. You may contact Mike Roberts, Building Official, at 503.496.1517 or mroberts@orcity.org if you have any building related questions.

Clackamas County Fire
Your application was transmitted to Mike Boumann, Lieutenant Deputy Fire Marshal of Clackamas County Fire District #1. No comments were returned regarding your application. You may contact Mr. Boumann at 503.742.2660 or at michaelbou@ccfd1.com.

Pre-application conferences are required by Section 17.50.050 of the City Code, as follows:
A. Preapplication Conference. Prior to submitting an application for any form of permit, the applicant shall schedule and attend a preapplication conference with City staff to discuss the proposal. To schedule a preapplication conference, the applicant shall contact the Planning Division, submit the required materials, and pay the appropriate conference fee. At a minimum, an applicant should submit a short narrative describing the proposal and a proposed site plan, drawn to a scale acceptable to the City, which identifies the proposed land uses, traffic circulation, and public rights-of-way and all other required plans. The purpose of the preapplication conference is to provide an opportunity for staff to provide the applicant with information

on the likely impacts, limitations, requirements, approval standards, fees and other information that may affect the proposal. The Planning Division shall provide the applicant(s) with the identity and contact persons for all affected neighborhood associations as well as a written summary of the preapplication conference. Notwithstanding any representations by City staff at a preapplication conference, staff is not authorized to waive any requirements of this code, and any omission or failure by staff to recite to an applicant all relevant applicable land use requirements shall not constitute a waiver by the City of any standard or requirement.
B. A preapplication conference shall be valid for a period of six months from the date it is held. If no application is filed within six months of the conference or meeting, the applicant must schedule and attend another conference before the City will accept a permit application. The community development director may waive the preapplication requirement if, in the Director's opinion, the development does not warrant this step. In no case shall a preapplication conference be valid for more than one year.

NOTICE TO APPLICANT: A property owner may apply for any permit they wish for their property. HOWEVER, THERE ARE NO GUARANTEES THAT ANY APPLICATION WILL BE APPROVED. No decisions are made until all reports and testimony have been submitted. This form will be kept by the Community Development Department. A copy will be given to the applicant. IF the applicant does not submit an application within six (6) months from the Pre-application Conference meeting date, a NEW Pre-Application Conference will be required.

City of Oregon City | PO Box 3040 | 698 Warner Parrott | Oregon City, OR 97045
Ph (503) 722-3789 www.orcity.org

OREGON CITY

Public Works – Development Services

625 Center Street | Oregon City OR 97045
Ph (503) 657-0891 | Fax (503) 657-7829

DEVELOPMENT SERVICES
PRE-APPLICATION MEETING NOTES

Planning Project Number:	PA 20-03
Address:	13895 FIR ST
Map Number(s):	3-2E-09B
Tax Lot(s):	01101
Project Name:	PW Ops Center
Meeting Date:	February 4, 2020
Reviewer(s):	Sang Pau

General Comments

1. A complete land use application will typically include a preliminary stormwater report and preliminary construction plans showing all required improvements (E.G. roads, sidewalks, sewer, water, stormwater facilities, grading and erosion control). The application should also include a narrative responding to all sections of the Oregon City Municipal Code (OCMC) applicable to the proposed development. See provided checklists at https://www.orcity.org/publicworks/engineering-development-services-checklists

2. The City will issue a Staff Report in response to the contents of the application package provided by the applicant. Once a Staff Report is issued, staff strongly encourages a pre-design meeting with the project engineer to discuss plan requirements, conditions of approval, and process.

3. All applicable conditions of approval contained in the Staff Report must be addressed by providing the appropriate document (E.G. construction plans, reports, etc.) which must be reviewed and approved prior to issuance of building permits.

4. All applicable System Development Charges (SDC) shall be due and payable upon building permit issuance. The applicant will need to complete a SDC request form, found on the City's website.

5. The applicant will be required to sign a Non-Remonstrance Agreement for the purpose of making sanitary sewer, storm sewer, water or street improvements in the future that benefit the Property and assessing the cost to benefited properties.

6. The contractor for the applicant will be required to attend a pre-construction meeting prior to any work beginning onsite.

7. All public improvements must be bonded with a 120% performance bond prior to the beginning of construction. Public improvements are defined as public utility extensions and roadway improvements within existing right-of-way. Public improvements may also be on private property in certain circumstances. This bond is released at the end of the construction period assuming everything is constructed as agreed upon.

8. All newly constructed public improvements shall be maintained for a two-year period following their acceptance of construction with a 15% maintenance bond. Newly constructed public improvements consist of those improvements within existing right of way and those that were constructed on private land to be deeded for City ownership following approval of a plat. This bond is released at the end of the maintenance period (typically 2 years).

9. An erosion control application and review must be completed prior to issuance of construction permit : https://www.orcity.org/publicworks/erosion-control-0

Streets

1. Fir Street is functionally classified as a "Collector" road and the development property is zoned "General Industrial". The following tables show the existing road section and the maximum street section required by city code for this type of road.

Existing Street Section on the development's side of centerline

Road Classification	Zoning	R.O.W. width	Road Width	Public Access	Sidewalk	Curb	Bike Lane	Street parking	Travel Lanes	Median
Collector	Industrial	30'	24'	0.5'	5'	0.5'	None	8'	(1) 16' (shared)	None

Maximum Street Section city code requires on the development's side of the centerline

Road Classification	Zoning	R.O.W. width	Road Width	Public Access	Sidewalk	Landscape Strip & Curb	Bike Lane	Street parking	Travel Lanes	Half of a Center Lane
Collector	Industrial	44'	31'	0.5'	5'	7.5'	6'	7'	(1) 12'	6'

2. Based on the development pattern and future needs of the area (per the Oregon City's Transportation System Plan), it is likely that the City will accept the existing curb location and pavement width along the frontage of Fir Street. The resulting street section along the subject property side of the centerline of Fir Street should be: 35' of ROW consisting of - 24 feet of pavement consisting of: 5' of pavement for the 12-foot-wide eastbound travel lane, 12-foot for the westbound travel lane and a 7-foot-wide Bike Lane. The existing curb location may remain; however, the addition of a 5-foot-wide landscape strip is required adjacent to the curb with a 5-foot-wide sidewalk, and 0.5' of buffer space behind the sidewalk is required. The development will require approximately 5 feet of ROW dedication to accommodate the aforementioned street section. The aforementioned dimensions are a deviation from Table 16.12.016 of the Oregon City Municipal Code, so the applicant will be required to request for a modification per section 16.12.013 of the Oregon City Municipal Code.

3. The proposal provided with the pre-application submittal has not conceptually provided the required street improvements.

4. One street tree is required for every thirty-five feet of property frontage. If utility conflicts require that the sidewalk be curb-tight, trees may be planted within ten feet of the public ROW.

5. Existing driveway approaches which are part of a curb-tight sidewalk will need to be verified for compliance with ADA requirements. If they do not comply, adjustments shall be made to meet ADA requirements.

6. Existing driveways will need to be adjusted to meet minimum driveway spacing standards (spaced a minimum of 100 feet apart on collector roads per city code). The property frontage along the street is approximately 325 feet long, so there is only room for up to two driveway approaches.

7. A Fire truck turn-around meeting the requirements of and be approved by Clackamas County Fire District No.1 may be required.

8. The development will be required to provide a 10-foot-wide Public Utility Easement (PUE) along all property lines fronting existing or proposed ROW. No structures including stormwater management facilities shall be placed in this easement.

9. All new service lines are required to be placed underground. The top overhead electrical lines along the frontage of the development property have been identified by Portland General Electric to be distribution lines and are therefore, not required to be relocated underground. However, all other overhead utilities along the frontage of the development property are required to be relocated underground unless deemed infeasible by utility providers (coordination with overhead utility provider(s) is required). Coordination with the owners of the utility poles and utilities on the poles is highly recommended as it can be a time consuming and costly process which may cause delays to a project if not properly planned.

10. There is an existing streetlight along the frontage of the property which is on an existing utility pole. The applicant shall submit a photometric study of the property frontage to ensure lighting levels meet standards from the Illuminating Engineering Society of North America (IESNA) ANSI RP-8-14 Roadway Lighting book. If new streetlighting is required, a photometric plan for the installation of new streetlights shall be provided. The materials for new streetlights must be from the latest PGE approved material list. For energizing of streetlights and to obtain the latest PGE approved material list, contact the following PGE Outdoor Lighting Services Department Design Project Managers.

Lisa Guarnero (Primary)	Jeff Steigleder (Back-Up)
(503) 742-8299	(503) 672-5462
Lisa.guarnero@pgn.com	Jeffery.Steigleder@pgn.com

11. Reduction to the standard improvements, ROW dedication and other deviations from the City's design standards may be requested through the modification process outlined in section 16.12.013 of the Oregon City Municipal Code. Proposed modifications may require additional evidence and analysis for review.

Stormwater

1. The Oregon City Stormwater and Grading Design Standards can be found online at: https://www.orcity.org/publicworks/stormwater-and-grading-design-standards.

2. Projects within the General Thresholds (Section 1.2.1) of the Stormwater and Grading Design Standard, are subject to the requirements of the City's Stormwater and Grading Design Standards. The project, as described in the Pre-Application submittal, appears to trigger Part A (see below) of the General Thresholds.

   A. Development activities that result in 5,000 square feet of new or replaced impervious surface, cumulative over a 5-year period.

   New or replaced impervious surface, includes surfaces associated with required frontage improvements.

3. Where compliance with the Stormwater and Grading Design Standards is required, applicants must submit a completed Site Assessment and Planning Checklist (and other items as described in Section 9.1.1 of the Stormwater and Grading Design Standards) as part of the land use application review process. At a minimum, to receive Completeness Approval, the applicant should submit a preliminary stormwater report addressing the following items from Section 9.1.1 of the City's Stormwater and Grading Design Standards.
   A. Stormwater management strategy
   B. A site plan showing an adequately sized stormwater facility based on Stormwater Best Management Practices (BMP) Sizing Tool or sized using the Engineered Method (as defined by City's Stormwater and Grading Design Standards).
   C. A geotechnical report or a Natural Resource Conservation Service (NRCS) soils report documenting onsite infiltration and soil conditions in support of a proposed stormwater management strategy.
   D. Downstream analysis which extends to the distance where the project site contributes less than 15 percent of the cumulative tributary drainage area or 1,500 feet downstream of the approved point of discharge, whichever is greater, as required by Chapter 5 of the Stormwater and Grading Design Standards.

4. The proposal provided with the pre-application submittal has not conceptually provided the required stormwater improvements. The size of the proposed parking lot may need to be reduced.

5. There is an inlet located along the frontage of the proposed development, in Fir Street. This structure directs flows west through an 12-inch pipe to the "Caufield" basin. There is also a 24-inch storm main which runs on the north side of the development. The 24-inch storm main flows west to the "Caufield" basin.

Water

1. There is an existing 12-inch ductile iron water main that runs within Fir Street which has an 8-inch branch that runs north along the west side of the development property. The 8-inch water main is within a 10-foot-wide water line easement. Water service to the development property appears to come off the 12-inch water main. There also appears to be a 6-inch water lateral from the 12-inch water main that extends into the development property. There are two 6-inch water laterals which extend from the 8-inch water main that run east into the development property and one of them feeds an on-site fire hydrant.

2. There is an existing public fire hydrant located off on the southwest corner of the development property. It appears no additional fire hydrants will be needed in the right of way; however, the applicant will need to verify with Clackamas Fire District No. 1 if the onsite fire hydrants are adequate.

Sanitary Sewer

1. The development site is served by a 10-inch sanitary sewer main which exists within Fir Street. If use of the existing sewer line is proposed, video inspection of the line will be needed for the City to determine if will be allowed to be reused.

Occupancy

1. Development Services will not recommend final occupancy of the building until construction of public improvements and private stormwater management facilities is completed with all construction punchlist items addressed and all required documents are provided.

Other

1. All public improvements and stormwater management facilities will need inspection by the applicant's civil engineer. The City only provides inspection oversight.

2. The proposed development resides within a high water table area. If the high-water table is part of a larger groundwater system rather than perched water, there may be addition requirements for the design of infiltration stormwater facilities.

Supplemental Information:

I. Documentation required before any construction plan review can begin by Public Works (which is after a land use decision has been made):

A. Complete Engineering Plans (Public Improvements, all stormwater facilities, site grading and erosion control)
B. Preliminary Cost Estimate for construction of Public Improvements, all stormwater facilities, site grading and erosion control.
C. Plan Review Fee
D. Complete Storm Water Report and Site Assessment and Planning Checklist

II. Documentation required before any construction plan can be deemed approved by Public Works (to be able to start construction or obtain a building permit):

a. Inspection Fee
b. Final Cost Estimate of Public Improvements
c. Approved Engineering Plan stamped and signed by an Oregon Professional Engineer
d. Approved Storm Water Report stamped and signed by an Oregon Professional Engineer
e. DEQ 1200C Permit
f. 120% Performance Bond
g. Developer/Engineer Agreement
h. Non-Remonstrance Agreement
i. R.O.W. Dedication / Deed of Dedication
j. PGE approved streetlight plan

III. Documentation required before Public Works will recommend Certificate of Occupancy:

a. Engineer of Record Certificate of Completion
b. Completed Punchlist
c. 15% Warranty Guarantee
d. Private storm facilities - Maintenance Covenant and Access Easement

KITTELSON & ASSOCIATES
851 SW 6th AVENUE, SUITE 600
PORTLAND, OR 97204
P 503.228.5230 F 503.273.8169

MEMORANDUM

Date:	February 27, 2020	Project #: 24444.0
To:	Pete Walter, City of Oregon City John Replinger, P.E., Replinger & Associates, LLC	
From:	Matt Bell, Russ Doubleday, and Chris Brehmer, P.E., Kittelson & Associates, Inc.	
Project:	Oregon City Operations Complex	
Subject:	Transportation Impact Analysis	

INTRODUCTION

The City of Oregon City is proposing to repurpose the building located at 13895 Fir Street as the new Oregon City Operations Complex. Figure 1 illustrates the site vicinity map. The existing building will be divided into two sections: the southern section will be a 25,290 square-foot office building for Public Works Operations, Engineering, and Parks Operations staff and the northern section will be a 24,670 square-foot warehouse and maintenance shop for fleet vehicles. The existing parking lot on the western half of the site will also be divided into two sections: the southern section will have 95 spaces for visitors and staff vehicles, while the northern section will have 125 spaces for fleet vehicles. The current site access will remain. Figure 2 illustrates a recent version of the conceptual site plan. Occupancy of the site is expected to occur in 2021.

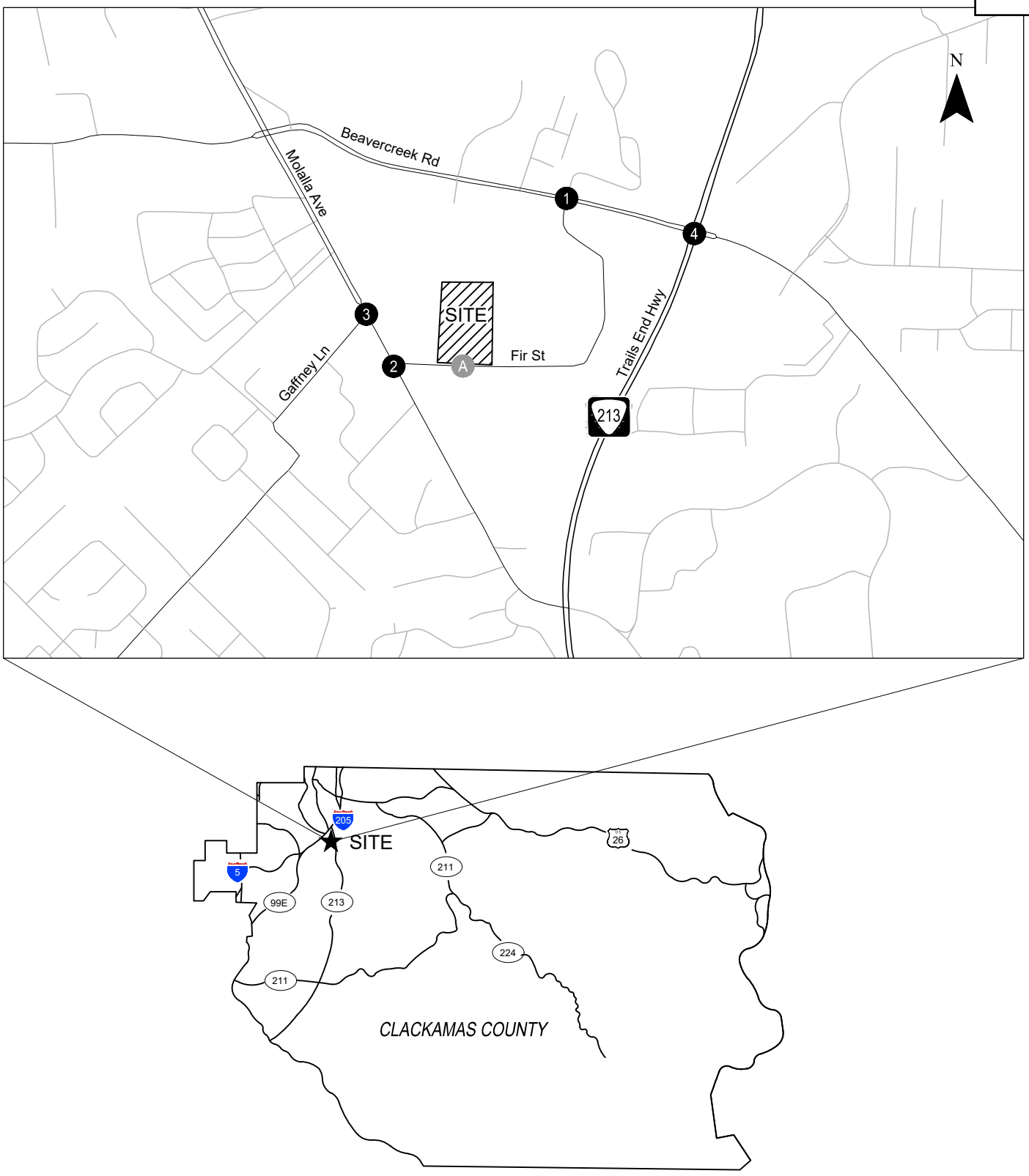
The results of this analysis indicate that the proposed Oregon City Operations Complex can be constructed while maintaining acceptable traffic operations at the study intersections and site driveway. No capacity-based mitigation needs were identified at the study intersections. Based on the analysis, the following improvements are recommended:

- Landscaping, above ground utilities, and signing should be located and maintained along the site frontage and throughout the site in a manner that provides adequate intersection sight distance per City Code.

Additional details of the study methodology, findings, and recommendations are provided below.

SCOPE OF THE REPORT

This analysis determines the transportation-related impacts associated with the proposed Oregon City Operations Complex and was prepared in accordance with the City of Oregon City *Guidelines for Transportation Impact Analyses* (TIA Guidelines – Reference 1). The study intersections and scope of this report were selected based on the TIA Guidelines and direction provided by City staff. The key assumptions and methodologies associated with this study were documented in a scoping memorandum prepared by Kittelson & Associates, Inc. (KAI) in January 2020. *Appendix "A" includes the scoping memorandum that was reviewed and approved by City staff.*

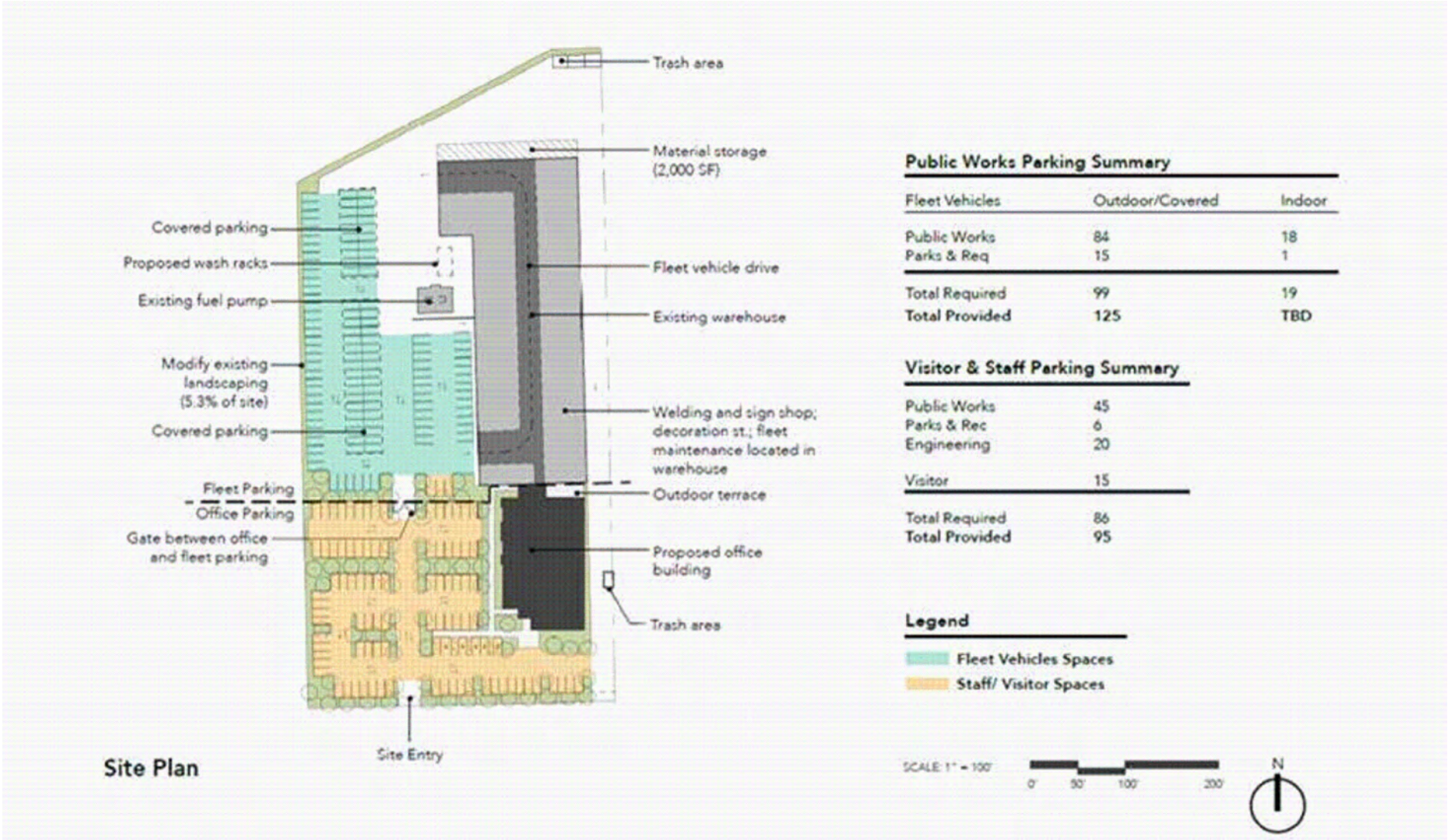


Site Vicinity Map
Oregon City, Oregon

Figure
1

(##) - Study Intersection
(##) - Site Driveway

H:\24\24444 - Oregon City Public Works\report\figs\24444 Figure 01.dwg Feb 11, 2020 - 9:32am - rdoubleday Layout Tab: Site Vicinity Map



Site plan provided by PlanB Consultancy, dated 08/22/2019

Conceptual Site Plan
Oregon City, Oregon

Figure
2

H:\24\24444 - Oregon City Public Works\report\figs\24444 Figure 01.dwg Feb 11, 2020 - 9:33am - rdoubleday Layout Tab: Proposed Site Plan

The operational analyses were performed at the site driveway and these intersections:

1. Fir Street/Beavercreek Road
2. Molalla Avenue/Fir Street
3. Molalla Avenue/Gaffney Lane

Per direction from City staff, site-generated trips were tracked through the OR 213/Beavercreek Road intersection for accounting purposes.

This report evaluates these transportation issues:

- Year 2019 Existing land-use and transportation-system conditions within the site vicinity during the weekday AM and PM peak periods;
- Year 2021 background traffic conditions (without the proposed development) at the study intersections during the weekday AM and PM peak periods;
- Year 2021 total traffic conditions (with the proposed development) at the study intersections during the weekday AM and PM peak periods;
- On-site traffic operations and circulation.

EXISTING CONDITIONS

The existing conditions analysis identifies the site conditions and the current physical and operational characteristics of the roadways within the study area. These conditions will be compared with future conditions later in this report.

Kittelson & Associates, Inc. (KAI) staff visited and inventoried the proposed development site and surrounding study area in January 2020. At that time, KAI collected information regarding site conditions, adjacent land uses, existing traffic operations, and transportation facilities in the study area.

SITE CONDITIONS AND ADJACENT LAND USES

The proposed development site is located within the Oregon City city limits, it is currently occupied by a vacant office/warehouse building that will be repurposed for City use, and it is zoned General Industrial (GI). Adjacent land uses include General Industrial (GI) to the east along Fir Street and General Commercial (GC) to the west along Molalla Avenue.

TRANSPORTATION FACILITIES

Table 1 summarizes the characteristics of the existing transportation facilities in the study area.

Table 1: Existing Transportation Facilities

Roadway	Functional Classification[1]	Number of Lanes	Posted Speed (MPH)	Sidewalks	Bicycle Lanes	On-Street Parking
Fir Street	Collector	2-3	25	Yes	Partial[2]	No
Beavercreek Road	Major Arterial	5	35	Yes	Yes	No
Molalla Avenue	Major Arterial	3	35	Yes	Yes	No
Gaffney Lane	Collector	2	25	Partial[3]	No	No

[1] Oregon City Transportation System Plan (Reference 2)
[2] On-street bike lanes are provided on the north-south portion of the roadway, east of the proposed development site.
[3] Continuous sidewalks are provided on the north side of Gaffney Lane and intermittent sidewalks are provided on the south side of Gaffney Lane.

Roadway Facilities

As shown in Figure 2, Fir Street is the only street that borders the site. Fir Street connects the site to Beavercreek Road to the north and Molalla Avenue to the west. Beavercreek Road connects to OR 213 as well as retail/commercial uses and residential uses to the east along Beavercreek Road. Molalla Avenue also connects to OR 213 as well as retail/commercial uses along Molalla Avenue and residential uses to the east and west. Gaffney Lane connects to residential uses west of Molalla Avenue. Figure 3 illustrates the existing lane configurations and traffic control devices at the study intersections.

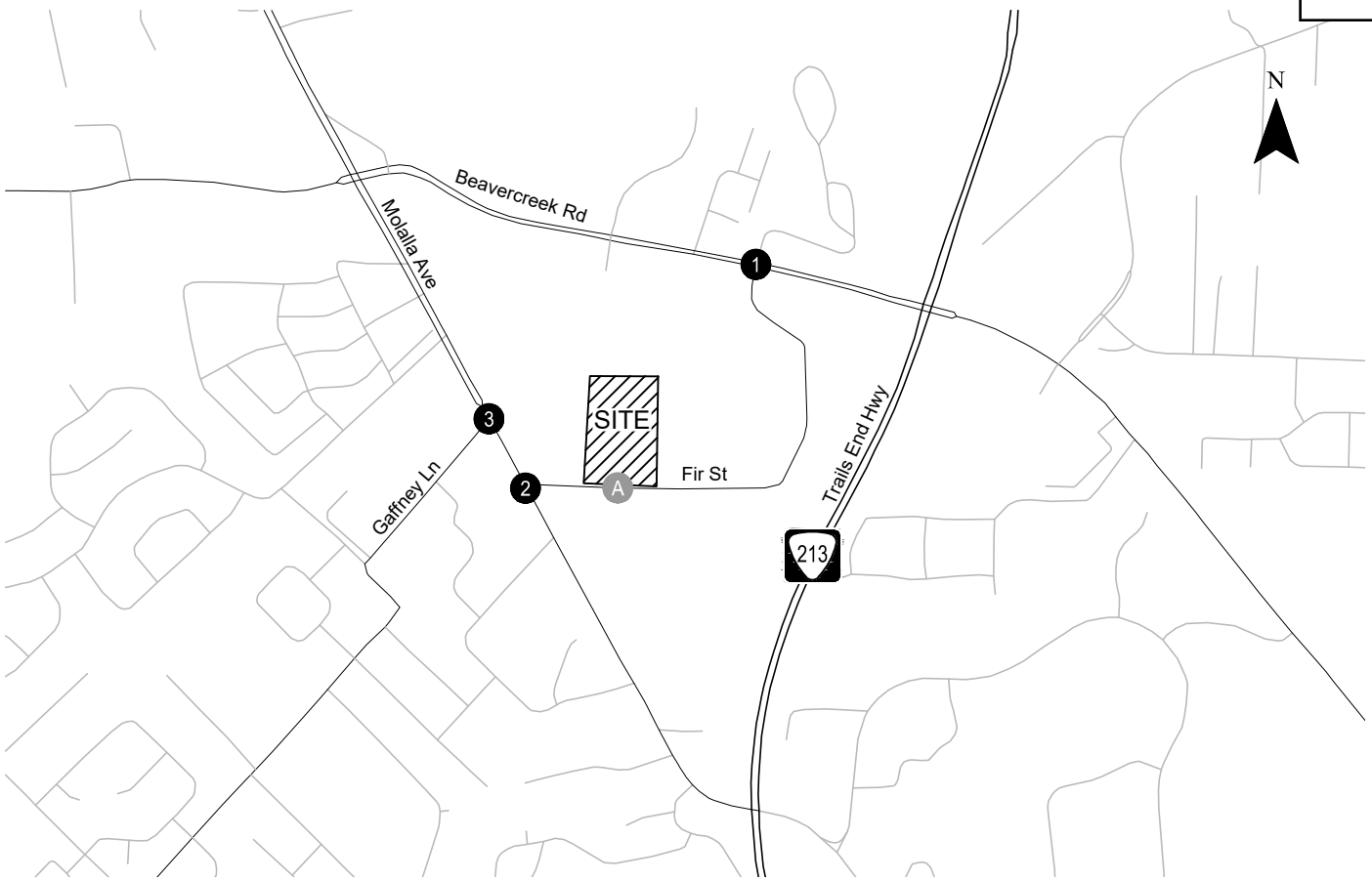
Pedestrian and Bicycle Facilities

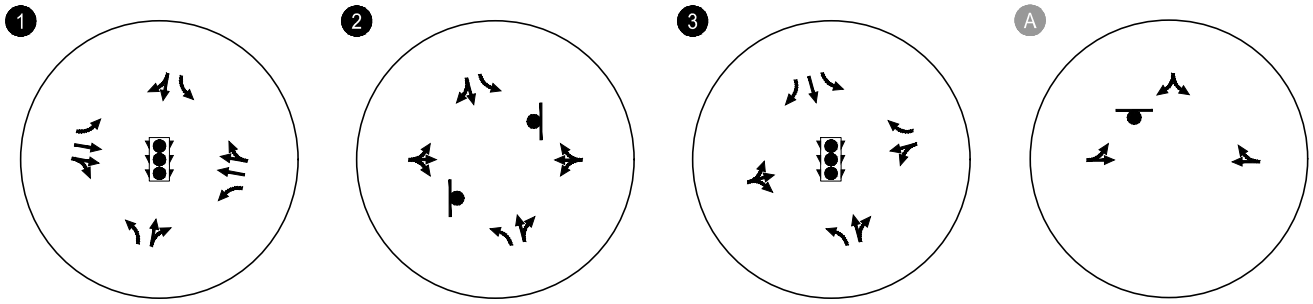
Sidewalks are provided along both sides of Fir Street, Beavercreek Road, and Molalla Avenue within the site vicinity; sidewalks are provided along both sides of Gaffney lane adjacent to developed properties. On-street bike lanes are provided along both sides of Fir Street east of the site and along both sides of Beavercreek Road and Molalla Avenue in the site vicinity. Marked crosswalks are provided at the signalized intersections in the site vicinity, except along the north side of the Molalla Avenue/Gaffney Lane intersection.

The 2013 Oregon City Transportation System Plan (TSP) includes two biking and walking projects within the study area. Project number B32 will add bike lanes on the east-west portion of Fir Street adjacent to the site, and project number W34 will fill in missing sidewalks on Molalla Avenue between Gaffney Lane and Sebastian Way.

Transit Facilities

Local transit service is provided in the site vicinity by TriMet. TriMet line 32 (Oatfield) provides weekday service between Clackamas Community College (CCC) and downtown Milwaukie with stops along Beavercreek Road. Line 32 operates on approximately 30-minute headways. TriMet line 33 (McLoughlin/King Road) provides weekday service between CCC and Clackamas Town Center via downtown Milwaukie with stops along Molalla Avenue. Line 33 is a frequent service route and operates on approximately 15-minute headways. TriMet line 99 (Macadam/McLoughlin) provides weekday rush hour-only service between CCC and Portland City Center with stops along Molalla Avenue. During rush hour, the bus route operates on approximately 15-minute headways.





- STOP SIGN
- TRAFFIC SIGNAL

Existing Lane Configurations
& Traffic Control Devices
Oregon City, Oregon

Figure
3

H:\24\24444 - Oregon City Public Works\report\figs\24444 Figure 01.dwg Feb 09, 2020 - 8:15am - mbell Layout Tab: ELC & TCD

TRAFFIC VOLUMES AND PEAK HOUR OPERATIONS

Turning-movement counts were conducted at the study intersections in December 2019. All the counts were conducted on a typical mid-week day during the morning (7:00 to 9:00 AM) and evening (4:00 to 6:00 PM) peak time periods. The system-wide morning and evening peak hours were found to occur from 7:55 to 8:55 AM and 4:10 to 5:10 PM, respectively. However, given minor differences between intersections, the individual intersection peak hours were used as a basis for the analysis. Figure 4 summarizes the year 2019 turning-movement counts at the study intersections during the weekday AM and PM peak hours. *Appendix "B" contains the traffic count worksheets used in this study.*

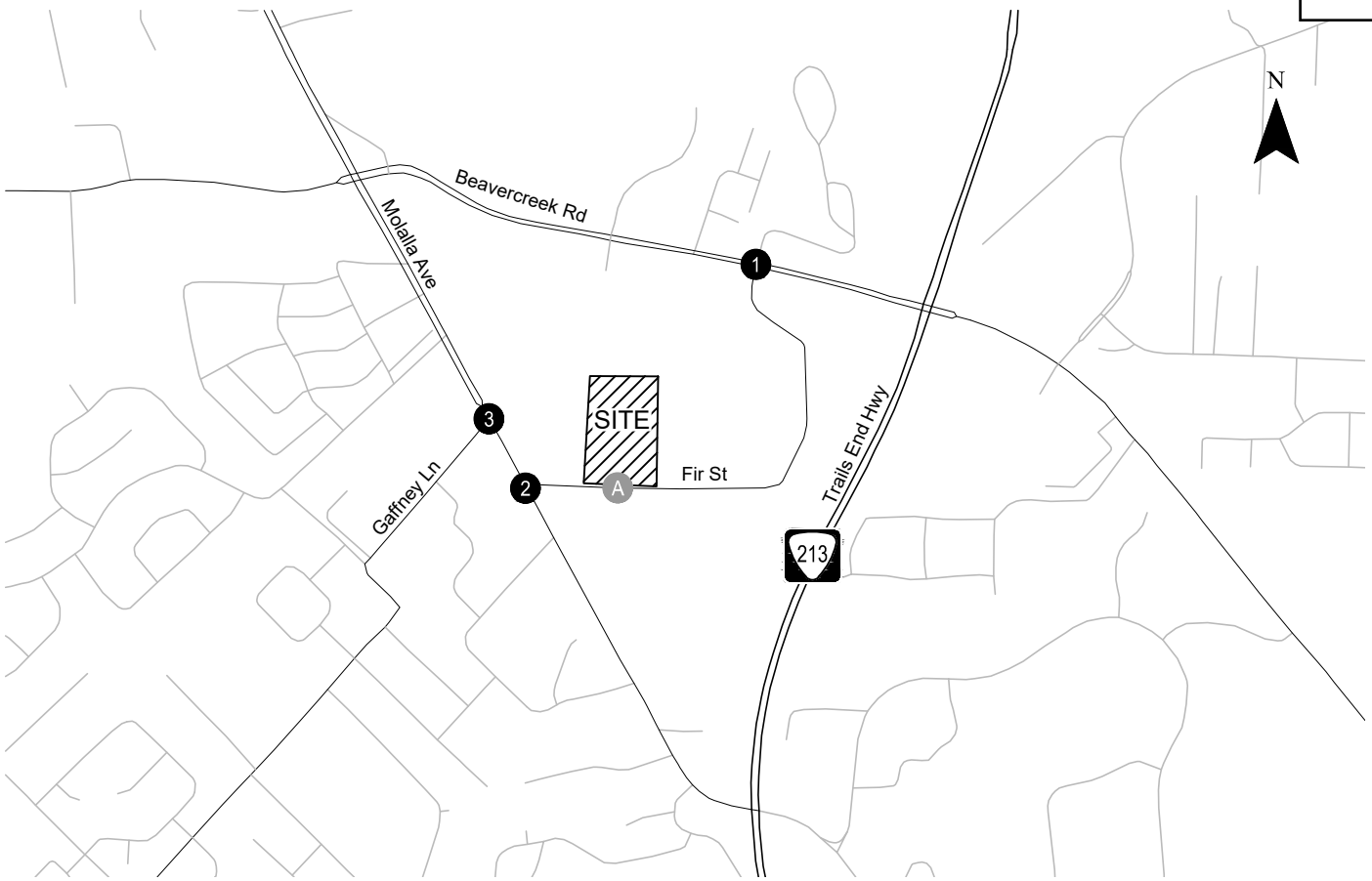
Current Intersection Operations

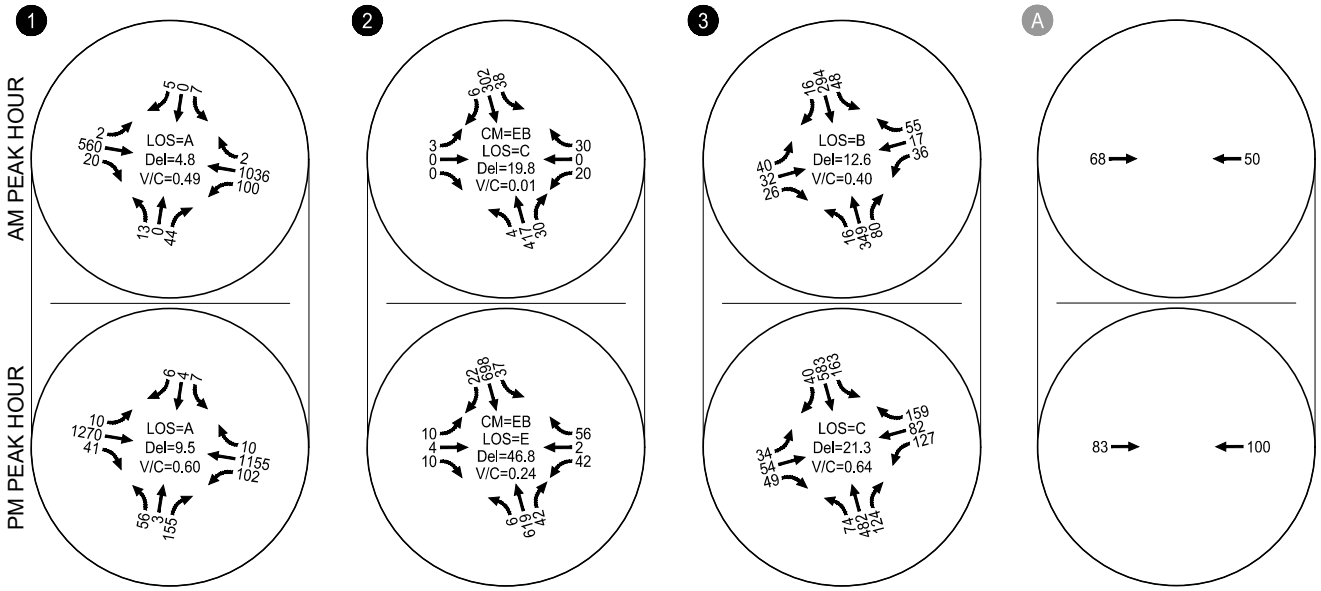
All analyses described in this report were performed in accordance with the procedures stated in the *Highway Capacity Manual* (HCM – Reference 3). HCM 2000 methodologies were used to evaluate operations at the signalized intersections and HCM 6th Edition methodologies were used to evaluate operations at the unsignalized intersections. All analyses used the peak 15-minute flow rate that occur during the weekday AM and PM peak hours. Using the peak 15-minute flow rate ensures that the analyses are based on a reasonable worst-case scenario. For this reason, the analyses reflect conditions that are only likely to occur for 15 minutes out of each average peak hour.

Section 16.12.033 of the Oregon City Municipal Code (OCMC) identifies the City's mobility standards for signalized and unsignalized intersections located outside the Regional Center, but designated on the Arterial and Throughway Network, as defined in the Regional Transportation Plan. Per the OCMC:

1. During the first hour, a maximum v/c ratio of 0.99 shall be maintained. For signalized intersections, this standard applies to the intersection as a whole. For unsignalized intersections, this standard applies to movements on the major street. There is no performance standard for minor street approaches.
2. During the second hour, a maximum v/c ratio of 0.99 shall be maintained at signalized intersections. For signalized intersections, this standard applies to the intersection as a whole. For unsignalized intersections, this standard applies to movements on the major street. There is no performance standard for the minor street approaches.

Figure 4 summarizes the year 2019 existing traffic conditions at the study intersections during the first hour of the weekday AM and PM peak periods. As shown, all of the study intersections currently operate acceptably during the first weekday AM and PM peak hour per their applicable mobility standards and so the second hour was not analyzed. *Appendix "C" includes the existing traffic conditions worksheets.*





CM = CRITICAL MOVEMENT (UNSIGNALIZED)
LOS = LEVEL OF SERVICE (INTERSECTION AVERAGE LOS SIGNALIZED/ CM LOS UNSIGNALIZED)
Del = DELAY (INTERSECTION AVERAGE CONTROL Del SIGNALIZED)/CM CONTROL Del (UNSIGNALIZED)
V/C = VOLUME-TO-CAPACITY RATIO (INTERSECTION AVERAGE V/C SIGNALIZED/CM V/C UNSIGNALIZED)

2019 Existing Traffic Conditions Weekday AM & PM Peak Hours Oregon City, Oregon

Figure 4

H:\24\24444 - Oregon City Public Works\report\figs\24444 Figure 01.dwg Feb 11, 2020 - 2:06pm - rdoubleday Layout Tab: 2019 ETC

Traffic Safety

The crash history of the study intersections was reviewed in an effort to identify potential safety issues in the site vicinity. The Oregon Department of Transportation (ODOT) provided crash data for the study intersections for the period from January 1, 2013, through December 31, 2017. Table 2 summarizes the crash data over the five-year period.

Table 2: Intersection Crash History (January 1, 2013 through December 31, 2017)

Intersection	Crash Type					Crash Severity			Total	Crash Rates (Crashes /MEV)	ODOT 90th Percentile Rate
	Rear-End	Turn	Angle	Ped/ Bike	Other	PDO[1]	Injury	Fatality			
Fir St/Beavercreek Road	5	14	3	-	-	10	10	2	22	0.43	0.86
Molalla Ave/Fir Street	3	-	-	-	-	1	2	-	3	0.11	0.293
Molalla Ave/Gaffney Lane	8	4	1	5	1	7	12	-	19	0.53	0.86

The crash rates shown in Table 2 were compared to the 90th percentile rates for similar facilities shown in Table 4-1 of the ODOT Analysis Procedures Manual (APM – Reference 4). Per the APM, any intersection that has a crash rate equal to or greater than the corresponding 90th percentile rate is considered a high-risk intersection and is recommended for further review. Based on these criteria, none of the study intersections are recommended for further review. *Appendix "D" contains the crash data provided by ODOT.*

As shown in Table 2, two fatal crashes were reported at the Fir Street/Beavercreek Road intersection over the five-year period. Based on the data, both crashes involved a motorcyclist and resulted in a motorcyclist fatality. On May 31st, 2014, a motorcyclist heading east on Beavercreek Road disregarded the traffic signal and skidded into a passenger car making a westbound left turn at the light, killing the motorcyclist. On February 15th, 2016, a westbound left-turning truck failed to yield the right-of-way to a motorcyclist heading eastbound, killing the motorcyclist. Given the crash history of the Fir Street/Beavercreek Road intersection, it is identified in the top five percent of sites on ODOT's 2017 SPIS list. A SPIS investigation report for the intersection is currently not available.

TRANSPORTATION IMPACT ANALYSIS

The transportation impact analysis identifies how the study area's transportation system will operate in the year the proposed development is expected to be fully built, year 2021. The impact of traffic generated by the proposed Oregon City Operations Complex was examined as follows:

- Developments and transportation improvements planned in the site vicinity were identified.
- Year 2021 background traffic conditions (without the proposed development) were analyzed at the study intersections during the weekday AM and PM peak hours.
- Site-generated trips were estimated for build-out of the site.

- Site trips were assigned to the study intersections based on an assumed trip distribution pattern.
- Year 2021 total traffic conditions (with build-out of the proposed development) were analyzed at the study intersections and site driveways during the weekday AM and PM peak hours.
- On-site circulation issues and site-access operations were evaluated.

YEAR 2021 BACKGROUND TRAFFIC CONDITIONS

The year 2021 background traffic conditions analysis identifies how the study area's transportation system will operate without the proposed Oregon City Operations Complex. This analysis includes traffic attributed to planned developments within the study area and to general growth in the region but does not include traffic from the proposed development.

Planned Developments and Transportation Improvements

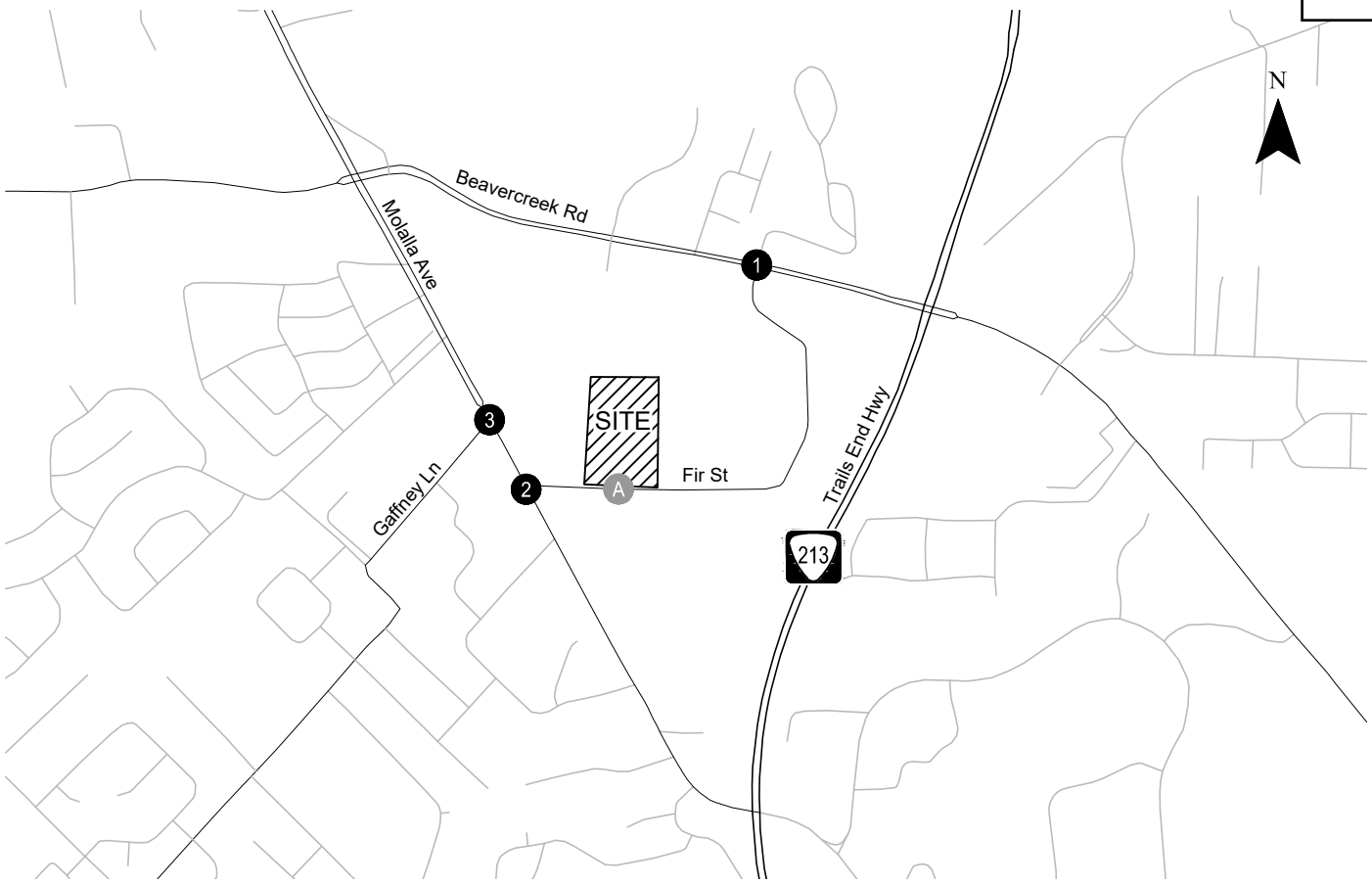
The Molalla Avenue Streetscape Project (TSP Project # W74) is currently underway and is expected to be completed by 2021. Per the TSP, the project will consist of roadway improvements along Molalla Avenue from Beavercreek Road to OR 213. Most of the improvements will occur on the west side of Molalla Avenue to make the corridor safer for people biking, walking, and taking transit. This project will include constructing a traffic signal at Molalla Avenue/Fir Street intersection. The Molalla Avenue/Fir Street intersection was modeled as a coordinated signal system between Molalla Avenue/Fir Street and Molalla Avenue/Gaffney Lane. The signal is included in the background and total traffic conditions analyses. Figure 5 shows the assumed lane configurations and traffic control devices at the study intersections under background and total traffic conditions. Per discussions with City staff, there are no planned developments within the site vicinity anticipated to impact access to the site or intersections operations.

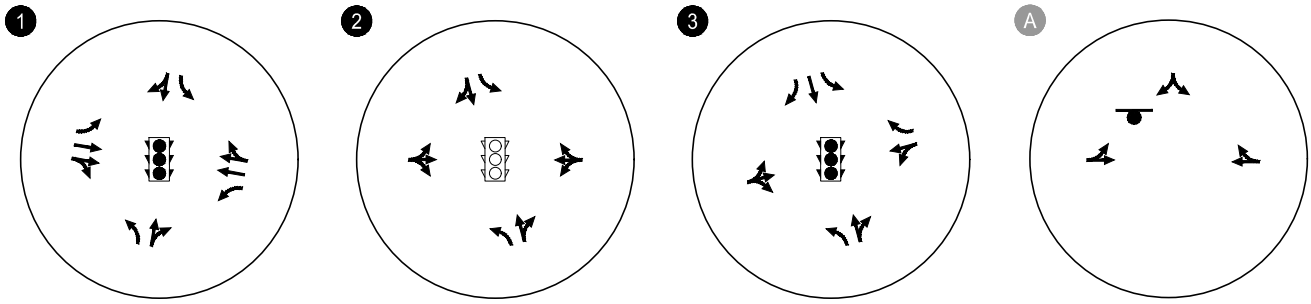
Traffic Volumes

A 2.0 percent annual growth rate used in this analysis based on information provided in the Oregon City TSP and direction provided by City staff. The year 2021 background traffic volumes were developed by applying a 2.0 percent annual growth rate to the existing traffic volumes shown in Figure 4. Figure 6 illustrates the resulting forecast year 2021 background traffic volumes during the weekday AM and PM peak hours.

Intersection Operations

The weekday AM and PM peak-hour turning-movement volumes shown in Figure 6 were used to conduct an operational analysis at the study intersections to determine the year 2021 background traffic conditions. The results of the analysis indicate that all the study intersections are forecast to operate acceptably during the first weekday AM and PM peak hours per their applicable mobility standards. *Appendix "E" contains the year 2021 background traffic conditions worksheets.*





- STOP SIGN
- TRAFFIC SIGNAL
- NEW TRAFFIC SIGNAL

Assumed Lane Configurations
& Traffic Control Devices
Oregon City, Oregon

Figure
5

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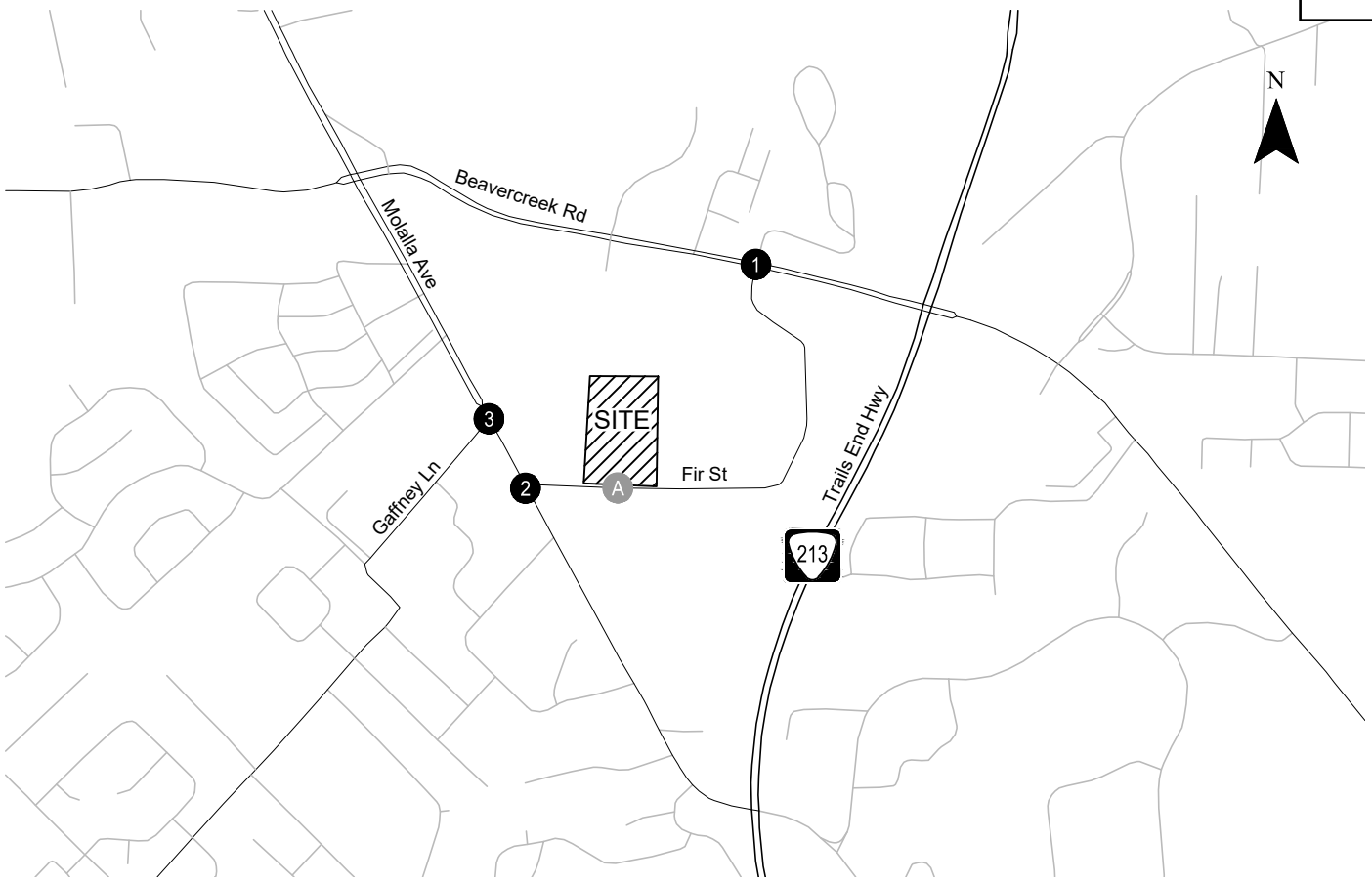
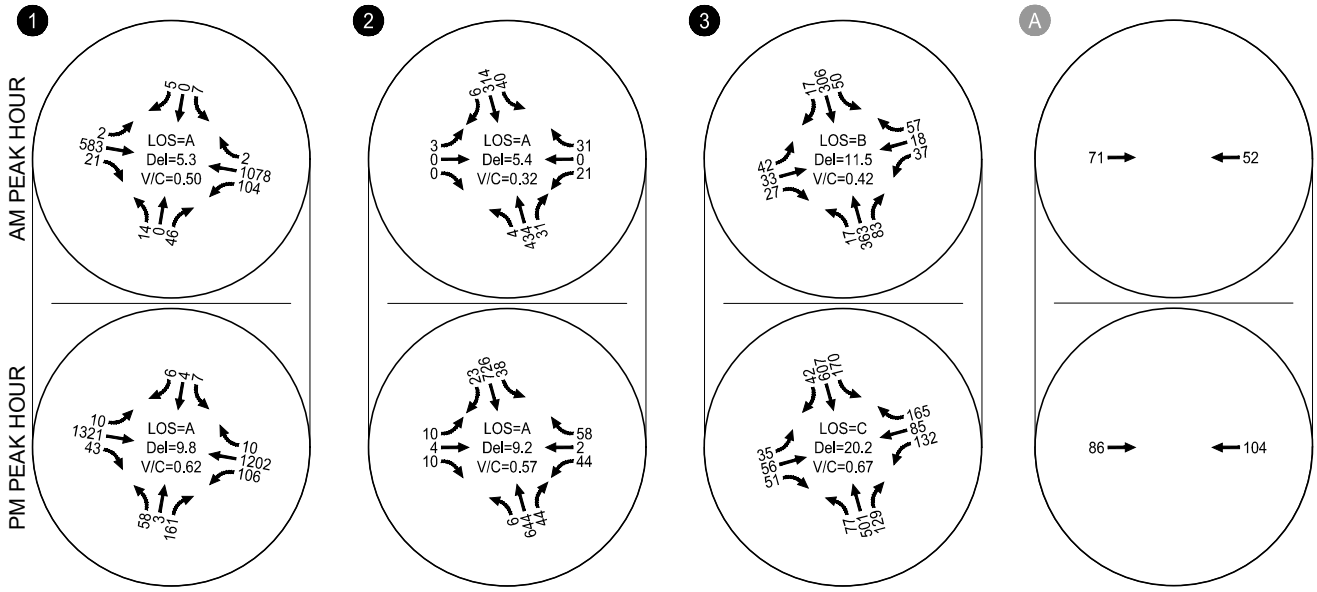
KITTELSON & ASSOCIATES





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Del = DELAY (INTERSECTION AVERAGE CONTROL Del SIGNALIZED)/CM CONTROL Del UNSIGNALIZED)
V/C = VOLUME-TO-CAPACITY RATIO (INTERSECTION AVERAGE V/C SIGNALIZED/CM V/C UNSIGNALIZED)

2021 Background Traffic Conditions
Weekday AM & PM Peak Hours
Oregon City, Oregon

Figure
6

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PROPOSED DEVELOPMENT PLAN

The City of Oregon City is proposing to repurpose the vacant building located at 13895 Fir Street as the new Oregon City Operations Complex. The existing building will be divided into two sections: the southern section will be a 25,290 square-foot office building for Public Works Operations, Engineering, and Parks Operations staff and the northern section will be a 34,670 square-foot warehouse and maintenance shop for fleet vehicles. The existing parking lot on the western half of the site will also be divided into two sections: the southern section will have 95 spaces for visitors and staff vehicles, while the northern section will have 125 spaces for fleet vehicles. The existing site driveway will be retained. Occupancy of the site is expected to occur in 2021.

Trip Generation

A trip generation estimate was prepared for the proposed Oregon City Operations Complex based on programmatic information provided by the City, field data collected by Kittelson at the existing Oregon City Public Works facility, and data provided in the standard reference manual, *Trip Generation*, 10th Edition, published by the Institute of Transportation Engineers (ITE – Reference 5). The estimate includes individual estimates for Public Works Operations, Engineering, and Parks Operations staff. Additional information related to the trip generation estimate is provided in Appendix "A". Table 3 summarizes the total number of trips that will be generated by the proposed development during the weekday AM and PM peak hours.

Table 3: Trip Generation Estimate

Land Use	ITE Code	Size (No. of Employees)	Daily	Weekday AM Peak Hour			Weekday PM Peak Hour		
				Total	In	Out	Total	In	Out
Public Works Employees	Field data	42	530	28	13	15	53	10	43
Engineering Employees	730	18	134	20	15	5	13	3	10
Parks Employees	Field data	13	160	9	4	5	16	3	13
		Total	**824**	**57**	**32**	**25**	**82**	**16**	**66**

As shown in Table 3, the proposed Oregon City Operations Complex is estimated to generate approximately 824 daily trips, including 57 trips (32 inbound, 25 outbound) during the weekday AM peak hour and 82 trips (16 inbound, 66 outbound) during the weekday PM peak hour.

Trip Generation Comparison

A trip generation estimate was also prepared for the previous use of the existing building in order to assist with the Transportation System Development Charge (TSDC) calculation. Based on information provided by the City, the previous use consisted of a 16,000 square-foot office building and a 58,000 square-foot warehouse. ITE land use codes 710 (General Office Building) and 150 (warehousing) were used as a basis for the estimate. Table 4 summarizes the estimate and compares it to the estimate for the proposed use shown in Table 3 to determine the net new trips.

Table 4: Trip Generation Comparison

Land Use	ITE Code	Size (No. of Employees)	Daily	Weekday AM Peak Hour			Weekday PM Peak Hour		
				Total	In	Out	Total	In	Out
Previous Use									
General Office Building	710	16,000	156	19	16	3	18	3	15
Warehousing	150	58,000	100	10	8	2	11	3	8
Total Previous Use Trips			256	29	24	5	29	6	23
Proposed Use									
Total Oregon City Operations Complex Trips			824	57	32	25	82	16	66
Net New Trips			**568**	**28**	**8**	**20**	**53**	**10**	**43**

As shown in Table 4, the proposed Oregon City Operations Complex is estimated to result in a net increase of 568 daily trips, including 28 trips (8 inbound, 20 outbound) during the weekday AM peak hour and 53 trips (10 inbound, 43 outbound) during the weekday PM peak hour. The year 2021 total traffic conditions analysis described below reflects the total trips shown in Table 3, not the net new trips shown in Table 4, given that the previous use has been suspended or significantly reduced. However, the TSDC calculation for the proposed use should provide credits for the previous use.

Trip Distribution/Trip Assignment

A trip distribution pattern was developed for the proposed development based on existing traffic patterns and the location of major trip origins and destinations in the Oregon City area. Figure 7 illustrates the estimated trip distribution pattern for the proposed development.

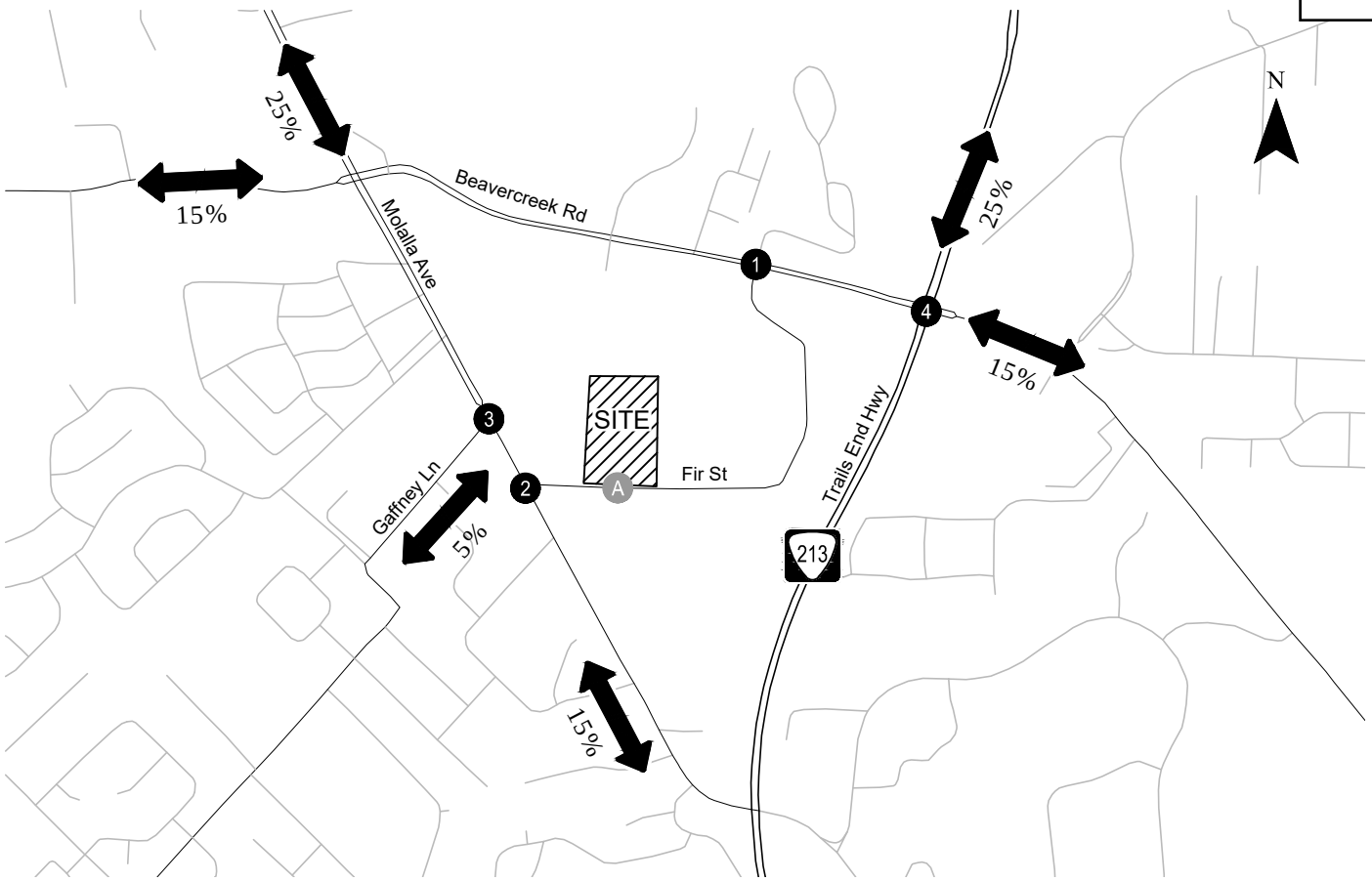
The site-generated trips shown in Table 3 were distributed to the study area roadways and assigned to the study intersections according to the trip distribution pattern shown in Figure 7. Figure 7 also illustrates the site-generated trips that are expected to use the roadway system during the weekday AM and PM peak hours, including the OR 213/Beavercreek Road intersection.

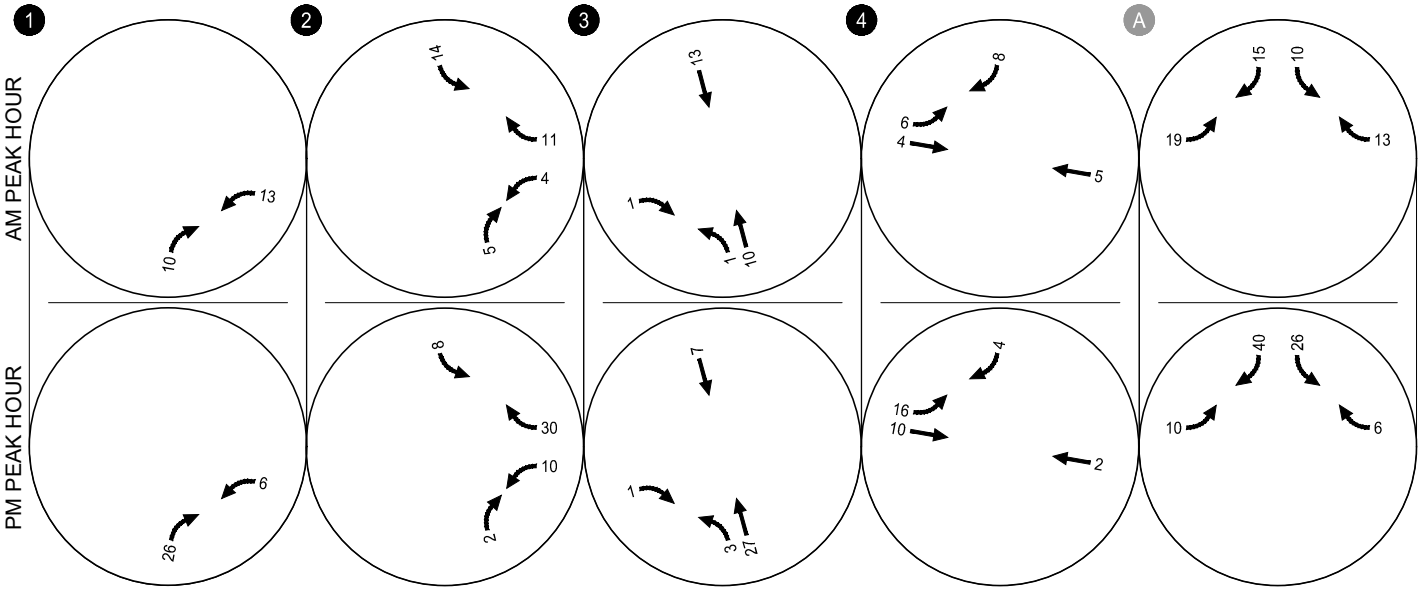
YEAR 2021 TOTAL TRAFFIC CONDITIONS

The total traffic conditions analysis forecasts how the study area's transportation system will operate with traffic generated by the proposed Oregon City Operations Complex development. The year 2021 background traffic volumes shown in Figure 6 were added to the site-generated traffic shown in Figure 7 to arrive at the total traffic volumes shown in Figure 8.

Intersection Operations

The weekday AM and PM peak hour turning-movement volumes shown in Figure 8 were used to conduct an operational analysis at the study intersections and site driveway to determine the year 2021 total traffic conditions. The results of the analysis indicate that all the study intersections and site driveway are forecast to operate acceptably during the first weekday AM and PM peak hours per their applicable mobility standards. *Appendix "F" contains the year 2021 total traffic conditions worksheets.*





Estimated Trip Distribution Pattern & Site Generated Trips
Weekday AM & PM Peak Hours
Oregon City, Oregon

Figure
7

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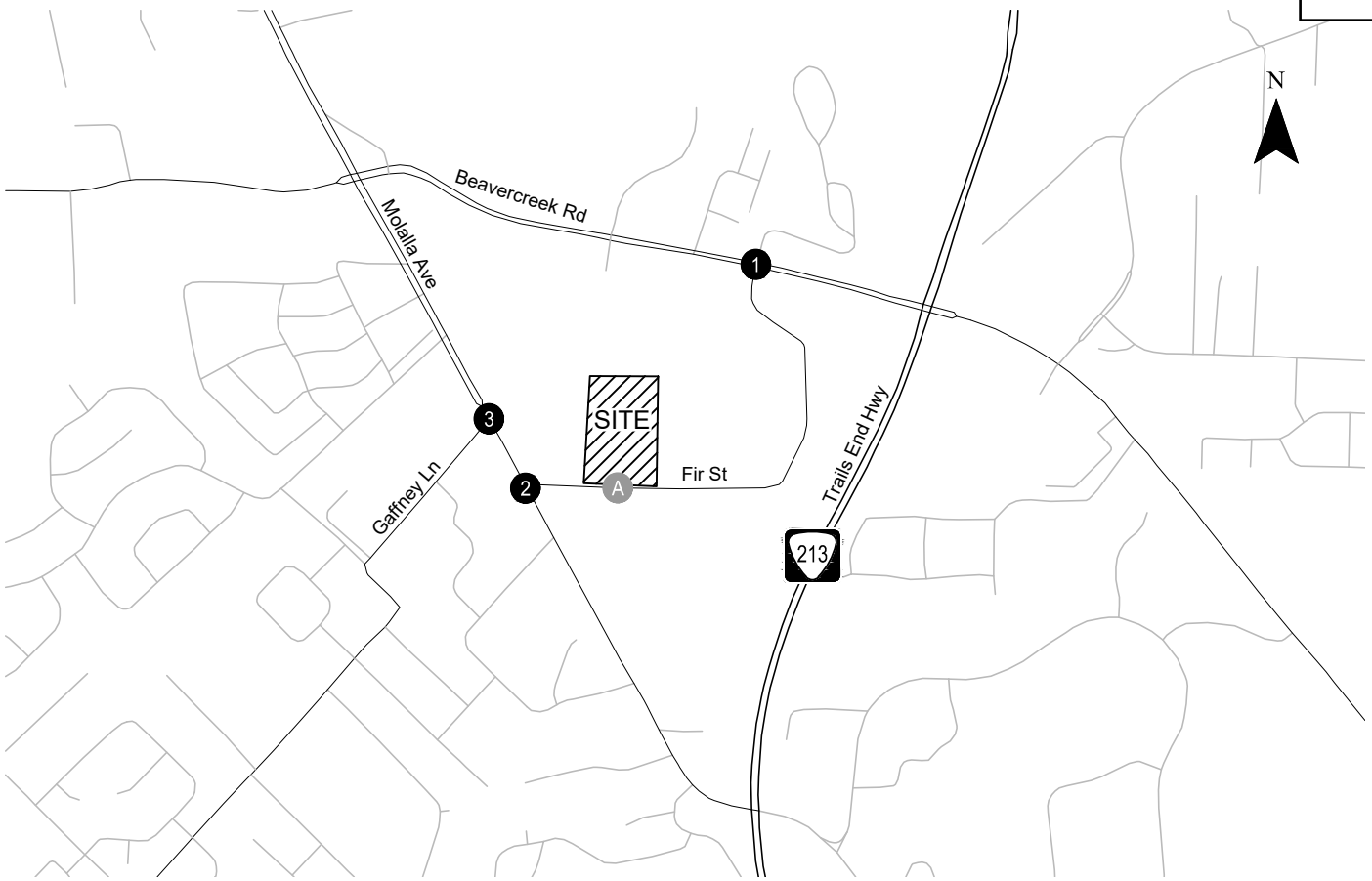

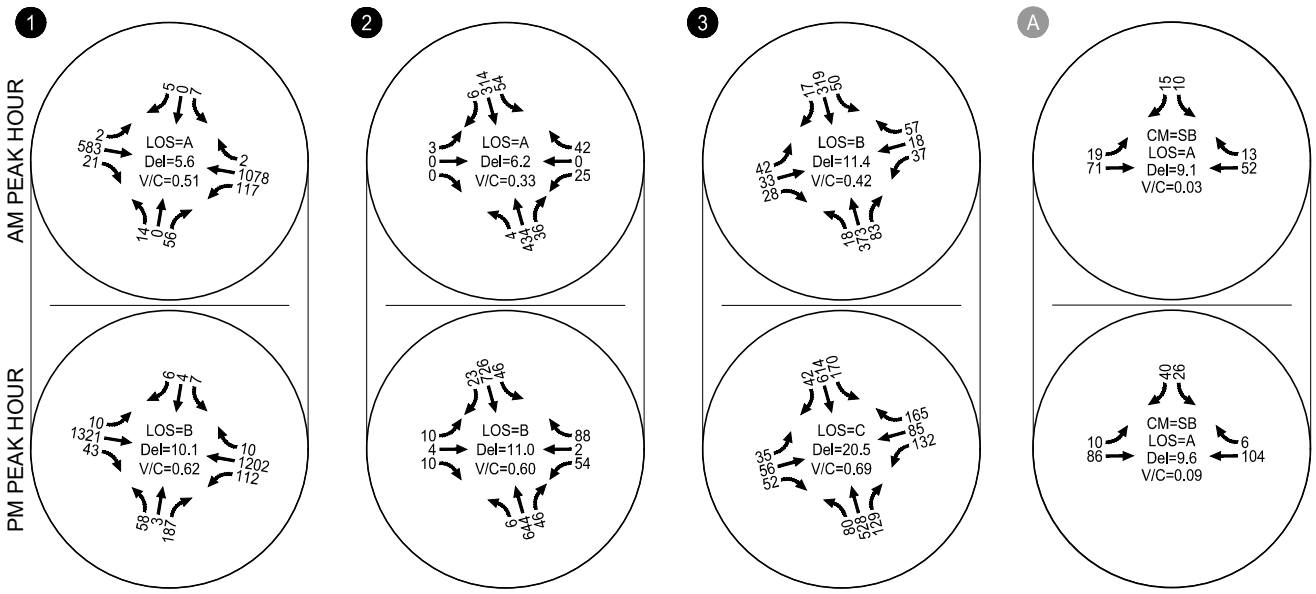

CM = CRITICAL MOVEMENT (UNSIGNALIZED)
LOS = LEVEL OF SERVICE (INTERSECTION AVERAGE LOS SIGNALIZED/ CM LOS UNSIGNALIZED)
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V/C = VOLUME-TO-CAPACITY RATIO (INTERSECTION AVERAGE V/C SIGNALIZED/CM V/C UNSIGNALIZED)

Year 2021 Total Traffic Conditons Weekday AM & PM Peak Hours Oregon City, Oregon

Figure 8

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ON-SITE CIRCULATION/SITE-ACCESS OPERATIONS

Figure 2 illustrates the proposed development plan. As shown, access to the proposed development is planned to be provided via the existing driveway on Fir Street. Per the year 2021 total traffic analysis described above, the site driveway is expected to operate acceptably under stop control during the weekday AM and PM peak hours. Vehicle queues at the driveway are expected to be less than one vehicle entering and exiting the site. Further, the driveway is not expected to be blocked by the queues associated with the Molalla Avenue/Fir Street intersection or other driveways along Fir Street. In addition, intersection sight distance is expected to satisfy applicable City requirements at the driveway and will be documented in the civil engineering plans. Landscaping, above ground utilities, and signing should be located and maintained along the site frontage and throughout the site in a manner that provides adequate intersection sight distance the future per City Code.

CONCLUSIONS AND RECOMMENDATIONS

The results of the traffic impact analysis indicate that the proposed Oregon City Operations Center development can be constructed while maintaining acceptable traffic operations at the study intersections. The findings of this analysis and our recommendations are discussed below.

FINDINGS

- All the study intersections currently operate acceptably during the weekday AM and PM peak hours and are projected to continue to do so in 2024 before and with the proposed Operations Center.
- A review of historical crash data did not reveal any patterns or trends in the site vicinity that require mitigation associated with this project.
- The proposed Operations Center is estimated to generate 824 daily trips, including 57 trips (32 inbound, 25 outbound) during the weekday AM peak hour, and 82 trips (16 inbound, 66 outbound) during the weekday PM peak hour.
    - No trip credit was assumed in this analysis for the previous use; however, the TSDC calculation should consider a credit for the previous use.
- The site driveway is expected to operate acceptably under stop control and 95th percentile queues are expected to be one vehicle or less entering and exiting the site.
- Intersection sight distance is expected to satisfy applicable City requirements at the site driveway.

RECOMMENDATIONS

- Landscaping, above ground utilities, and signing should be located and maintained along the site frontage and throughout the site in a manner that provides adequate intersection sight distance per City Code.

REFERENCES

1. City of Oregon City. *Guidelines for Transportation Impact Analyses*. 2005.
2. City of Oregon City. *Oregon City Transportation System Plan*. 2013.
3. Transportation Research Board. *Highway Capacity Manual, 6th Edition*. 2016.
4. Oregon Department of Transportation. *Analysis Procedures Manual*. 2019.
5. Institute of Transportation Engineers. *Trip Generation Manual, 10th Edition*. 2017.

APPENDICES

A. Scoping Letter
B. Traffic Counts
C. Existing Traffic Conditions Analysis Worksheets
D. ODOT Crash Data
E. Year 2021 Background Traffic Conditions Analysis Worksheets
F. Year 2021 Total Traffic Conditions Analysis Worksheets

Appendix A Scoping Letter

KITTELSON & ASSOCIATES
851 SW 6th AVENUE, SUITE 600
PORTLAND, OR 97204
P 503.228.5230 F 503.273.8169

MEMORANDUM

Date: January 28, 2020 Project #: 24444.P

To: Pete Walter, City of Oregon City
John Replinger, P.E., Replinger & Associates, LLC

From: Matt Bell, Russ Doubleday, and Chris Brehmer, P.E., Kittelson & Associates, Inc.

Project: Oregon City Operations Complex Development

Subject: Transportation Impact Analysis - Key Assumptions

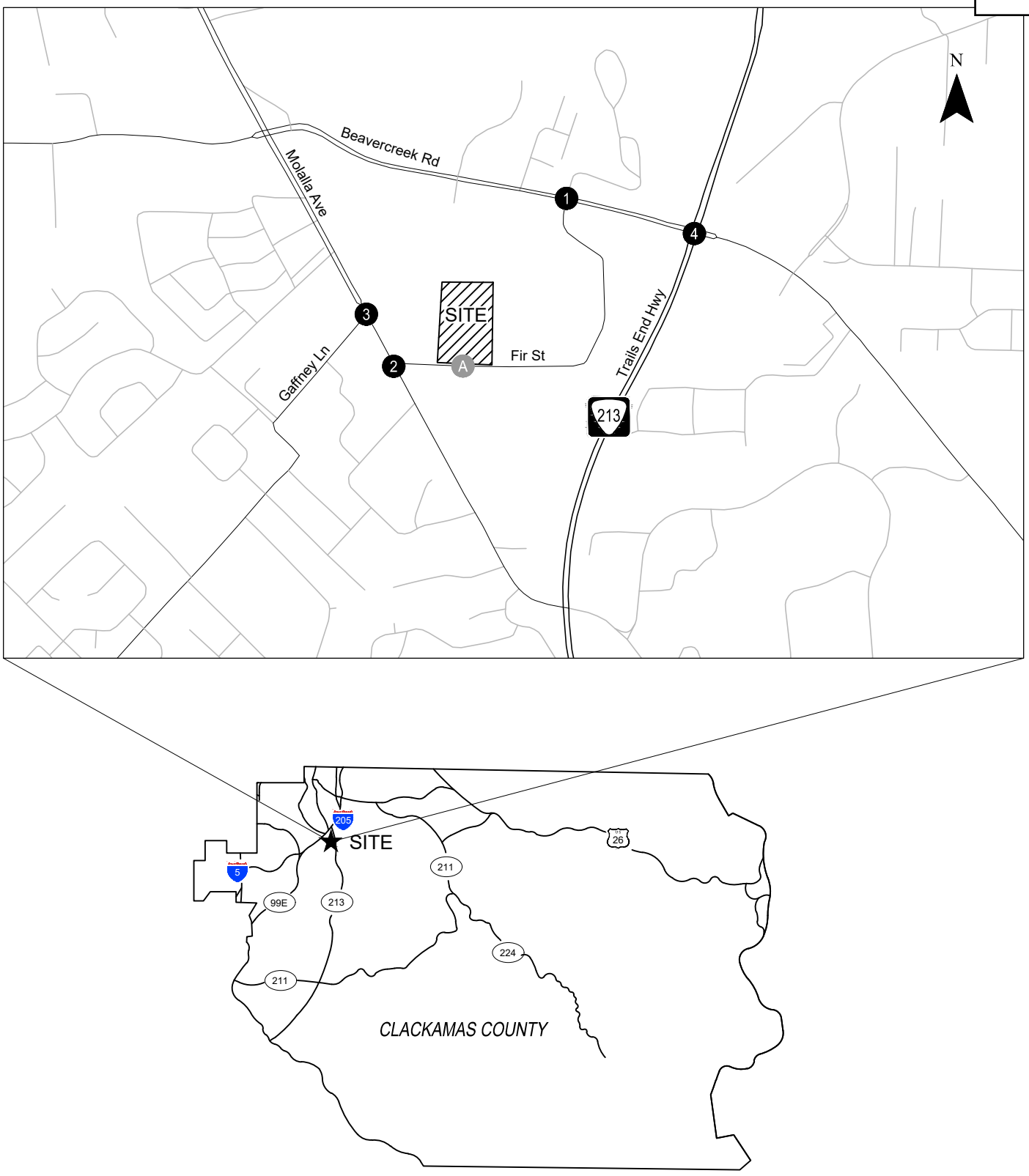
This memorandum summarizes the key assumptions associated with preparing a Transportation Impact Analysis (TIA) for the proposed Oregon City Operations Complex development. These assumptions are based on a review of the proposed development plan, discussions with the project team and City of Oregon City staff, and guidance provided in the *City of Oregon City Guidelines for Transportation Impact Analyses* (TIA Guidelines).

PROJECT DESCRIPTION

The City of Oregon City is proposing to repurpose the building located at 13895 Fir Street in Oregon City, Oregon as the new Oregon City Operations Complex. Figure 1 illustrates the site vicinity map. The existing building will be divided into two sections: the southern section will be a 25,290 square-foot office building for Public Works Operations, Engineering, and Parks Operations staff and the northern section will be a 34,670 square-foot warehouse and maintenance shop for fleet vehicles. The existing parking lot on the western half of the site will also be divided into two sections: the southern section will have 95 spaces for visitors and staff vehicles, while the northern section will have 125 spaces for fleet vehicles. Figure 2 illustrates a recent version of the conceptual site plan. Occupancy of the site is expected to occur in 2021.

TRIP GENERATION

A trip generation estimate was prepared for the proposed Oregon City Operations Complex based on programmatic information provided by the City, field data collected by Kittelson at the existing Oregon City Public Works facility, and data provided in the standard reference manual, *Trip Generation*, 10th Edition, published by the Institute of Transportation Engineers (ITE– Reference 5). As indicated above, the proposed development will consist of offices for Public Works, Engineering, and Parks staff and is currently planned to include warehouse space and maintenance shop space (6 bays) for fleet vehicles. The trip generation estimate was prepared based on the following uses and assumptions:

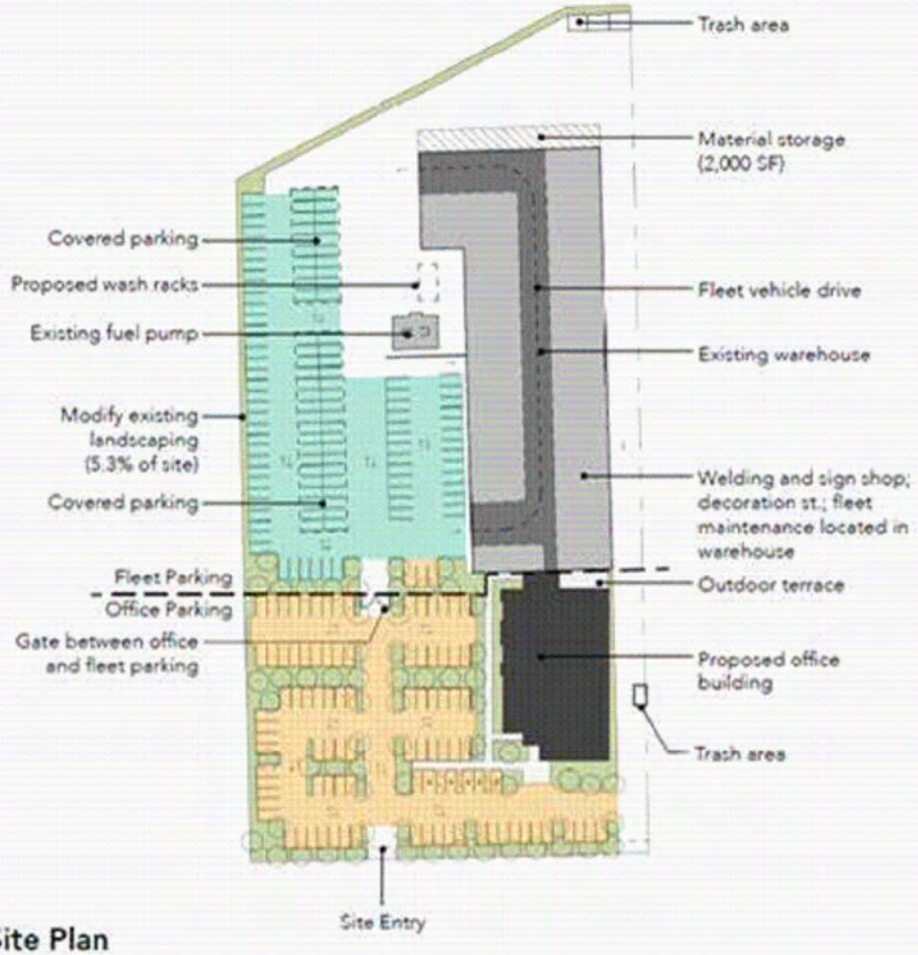


Site Vicinity Map
Oregon City, Oregon

Figure
1

(##) - Study Intersection
(##) - Site Driveway

H:\24\24444 - Oregon City Public Works\report\figs\24444 Figure 01.dwg Feb 11, 2020 - 9:32am - rdoubleday Layout Tab: Site Vicinity Map



Site Plan

Public Works Parking Summary

Fleet Vehicles	Outdoor/Covered	Indoor
Public Works	84	18
Parks & Req	15	1
Total Required	99	19
Total Provided	**125**	**TBD**

Visitor & Staff Parking Summary

Public Works	45
Parks & Rec	6
Engineering	20
Visitor	15
Total Required	86
Total Provided	**95**

Legend

Fleet Vehicles Spaces

Staff/ Visitor Spaces

SCALE: 1" = 100'

0' 50' 100' 200'

N

Site plan provided by PlanB Consultancy, dated 08/22/2019

Conceptual Site Plan
Oregon City, Oregon

Figure
2

H:\24\24444 - Oregon City Public Works\report\figs\24444 Figure 01.dwg Feb 11, 2020 - 9:33am - rdoubleday Layout Tab: Proposed Site Plan

- **Public Works Operations:** The Operations Complex is expected to accommodate up to 42 Public Works Operations employees. This includes 30 full time permanent employees and 12 seasonal employees, which make up a peak season employee count of 42 total employees. Based on discussions with the Oregon City staff, these employees have unique trip generation characteristics. Most Public

  Works Operations employees arrive before 7:00 a.m. and leave by 5:00 p.m. They also work nine 9-hour days, and many of them work off-site. Given the unique nature of these employees, a trip generation study was conducted at the existing Oregon City Operations Center at 122 S Center Street to determine their trip generation characteristics as well as the characteristics of the center in general.

  The study was conducted on a typical mid-week day during the morning (6:30 to 9:00 a.m.) and evening (3:30 to 6:00 p.m.) peak time periods. The results of the study indicate that the morning and evening peak hours of the Operations Center occur prior to the typical morning and evening peak hours of the adjacent street. However, the purpose of the TIA will be to evaluate the impact of the Operations Complex on the adjacent street. Therefore, the trip generation rates developed for the Operations Center are being used to represent the peak hour impacts of the adjacent street. The rates were used as a basis for developing the trip generation estimate for the Operations Complex. *Attachment A contains the trip generation data.*

- **Engineering Employees:** The Operations Complex is expected to accommodate up to 18 employees from the City's Engineering Group. These employees are expected to have trip generation characteristics similar to typical government office employees. Therefore, the trip generation estimate for Engineering employees was developed based on information provided in the standard reference manual, *Tip Generation, 10th Edition*, published by the Institute of Transportation Engineers (ITE – Reference 1). ITE land use code 730 (Government Office) was used as a basis for the estimate.

- **Parks Employees:** The Operations Complex is expected to accommodate up to 13 employees from the City's Parks Operations Group. These employees are expected to have trip generation characteristics similar to the Public Works Operations employees. Therefore, the trip generation estimate for Parks employees was developed based on the trip generation rates developed for the Operations Center.

Table 1 summarizes the trip generation estimate prepared for the proposed development for the daily, weekday AM and PM peak hours.

Table 1: Trip Generation Estimate

Land Use	ITE Code	Size (No. of Employees	Daily	Weekday AM Peak Hour			Weekday PM Peak Hour		
				Total	In	Out	Total	In	Out
Public Works Employees	N/A	42	530	28	13	15	53	10	43
Engineering Employees	730	18	134	20	15	5	13	3	10
Parks Employees	730	13	160	9	4	5	16	3	13
		Total	**824**	**57**	**32**	**25**	**82**	**16**	**66**

1. Daily trips for the Public Works Employees was derived from the PM Peak hour.

As shown in Table 1, the proposed Oregon City Operations Complex is expected to generate approximately 824 daily trips, including 57 trips (32 inbound, 25 outbound) during the weekday AM peak hour and 82 trips (16 inbound, 66 outbound) during the weekday PM peak Hour.

TRIP DISTRIBUTION/ASSIGNMENT

A trip distribution pattern will be developed for the operations complex based on existing traffic patterns and the location of major trip origins and destinations in the study area. The site-generated trips shown in Table 1 will be distributed onto the study area roadways and assigned to the study intersections and site-access driveways in accordance with the trip distribution pattern.

STUDY AREA

The study area for the TIA will include the major streets (collector and above) located adjacent to the proposed development site along with the site-access driveways and several major intersections. The study intersections were determined based on a review of the City's functional classification plan, a review of historical traffic data within the study area, and guidance provided in the TIA Guidelines. The intersections include:

1. Beavercreek Road/Fir Street
2. Molalla Avenue/Fir Street
3. Molalla Avenue/Gaffney Lane
4. OR 213/Beavercreek Road

Per direction provided by City staff, the site-generated trips shown in Table 1 will be assigned to the OR 213/Beavercreek Road intersection for accounting purposes; however, traffic operations and safety will not be evaluated at the intersection under existing or projected future traffic conditions.

STUDY PERIODS

The study periods for the TIA were determined based on the type of use, the type of adjacent uses, the trip generation estimate provided above, and guidance provided in the TIA Guidelines. The TIA will include an evaluation of the study intersections and site driveways during the following study periods:

- Year 2019 existing traffic conditions at the study intersections during the weekday AM and PM peak hours,
- Year 2021 background traffic conditions at the study intersections (without the proposed development) during the weekday AM and PM peak hours, and
- Year 2021 total traffic conditions at the study intersection and site-access driveways (with occupancy of the proposed development) during the weekday AM and PM peak hours.

ANALYSIS TOOLS AND METHODOLOGY

The TIA will evaluate traffic operations at the study intersections and site-access driveways based on the methodologies identified in the *Highway Capacity Manual* (HCM – Reference 2). HCM 2000 methodologies will be used to report operations at the signalized intersections and HCM 6th Edition will be used to report operations at the unsignalized intersections. Synchro 10 will be used to evaluate traffic operations at the study intersections. Synchro 10 is a software tool designed to assist with operations analysis in accordance with HCM methodologies.

PERFORMANCE MEASURES

Traffic operations at the study intersections will be evaluated based on the applicable performance measures. Per the TIA Guidelines, all of the unsignalized study intersections are expected to operate at Level of Service (LOS) "E" or better for the poorest operating approach and with no movement serving more than 20 peak hour vehicles operating at worse than LOS "E". In other words, LOS "F" will be tolerated for minor movements during a peak hour. Additionally, all of the signalized study intersections are expected to operate at LOS "D" or better for the intersection as a whole and no approach operating at worse than LOS "E" and a v/c ratio not higher than 1.0 for the sum of critical movements.

NEXT STEPS

We trust this memorandum provides adequate documentation of the key assumptions associated with the TIA for the proposed Oregon City Operations Complex development.

We request that the City provide written confirmation regarding the proposed methodology and project assumptions as soon as possible so that we may proceed with our analysis. In addition, we would appreciate the City providing timing of planned improvements at the study intersections, information on planned developments and in-process trips that could impact the study intersections, and an approved background growth rate that should be incorporated into the traffic analysis.

REFERENCE

1. Institute of Transportation Engineers, *Trip Generation Manual, 10th Edition*. 2017.
2. Transportation Research Board. *Highway Capacity Manual*. 2016.

Attachment A Trip Generation Data

	5 Minutes		1 Hour			
	In	Out	In	Out	Total	
6:30 AM	1	0	29	2	31	
6:35 AM	2	0	28	4	32	Peak Hour of Operations Center
6:40 AM	3	0	26	5	31	
6:45 AM	11	0	23	7	30	
6:50 AM	7	0	12	8	20	
6:55 AM	5	1	5	8	13	
7:00 AM	0	0	0	7	7	
7:05 AM	0	0	0	8	8	
7:10 AM	0	0	1	8	9	
7:15 AM	0	0	1	10	11	
7:20 AM	0	0	1	13	14	
7:25 AM	0	1	1	14	15	
7:30 AM	0	2	1	14	15	
7:35 AM	0	1	3	13	16	
7:40 AM	0	2	3	12	15	
7:45 AM	0	1	4	12	16	
7:50 AM	0	0	4	11	15	
7:55 AM	0	0	5	11	16	
8:00 AM	0	1	9	11	20	Peak Hour of Adjacent Street
8:05 AM	1	0				
8:10 AM	0	2				
8:15 AM	0	3	AM Trip Rate Per Employee			
8:20 AM	0	1	30	Employees		
8:25 AM	0	1	20	Peak Hour Trips		
8:30 AM	2	1	0.67	Peak Hour Trip Rate		
8:35 AM	0	0	45%	Inbound		
8:40 AM	1	2	55%	Outbound		
8:45 AM	0	0				
8:50 AM	1	0				
8:55 AM	4	0				

	5 Minutes		1 Hour			
	In	Out	In	Out	Total	
3:30 PM	0	0	20	11	31	
3:35 PM	1	3	20	26	46	
3:40 PM	3	0	20	27	47	
3:45 PM	4	1	17	33	50	Peak Hour of Operations Center
3:50 PM	1	1	13	34	47	
3:55 PM	5	3	12	34	46	
4:00 PM	0	0	7	31	38	Peak Hour of Adjacent Street
4:05 PM	2	0	7	31	38	
4:10 PM	1	0	5	31	36	
4:15 PM	0	0	4	31	35	
4:20 PM	1	1	4	31	35	
4:25 PM	2	2	3	30	33	
4:30 PM	0	15	1	28	29	
4:35 PM	1	4	1	13	14	
4:40 PM	0	6	0	9	9	
4:45 PM	0	2	0	3	3	
4:50 PM	0	1	0	1	1	
4:55 PM	0	0	0	0	0	
5:00 PM	0	0	0	0	0	
5:05 PM	0	0				
5:10 PM	0	0				
5:15 PM	0	0	AM Trip Rate Per Employee			
5:20 PM	0	0	30	Employees		
5:25 PM	0	0	38	Peak Hour Trips		
5:30 PM	0	0	1.27	Peak Hour Trip Rate		
5:35 PM	0	0	18%	Inbound		
5:40 PM	0	0	82%	Outbound		
5:45 PM	0	0				
5:50 PM	0	0				
5:55 PM	0	0				

Appendix B Traffic Counts

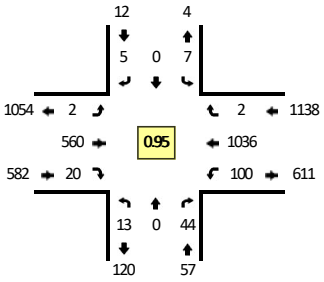
Type of peak hour being reported: Intersection Peak

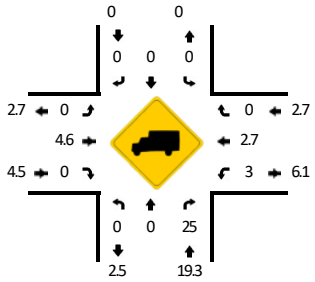
Method for determining peak hour: Total Entering

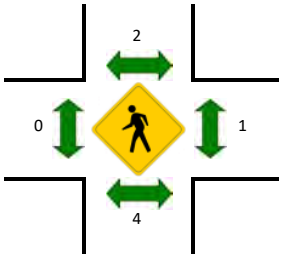
LOCATION: Fir St -- S Beavercreek Rd
CITY/STATE: Oregon City, OR

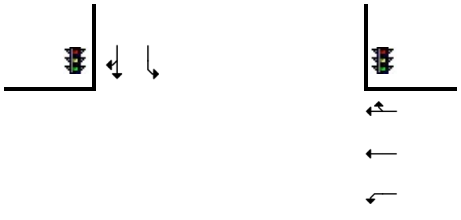
QC JOB #: 15124101
DATE: Tue, Dec 3 2019

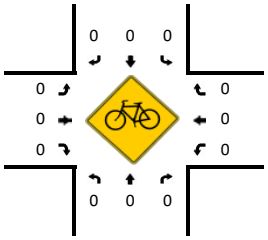
Peak-Hour: 7:20 AM -- 8:20 AM
Peak 15-Min: 7:50 AM -- 8:05 AM

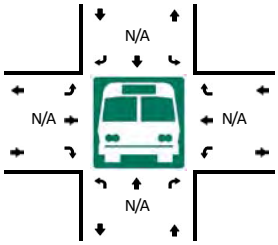


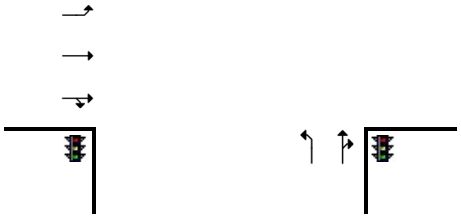


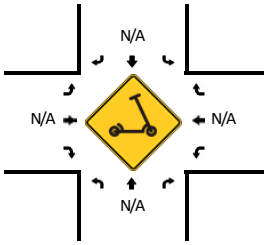












5-Min Count Period Beginning At	Fir St (Northbound)				Fir St (Southbound)				S Beavercreek Rd (Eastbound)				S Beavercreek Rd (Westbound)				Total	Hourly Totals
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U		
7:00 AM	0	0	2	0	0	1	0	0	0	58	0	0	9	61	2	0	133	
7:05 AM	0	0	3	0	2	0	2	0	0	61	1	0	8	59	4	0	140	
7:10 AM	0	0	2	0	1	0	2	0	0	58	2	0	5	45	0	0	115	
7:15 AM	0	0	4	0	1	0	0	0	0	59	0	0	4	65	0	0	133	
7:20 AM	1	0	3	0	0	0	1	0	0	76	0	0	7	75	0	0	163	
7:25 AM	1	0	1	0	0	0	0	0	1	62	1	0	5	77	0	0	148	
7:30 AM	1	0	5	0	0	0	1	0	0	47	0	0	7	95	0	0	156	
7:35 AM	0	0	1	0	0	0	1	0	0	45	0	0	5	62	0	0	114	
7:40 AM	0	0	5	0	0	0	0	0	1	48	1	0	10	92	0	0	157	
7:45 AM	1	0	3	0	1	0	0	0	0	45	4	0	7	102	0	0	163	
7:50 AM	0	0	1	0	2	0	0	0	0	40	2	0	10	95	1	0	151	
7:55 AM	0	0	4	0	1	0	1	0	0	40	4	0	13	93	0	0	156	1729
8:00 AM	4	0	7	0	0	0	0	0	0	42	4	0	9	99	0	0	165	1761
8:05 AM	1	0	5	0	1	0	1	0	0	44	1	0	8	80	1	0	142	1763
8:10 AM	1	0	6	0	2	0	0	0	0	33	0	0	10	84	0	0	136	1784
8:15 AM	3	0	3	0	0	0	0	0	0	38	3	0	9	82	0	0	138	1789
8:20 AM	5	0	10	0	0	0	0	0	0	42	3	0	6	69	1	0	136	1762
8:25 AM	4	0	4	0	2	1	0	0	0	37	0	0	10	90	1	0	149	1763
8:30 AM	0	0	4	0	0	0	0	0	1	48	2	0	5	69	1	1	131	1738
8:35 AM	3	0	7	0	0	0	2	0	0	45	2	0	9	75	3	0	146	1770
8:40 AM	0	0	3	0	2	0	0	0	1	48	4	0	7	79	0	0	144	1757
8:45 AM	3	0	5	0	0	0	1	0	0	45	2	0	10	99	0	0	165	1759
8:50 AM	4	0	6	0	0	1	1	0	0	61	2	0	6	95	1	0	177	1785
8:55 AM	3	0	7	0	2	1	1	0	0	35	4	0	9	80	1	0	143	1772

Peak 15-Min Flowrates	Northbound				Southbound				Eastbound				Westbound				Total
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	
All Vehicles	16	0	48	0	12	0	4	0	0	488	40	0	128	1148	4	0	1888
Heavy Trucks	0	0	12		0	0	0		0	24	0		8	24	0		68
Buses																	
Pedestrians		0				0				0				0			0
Bicycles	0	0	0		0	0	0		0	0	0		0	0	0		0
Scooters																	

Comments:

Report generated on 12/13/2019 12:18 PM

SOURCE: Quality Counts, LLC (http://www.qualitycounts.net) 1-877-580-2212

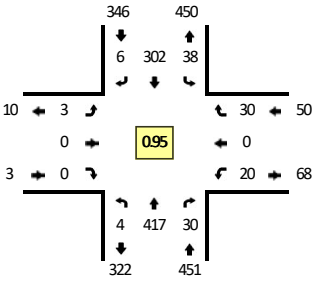
Type of peak hour being reported: Intersection Peak

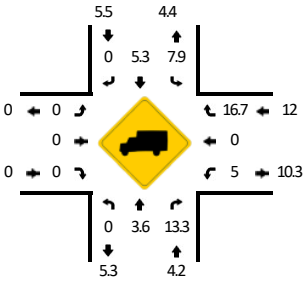
Method for determining peak hour: Total Entering

LOCATION: S Molalla Ave -- Fir St
CITY/STATE: Oregon City, OR

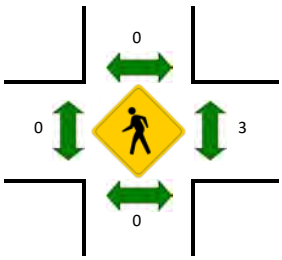
QC JOB #: 15124103
DATE: Tue, Dec 3 2019

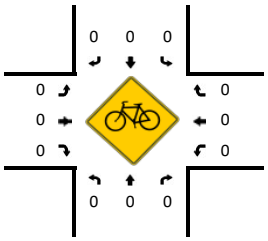
Peak-Hour: 8:00 AM -- 9:00 AM
Peak 15-Min: 8:40 AM -- 8:55 AM

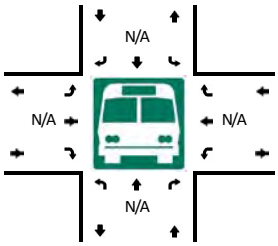


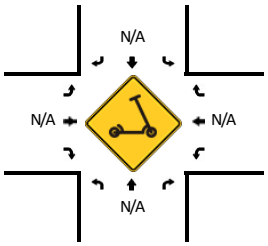


Quality Counts
DATA THAT DRIVES COMMUNITIES









5-Min Count Period Beginning At	S Molalla Ave (Northbound)				S Molalla Ave (Southbound)				Fir St (Eastbound)				Fir St (Westbound)				Total	Hourly Totals
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U		
7:00 AM	0	20	0	0	4	12	2	0	0	0	0	0	0	0	2	0	40	
7:05 AM	0	14	1	0	2	8	0	0	0	0	0	0	2	0	2	0	29	
7:10 AM	0	29	3	0	4	10	0	0	0	0	0	0	0	0	1	0	47	
7:15 AM	0	22	1	0	2	23	0	0	0	0	0	0	0	0	0	0	48	
7:20 AM	0	38	2	0	2	15	0	0	0	0	0	0	0	0	0	0	57	
7:25 AM	0	34	3	0	3	18	0	0	0	0	0	0	0	0	1	0	59	
7:30 AM	0	34	3	0	5	18	0	0	0	0	0	0	0	0	4	0	64	
7:35 AM	0	32	2	0	0	18	0	0	0	0	0	0	1	0	0	0	53	
7:40 AM	0	23	2	0	1	29	1	0	0	0	0	0	1	0	0	0	57	
7:45 AM	0	28	4	0	1	25	2	0	0	0	0	0	0	0	1	0	61	
7:50 AM	0	33	0	0	5	37	0	0	0	0	0	0	1	0	0	0	76	
7:55 AM	0	33	2	0	5	26	0	0	0	1	1	0	1	0	0	0	69	660
8:00 AM	0	44	7	0	5	28	2	0	0	0	0	0	1	0	4	0	91	711
8:05 AM	0	25	5	0	2	29	0	0	0	0	0	0	1	0	1	0	63	745
8:10 AM	0	35	1	0	2	22	2	0	1	0	0	0	1	0	1	0	65	763
8:15 AM	1	30	2	0	4	30	0	0	0	0	0	0	2	0	2	0	71	786
8:20 AM	0	40	0	0	3	21	0	0	0	0	0	0	3	0	3	0	70	799
8:25 AM	0	33	2	0	1	26	0	0	0	0	0	0	4	0	1	0	67	807
8:30 AM	0	31	5	0	2	22	0	0	1	0	0	0	0	0	3	0	64	807
8:35 AM	0	29	1	0	3	23	0	0	0	0	0	0	0	0	4	0	60	814
8:40 AM	0	38	1	0	2	27	1	0	0	0	0	0	4	0	2	0	75	832
8:45 AM	0	45	1	0	4	16	0	0	0	0	0	0	2	0	2	0	70	841
8:50 AM	1	32	4	0	8	29	0	0	0	0	0	0	1	0	4	0	79	844
8:55 AM	2	35	1	0	2	29	1	0	1	0	0	0	1	0	3	0	75	850

Peak 15-Min Flowrates	Northbound				Southbound				Eastbound				Westbound				Total
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	
All Vehicles	4	460	24	0	56	288	4	0	0	0	0	0	28	0	32	0	896
Heavy Trucks	0	16	8		0	24	0		0	0	0		0	0	4		52
Buses																	
Pedestrians		0				0				0				4			4
Bicycles	0	0	0		0	0	0		0	0	0		0	0	0		0
Scooters																	

Comments:

Report generated on 12/13/2019 12:18 PM

SOURCE: Quality Counts, LLC (http://www.qualitycounts.net) 1-877-580-2212

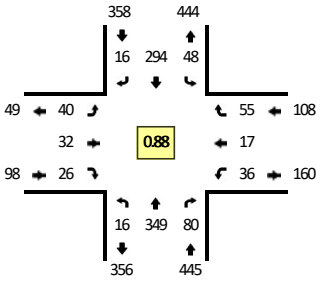
Type of peak hour being reported: Intersection Peak

Method for determining peak hour: Total Entering

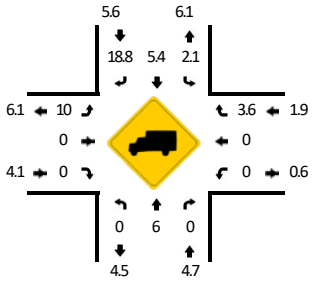
LOCATION: S Molalla Ave -- S Gaffney Ln
CITY/STATE: Oregon City, OR

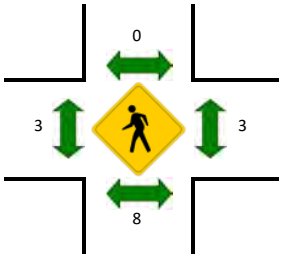
QC JOB #: 15124105
DATE: Tue, Dec 3 2019

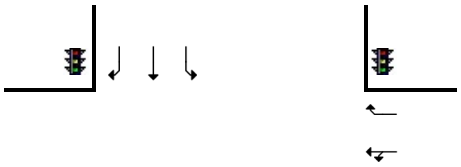
Peak-Hour: 7:50 AM -- 8:50 AM
Peak 15-Min: 7:50 AM -- 8:05 AM

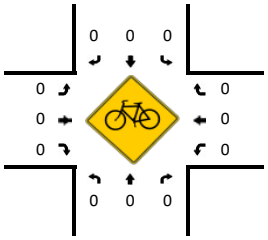


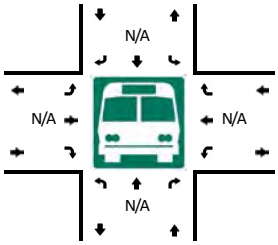
Quality Counts
DATA THAT DRIVES COMMUNITIES

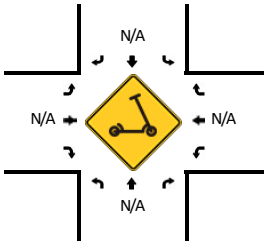












5-Min Count Period Beginning At	S Molalla Ave (Northbound)				S Molalla Ave (Southbound)				S Gaffney Ln (Eastbound)				S Gaffney Ln (Westbound)				Total	Hourly Totals
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U		
7:00 AM	1	19	3	0	4	16	3	0	4	3	1	0	2	1	2	0	59	
7:05 AM	0	16	1	0	1	7	1	0	1	1	1	0	2	1	8	0	40	
7:10 AM	1	24	4	0	4	14	1	0	5	2	3	0	1	1	4	0	64	
7:15 AM	1	19	4	0	6	24	2	0	5	8	1	0	1	0	0	0	71	
7:20 AM	0	34	1	0	3	11	1	0	1	1	6	0	0	1	5	0	64	
7:25 AM	3	28	4	0	2	16	1	0	3	1	3	0	1	3	1	0	66	
7:30 AM	5	30	2	0	3	18	5	0	2	3	4	0	1	3	2	0	78	
7:35 AM	1	29	4	0	5	15	6	0	6	2	3	0	2	1	2	0	76	
7:40 AM	1	18	4	0	4	23	2	0	4	3	2	0	2	0	5	0	68	
7:45 AM	2	22	6	0	6	26	1	0	3	3	1	0	3	2	2	0	77	
7:50 AM	0	29	3	0	2	41	4	0	6	4	5	0	1	1	8	0	104	
7:55 AM	1	30	4	0	5	26	3	0	5	5	4	0	3	1	4	0	91	858
8:00 AM	1	33	8	0	2	26	1	0	6	3	4	0	2	1	4	0	91	890
8:05 AM	2	30	5	0	6	21	1	0	3	0	5	0	3	2	3	0	81	931
8:10 AM	2	24	9	0	2	27	1	0	1	5	0	0	3	0	5	0	79	946
8:15 AM	1	27	6	0	3	23	1	0	5	3	4	0	4	3	7	0	87	962
8:20 AM	1	36	7	0	7	21	3	0	3	2	1	0	1	3	5	0	90	988
8:25 AM	2	28	6	0	2	28	1	0	1	1	1	0	3	0	4	0	77	999
8:30 AM	3	23	10	0	4	14	0	0	2	0	1	0	5	4	4	0	70	991
8:35 AM	1	30	4	0	5	25	0	0	4	5	0	0	2	2	4	0	82	997
8:40 AM	1	26	8	0	6	27	1	0	0	2	0	0	5	0	2	0	78	1007
8:45 AM	1	33	10	0	4	15	0	0	4	2	1	0	4	0	5	0	79	1009
8:50 AM	1	23	8	0	7	32	2	0	0	5	2	0	5	1	5	0	91	996
8:55 AM	3	33	10	0	9	25	2	0	1	1	4	0	3	1	3	0	95	1000

Peak 15-Min Flowrates	Northbound				Southbound				Eastbound				Westbound				Total
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	
All Vehicles	8	368	60	0	36	372	32	0	68	48	52	0	24	12	64	0	1144
Heavy Trucks	0	28	0		0	16	0		4	0	0		0	0	0		48
Buses																	
Pedestrians		8				0				0				4			12
Bicycles	0	0	0		0	0	0		0	0	0		0	0	0		0
Scooters																	

Comments:

Report generated on 12/13/2019 12:18 PM

SOURCE: Quality Counts, LLC (http://www.qualitycounts.net) 1-877-580-2212

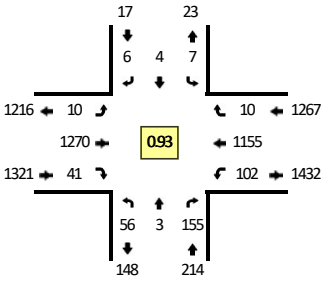
Type of peak hour being reported: Intersection Peak

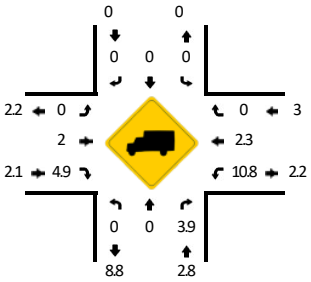
Method for determining peak hour: Total Entering

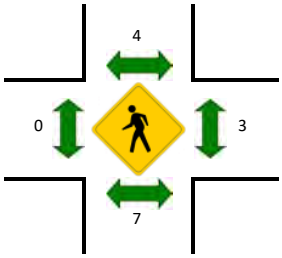
LOCATION: Fir St -- S Beavercreek Rd
CITY/STATE: Oregon City, OR

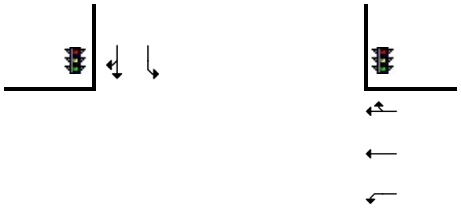
QC JOB #: 15124102
DATE: Tue, Dec 3 2019

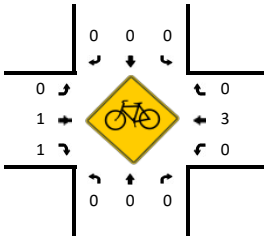
Peak-Hour: 4:10 PM -- 5:10 PM
Peak 15-Min: 4:10 PM -- 4:25 PM

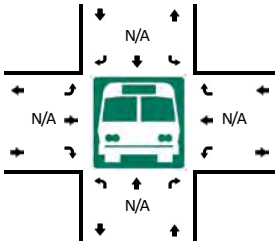


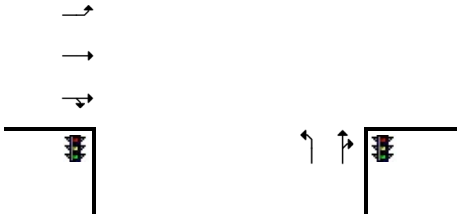


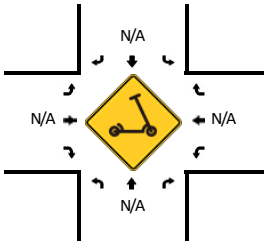












5-Min Count Period Beginning At	Fir St (Northbound)				Fir St (Southbound)				S Beavercreek Rd (Eastbound)				S Beavercreek Rd (Westbound)				Total	Hourly Totals
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U		
4:00 PM	1	0	12	0	0	0	1	0	0	95	4	0	8	110	0	0	231	
4:05 PM	6	0	19	0	3	0	0	0	0	88	1	0	8	93	0	0	218	
4:10 PM	6	0	14	0	1	1	3	0	1	129	4	0	13	104	1	0	277	
4:15 PM	4	1	12	1	2	2	0	0	1	81	3	0	8	114	0	0	229	
4:20 PM	9	0	11	0	1	1	1	0	0	101	5	0	7	113	0	0	249	
4:25 PM	7	0	11	0	0	0	0	0	0	81	4	0	8	110	0	0	221	
4:30 PM	4	0	13	0	0	0	0	0	1	109	2	0	6	99	1	0	235	
4:35 PM	6	1	19	0	0	0	0	0	1	113	5	0	5	88	0	0	238	
4:40 PM	6	0	10	0	1	0	1	0	1	100	5	0	9	90	3	0	226	
4:45 PM	3	0	13	0	0	0	0	0	2	101	2	0	6	96	1	0	224	
4:50 PM	2	1	9	0	1	0	1	0	1	100	2	0	11	84	1	0	213	
4:55 PM	3	0	10	0	0	0	0	0	1	97	2	0	13	79	1	0	206	2767
5:00 PM	2	0	19	0	1	0	0	0	0	118	3	0	7	89	1	0	240	2776
5:05 PM	3	0	14	0	0	0	0	0	1	140	4	0	9	89	1	0	261	2819
5:10 PM	5	0	8	0	2	0	0	0	0	128	3	0	12	83	1	0	242	2784
5:15 PM	3	0	8	0	0	0	1	0	1	109	3	0	6	96	2	0	229	2784
5:20 PM	6	1	11	0	1	1	0	0	1	95	5	0	11	79	1	0	212	2747
5:25 PM	5	0	10	0	0	0	1	0	0	94	2	0	6	75	0	0	193	2719
5:30 PM	2	1	8	0	1	0	0	0	0	104	1	0	7	74	1	0	199	2683
5:35 PM	2	0	9	0	1	0	0	0	2	116	4	0	6	71	1	0	212	2657
5:40 PM	6	0	18	0	1	0	0	0	2	84	2	0	11	82	1	0	207	2638
5:45 PM	1	0	9	0	0	0	1	0	1	84	4	0	6	68	0	0	174	2588
5:50 PM	2	0	14	0	0	0	1	0	1	85	4	0	3	97	0	0	207	2582
5:55 PM	1	0	7	0	0	0	0	0	1	99	2	0	5	84	0	0	199	2575

Peak 15-Min Flowrates	Northbound				Southbound				Eastbound				Westbound				Total
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	
All Vehicles	76	4	148	4	16	16	16	0	8	1244	48	0	112	1324	4	0	3020
Heavy Trucks	0	0	8		0	0	0		0	20	8		4	24	0		64
Buses																	
Pedestrians		12				4				0				0			16
Bicycles	0	0	0		0	0	0		0	1	0		0	0	0		1
Scooters																	

Comments:

Report generated on 12/13/2019 12:18 PM

SOURCE: Quality Counts, LLC (http://www.qualitycounts.net) 1-877-580-2212

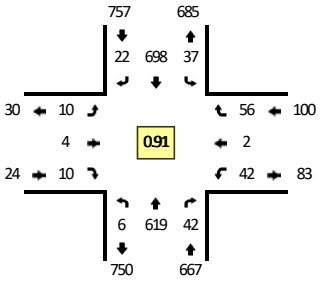
Type of peak hour being reported: Intersection Peak

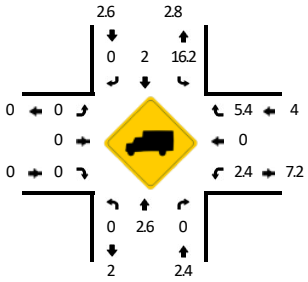
Method for determining peak hour: Total Entering

LOCATION: S Molalla Ave -- Fir St
CITY/STATE: Oregon City, OR

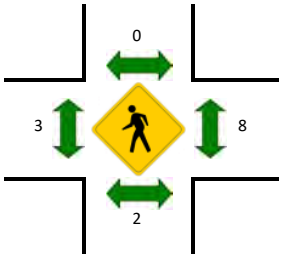
QC JOB #: 15124104
DATE: Tue, Dec 3 2019

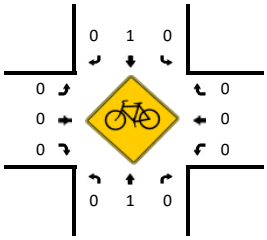
Peak-Hour: 4:05 PM -- 5:05 PM
Peak 15-Min: 4:10 PM -- 4:25 PM

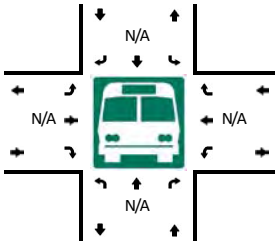


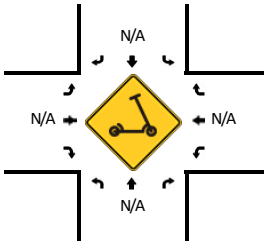


Quality Counts
DATA THAT DRIVES COMMUNITIES









5-Min Count Period Beginning At	S Molalla Ave (Northbound)				S Molalla Ave (Southbound)				Fir St (Eastbound)				Fir St (Westbound)				Total	Hourly Totals
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U		
4:00 PM	0	46	2	0	5	48	6	0	1	0	1	0	1	1	1	0	112	
4:05 PM	0	43	3	0	4	62	2	0	2	1	1	0	4	0	7	0	129	
4:10 PM	1	55	5	0	6	66	1	0	0	0	0	0	5	0	6	0	145	
4:15 PM	1	57	5	0	4	49	3	0	1	0	0	0	3	0	4	0	127	
4:20 PM	1	62	5	0	5	68	3	0	0	0	2	0	5	0	2	0	153	
4:25 PM	0	59	3	0	1	57	2	0	0	0	3	0	3	0	4	0	132	
4:30 PM	0	46	4	0	4	60	3	0	2	0	0	0	2	0	8	0	129	
4:35 PM	1	51	3	0	5	57	1	0	0	0	0	0	5	1	2	0	126	
4:40 PM	0	42	2	0	2	52	1	0	1	1	4	0	2	0	3	0	110	
4:45 PM	1	47	5	0	0	64	0	0	0	1	0	0	1	0	2	0	121	
4:50 PM	0	57	4	0	2	61	0	0	4	0	0	0	3	1	7	0	139	
4:55 PM	0	51	1	0	2	46	3	0	0	0	0	0	5	0	7	0	115	1538
5:00 PM	1	49	2	0	2	56	3	0	0	1	0	0	4	0	4	0	122	1548
5:05 PM	1	44	5	0	2	55	2	0	0	0	0	0	2	0	7	0	118	1537
5:10 PM	0	47	4	0	1	56	3	1	1	0	0	0	1	0	5	0	119	1511
5:15 PM	0	42	1	0	2	66	2	0	1	0	0	0	2	0	4	0	120	1504
5:20 PM	2	41	1	0	3	45	3	0	0	1	0	0	0	1	6	0	103	1454
5:25 PM	0	38	3	0	3	39	2	0	1	0	0	0	3	0	2	0	91	1413
5:30 PM	0	38	6	0	4	63	5	0	1	0	1	0	1	0	8	0	127	1411
5:35 PM	0	36	4	0	6	44	2	0	0	1	0	0	2	0	8	0	103	1388
5:40 PM	0	42	3	0	10	53	3	0	0	1	1	0	2	0	2	0	117	1395
5:45 PM	0	39	3	0	5	45	3	0	2	0	0	0	4	1	7	0	109	1383
5:50 PM	0	40	3	0	1	53	1	0	1	0	1	0	2	0	8	0	110	1354
5:55 PM	1	44	2	0	2	47	2	0	0	0	0	0	2	2	0	0	102	1341

Peak 15-Min Flowrates	Northbound				Southbound				Eastbound				Westbound				Total
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	
All Vehicles	12	696	60	0	60	732	28	0	4	0	8	0	52	0	48	0	1700
Heavy Trucks	0	24	0		4	28	0		0	0	0		0	0	8		64
Buses																	
Pedestrians		8				0				4				8			20
Bicycles	0	0	0		0	1	0		0	0	0		0	0	0		1
Scooters																	

Comments:

Report generated on 12/13/2019 12:18 PM

SOURCE: Quality Counts, LLC (http://www.qualitycounts.net) 1-877-580-2212

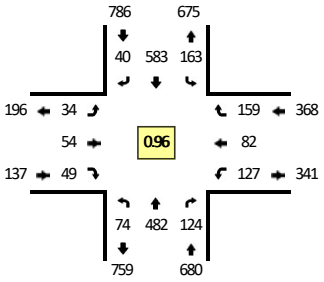
Type of peak hour being reported: Intersection Peak

Method for determining peak hour: Total Entering

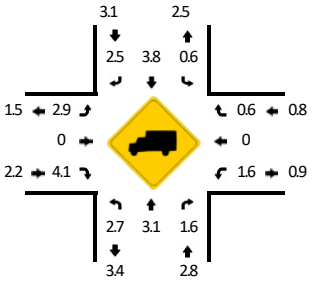
LOCATION: S Molalla Ave -- S Gaffney Ln
CITY/STATE: Oregon City, OR

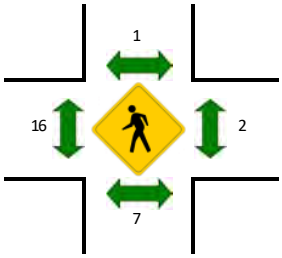
QC JOB #: 15124106
DATE: Tue, Dec 3 2019

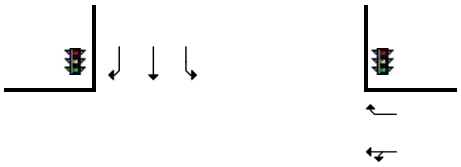
Peak-Hour: 4:10 PM -- 5:10 PM
Peak 15-Min: 4:15 PM -- 4:30 PM

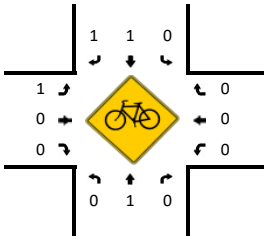


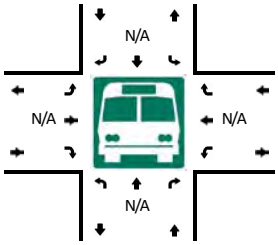
Quality Counts
DATA THAT DRIVES COMMUNITIES

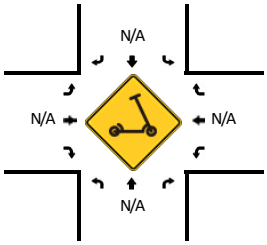












5-Min Count Period Beginning At	S Molalla Ave (Northbound)				S Molalla Ave (Southbound)				S Gaffney Ln (Eastbound)				S Gaffney Ln (Westbound)				Total	Hourly Totals
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U		
4:00 PM	6	30	15	0	12	47	1	0	3	6	2	0	9	1	7	0	139	
4:05 PM	5	37	13	0	11	50	2	0	5	4	4	0	13	6	13	0	163	
4:10 PM	6	42	10	0	14	57	2	0	3	1	8	0	9	6	11	0	169	
4:15 PM	9	39	11	0	14	48	5	0	2	7	4	0	9	9	13	0	170	
4:20 PM	6	34	21	0	14	52	2	0	4	5	7	0	14	3	11	0	173	
4:25 PM	6	47	12	0	12	51	6	0	4	5	6	0	10	3	9	0	171	
4:30 PM	3	37	8	0	22	51	2	0	4	4	6	0	8	6	16	0	167	
4:35 PM	5	45	6	0	15	46	3	0	3	6	2	0	14	10	15	0	170	
4:40 PM	3	39	10	0	18	39	4	0	4	7	2	0	14	8	13	0	161	
4:45 PM	4	37	7	0	12	56	2	0	2	4	3	0	8	8	17	0	160	
4:50 PM	9	50	10	0	8	46	1	0	1	5	6	0	10	8	11	0	165	
4:55 PM	9	42	11	0	9	41	7	0	0	3	1	0	11	4	16	0	154	1962
5:00 PM	10	33	7	0	12	44	1	0	2	3	3	0	10	9	13	0	147	1970
5:05 PM	4	37	11	0	13	52	5	0	5	4	1	0	10	8	14	0	164	1971
5:10 PM	6	39	10	0	4	49	5	0	5	4	1	0	8	7	11	0	149	1951
5:15 PM	7	37	8	0	15	52	2	0	5	5	5	0	12	6	16	0	170	1951
5:20 PM	2	36	8	0	10	39	6	0	2	4	4	0	7	5	16	0	139	1917
5:25 PM	4	28	6	0	8	37	9	0	0	4	2	0	5	8	16	0	127	1873
5:30 PM	6	34	4	0	11	54	2	0	3	3	3	0	14	4	12	0	150	1856
5:35 PM	9	29	9	0	10	44	2	0	1	4	1	0	3	7	7	0	126	1812
5:40 PM	4	25	9	0	14	46	4	0	2	3	4	0	18	4	7	0	140	1791
5:45 PM	4	33	12	0	5	36	1	0	2	2	3	0	11	6	9	0	124	1755
5:50 PM	2	43	5	0	8	48	4	0	1	1	1	0	7	3	9	0	132	1722
5:55 PM	3	32	8	0	8	41	6	0	5	2	3	0	9	3	7	0	127	1695

Peak 15-Min Flowrates	Northbound				Southbound				Eastbound				Westbound				Total
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	
All Vehicles	84	480	176	0	160	604	52	0	40	68	68	0	132	60	132	0	2056
Heavy Trucks	4	20	8		4	24	4		0	0	0		0	0	0		64
Buses																	
Pedestrians		0				0				8				0			8
Bicycles	0	0	0		0	0	0		0	0	0		0	0	0		0
Scooters																	

Comments:

Report generated on 12/13/2019 12:18 PM

SOURCE: Quality Counts, LLC (http://www.qualitycounts.net) 1-877-580-2212

Appendix C Existing Traffic Conditions Analysis Worksheets

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	2	560	20	100	1036	2	13	0	44	7	0	5
Future Volume (vph)	2	560	20	100	1036	2	13	0	44	7	0	5
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.5		4.0	4.5		4.5	4.5		4.5	4.5	
Lane Util. Factor	1.00	0.95		1.00	0.95		1.00	1.00		1.00	1.00	
Frpb, ped/bikes	1.00	1.00		1.00	1.00		1.00	1.00		1.00	0.99	
Flpb, ped/bikes	1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00	
Frt	1.00	0.99		1.00	1.00		1.00	0.85		1.00	0.85	
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1805	3423		1752	3504		1804	1292		1805	1595	
Flt Permitted	0.23	1.00		0.42	1.00		1.00	1.00		1.00	1.00	
Satd. Flow (perm)	444	3423		776	3504		1899	1292		1900	1595	
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	2	589	21	105	1091	2	14	0	46	7	0	5
RTOR Reduction (vph)	0	3	0	0	0	0	0	44	0	0	5	0
Lane Group Flow (vph)	2	607	0	105	1093	0	14	2	0	7	0	0
Confl. Peds. (#/hr)	4		2	2		4	1					1
Heavy Vehicles (%)	0%	5%	0%	3%	3%	0%	0%	0%	25%	0%	0%	0%
Turn Type	D.P+P	NA		D.P+P	NA		Perm	NA		Perm	NA	
Protected Phases	5	2		1	6			8			4	
Permitted Phases	6			2			8			4		
Actuated Green, G (s)	25.6	22.8		25.6	25.0		1.6	1.6		1.6	1.6	
Effective Green, g (s)	25.6	22.8		25.6	25.0		1.6	1.6		1.6	1.6	
Actuated g/C Ratio	0.64	0.57		0.64	0.62		0.04	0.04		0.04	0.04	
Clearance Time (s)	4.0	4.5		4.0	4.5		4.5	4.5		4.5	4.5	
Vehicle Extension (s)	1.0	2.0		1.0	2.0		1.0	1.0		1.0	1.0	
Lane Grp Cap (vph)	303	1941		562	2179		75	51		75	63	
v/s Ratio Prot	0.00	0.18		c0.01	c0.31			0.00			0.00	
v/s Ratio Perm	0.00			0.11			c0.01			0.00		
v/c Ratio	0.01	0.31		0.19	0.50		0.19	0.04		0.09	0.00	
Uniform Delay, d1	2.7	4.6		2.8	4.2		18.7	18.6		18.6	18.5	
Progression Factor	1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00	
Incremental Delay, d2	0.0	0.0		0.1	0.1		0.4	0.1		0.2	0.0	
Delay (s)	2.7	4.6		2.9	4.2		19.1	18.7		18.8	18.5	
Level of Service	A	A		A	A		B	B		B	B	
Approach Delay (s)		4.6			4.1			18.8			18.7	
Approach LOS		A			A			B			B	

Intersection Summary			
HCM 2000 Control Delay	4.8	HCM 2000 Level of Service	A
HCM 2000 Volume to Capacity ratio	0.49		
Actuated Cycle Length (s)	40.2	Sum of lost time (s)	13.0
Intersection Capacity Utilization	50.3%	ICU Level of Service	A
Analysis Period (min)	15		

c Critical Lane Group

Intersection	
Int Delay, s/veh	1.3

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕		↰	↱		↰	↱	
Traffic Vol, veh/h	3	0	0	20	0	30	4	417	30	38	302	6
Future Vol, veh/h	3	0	0	20	0	30	4	417	30	38	302	6
Conflicting Peds, #/hr	0	0	0	0	0	0	3	0	0	0	0	3
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	50	-	-	70	-	-
Veh in Median Storage, #	-	0	-	-	1	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	95	95	95	95	95	95	95	95	95	95	95	95
Heavy Vehicles, %	0	0	0	5	0	17	0	4	13	8	5	0
Mvmt Flow	3	0	0	21	0	32	4	439	32	40	318	6

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	883	883	324	864	870	455	327	0	0	471	0	0
Stage 1	404	404	-	463	463	-	-	-	-	-	-	-
Stage 2	479	479	-	401	407	-	-	-	-	-	-	-
Critical Hdwy	7.1	6.5	6.2	7.15	6.5	6.37	4.1	-	-	4.18	-	-
Critical Hdwy Stg 1	6.1	5.5	-	6.15	5.5	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.1	5.5	-	6.15	5.5	-	-	-	-	-	-	-
Follow-up Hdwy	3.5	4	3.3	3.545	4	3.453	2.2	-	-	2.272	-	-
Pot Cap-1 Maneuver	269	287	722	271	292	575	1244	-	-	1060	-	-
Stage 1	627	603	-	573	568	-	-	-	-	-	-	-
Stage 2	571	558	-	620	601	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	246	274	720	263	279	575	1240	-	-	1060	-	-
Mov Cap-2 Maneuver	246	274	-	385	387	-	-	-	-	-	-	-
Stage 1	623	578	-	571	566	-	-	-	-	-	-	-
Stage 2	538	556	-	597	576	-	-	-	-	-	-	-

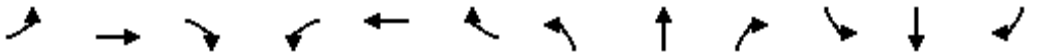
Approach	EB	WB	NB	SB
HCM Control Delay, s	19.8	13.4	0.1	0.9
HCM LOS	C	B		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1240	-	-	246	480	1060	-	-
HCM Lane V/C Ratio	0.003	-	-	0.013	0.11	0.038	-	-
HCM Control Delay (s)	7.9	-	-	19.8	13.4	8.5	-	-
HCM Lane LOS	A	-	-	C	B	A	-	-
HCM 95th %tile Q(veh)	0	-	-	0	0.4	0.1	-	-

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	40	32	26	36	17	55	16	349	80	48	294	16
Future Volume (vph)	40	32	26	36	17	55	16	349	80	48	294	16
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.0			4.0	4.0	4.0	4.5		4.0	4.5	4.5
Lane Util. Factor		1.00			1.00	1.00	1.00	1.00		1.00	1.00	1.00
Frpb, ped/bikes		1.00			1.00	0.94	1.00	1.00		1.00	1.00	0.97
Flpb, ped/bikes		0.99			1.00	1.00	1.00	1.00		1.00	1.00	1.00
Frt		0.96			1.00	0.85	1.00	0.97		1.00	1.00	0.85
Flt Protected		0.98			0.97	1.00	0.95	1.00		0.95	1.00	1.00
Satd. Flow (prot)		1713			1837	1463	1801	1753		1768	1810	1321
Flt Permitted		0.84			0.66	1.00	0.56	1.00		0.43	1.00	1.00
Satd. Flow (perm)		1470			1262	1463	1060	1753		799	1810	1321
Peak-hour factor, PHF	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88
Adj. Flow (vph)	45	36	30	41	19	62	18	397	91	55	334	18
RTOR Reduction (vph)	0	17	0	0	0	56	0	6	0	0	0	5
Lane Group Flow (vph)	0	94	0	0	60	7	18	482	0	55	334	13
Confl. Peds. (#/hr)	8					8	3		3	3		3
Heavy Vehicles (%)	10%	0%	0%	0%	0%	4%	0%	6%	0%	2%	5%	19%
Turn Type	Perm	NA		Perm	NA	Perm	pm+pt	NA		pm+pt	NA	Perm
Protected Phases		8			4		1	6		5	2	
Permitted Phases	8			4		4	6			2		2
Actuated Green, G (s)		9.3			9.3	9.3	65.8	63.7		70.6	66.1	66.1
Effective Green, g (s)		9.3			9.3	9.3	65.8	63.7		70.6	66.1	66.1
Actuated g/C Ratio		0.10			0.10	0.10	0.73	0.71		0.78	0.73	0.73
Clearance Time (s)		4.0			4.0	4.0	4.0	4.5		4.0	4.5	4.5
Vehicle Extension (s)		2.5			2.5	2.5	2.3	4.2		2.3	4.2	4.2
Lane Grp Cap (vph)		151			130	151	792	1240		675	1329	970
v/s Ratio Prot							0.00	c0.28		c0.00	0.18	
v/s Ratio Perm		c0.06			0.05	0.00	0.02			0.06		0.01
v/c Ratio		0.62			0.46	0.04	0.02	0.39		0.08	0.25	0.01
Uniform Delay, d1		38.7			38.0	36.3	3.3	5.3		2.5	3.9	3.2
Progression Factor		1.00			1.00	1.00	1.00	1.00		1.00	1.00	1.00
Incremental Delay, d2		6.7			1.9	0.1	0.0	0.9		0.0	0.5	0.0
Delay (s)		45.4			39.9	36.4	3.3	6.2		2.5	4.3	3.2
Level of Service		D			D	D	A	A		A	A	A
Approach Delay (s)		45.4			38.1			6.1			4.1	
Approach LOS		D			D			A			A	

Intersection Summary			
HCM 2000 Control Delay	12.6	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.40		
Actuated Cycle Length (s)	90.0	Sum of lost time (s)	12.5
Intersection Capacity Utilization	50.1%	ICU Level of Service	A
Analysis Period (min)	15		

c Critical Lane Group



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	10	1270	41	102	1155	10	56	3	155	7	4	6
Future Volume (vph)	10	1270	41	102	1155	10	56	3	155	7	4	6
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.5		4.0	4.5		4.5	4.5		4.5	4.5	
Lane Util. Factor	1.00	0.95		1.00	0.95		1.00	1.00		1.00	1.00	
Frpb, ped/bikes	1.00	1.00		1.00	1.00		1.00	1.00		1.00	0.99	
Flpb, ped/bikes	1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00	
Frt	1.00	1.00		1.00	1.00		1.00	0.85		1.00	0.91	
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1805	3517		1626	3534		1802	1559		1805	1715	
Flt Permitted	0.17	1.00		0.12	1.00		0.75	1.00		0.58	1.00	
Satd. Flow (perm)	331	3517		198	3534		1424	1559		1095	1715	
Peak-hour factor, PHF	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Adj. Flow (vph)	11	1366	44	110	1242	11	60	3	167	8	4	6
RTOR Reduction (vph)	0	2	0	0	0	0	0	143	0	0	5	0
Lane Group Flow (vph)	11	1408	0	110	1253	0	60	27	0	8	5	0
Confl. Peds. (#/hr)	7		4	4		7	3					3
Confl. Bikes (#/hr)			1			3						
Heavy Vehicles (%)	0%	2%	5%	11%	2%	0%	0%	0%	4%	0%	0%	0%
Turn Type	D.P+P	NA		D.P+P	NA		Perm	NA		Perm	NA	
Protected Phases	5	2		1	6			8			4	
Permitted Phases	6			2			8			4		
Actuated Green, G (s)	39.7	35.4		39.7	39.1		8.8	8.8		8.8	8.8	
Effective Green, g (s)	39.7	35.4		39.7	39.1		8.8	8.8		8.8	8.8	
Actuated g/C Ratio	0.65	0.58		0.65	0.64		0.14	0.14		0.14	0.14	
Clearance Time (s)	4.0	4.5		4.0	4.5		4.5	4.5		4.5	4.5	
Vehicle Extension (s)	1.0	2.0		1.0	2.0		1.0	1.0		1.0	1.0	
Lane Grp Cap (vph)	228	2024		227	2246		203	223		156	245	
v/s Ratio Prot	0.00	c0.40		c0.03	c0.35			0.02			0.00	
v/s Ratio Perm	0.03			0.28			c0.04			0.01		
v/c Ratio	0.05	0.70		0.48	0.56		0.30	0.12		0.05	0.02	
Uniform Delay, d1	4.5	9.2		6.5	6.3		23.6	23.0		22.7	22.6	
Progression Factor	1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00	
Incremental Delay, d2	0.0	0.9		0.6	0.2		0.3	0.1		0.0	0.0	
Delay (s)	4.5	10.1		7.1	6.5		23.9	23.1		22.8	22.7	
Level of Service	A	B		A	A		C	C		C	C	
Approach Delay (s)		10.0			6.5			23.3			22.7	
Approach LOS		B			A			C			C	

Intersection Summary			
HCM 2000 Control Delay	9.5	HCM 2000 Level of Service	A
HCM 2000 Volume to Capacity ratio	0.60		
Actuated Cycle Length (s)	61.5	Sum of lost time (s)	13.0
Intersection Capacity Utilization	62.7%	ICU Level of Service	B
Analysis Period (min)	15		
c Critical Lane Group			

Intersection	
Int Delay, s/veh	2.7

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	10	4	10	42	2	56	6	619	42	37	698	22
Future Vol, veh/h	10	4	10	42	2	56	6	619	42	37	698	22
Conflicting Peds, #/hr	2	0	0	0	0	2	8	0	3	3	0	8
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	50	-	-	70	-	-
Veh in Median Storage, #	-	0	-	-	1	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	91	91	91	91	91	91	91	91	91	91	91	91
Heavy Vehicles, %	0	0	0	2	0	5	0	3	0	16	2	0
Mvmt Flow	11	4	11	46	2	62	7	680	46	41	767	24

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	1620	1612	787	1589	1601	708	799	0	0	729	0	0
Stage 1	869	869	-	720	720	-	-	-	-	-	-	-
Stage 2	751	743	-	869	881	-	-	-	-	-	-	-
Critical Hdwy	7.1	6.5	6.2	7.12	6.5	6.25	4.1	-	-	4.26	-	-
Critical Hdwy Stg 1	6.1	5.5	-	6.12	5.5	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.1	5.5	-	6.12	5.5	-	-	-	-	-	-	-
Follow-up Hdwy	3.5	4	3.3	3.518	4	3.345	2.2	-	-	2.344	-	-
Pot Cap-1 Maneuver	84	105	395	87	107	430	833	-	-	814	-	-
Stage 1	349	372	-	419	435	-	-	-	-	-	-	-
Stage 2	406	425	-	347	367	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	68	98	392	78	100	428	827	-	-	812	-	-
Mov Cap-2 Maneuver	68	98	-	196	218	-	-	-	-	-	-	-
Stage 1	343	350	-	414	430	-	-	-	-	-	-	-
Stage 2	342	420	-	316	346	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	46.8	25.7	0.1	0.5
HCM LOS	E	D		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	827	-	-	112	282	812	-	-
HCM Lane V/C Ratio	0.008	-	-	0.235	0.39	0.05	-	-
HCM Control Delay (s)	9.4	-	-	46.8	25.7	9.7	-	-
HCM Lane LOS	A	-	-	E	D	A	-	-
HCM 95th %tile Q(veh)	0	-	-	0.9	1.8	0.2	-	-

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	34	54	49	127	82	159	74	482	124	163	583	40
Future Volume (vph)	34	54	49	127	82	159	74	482	124	163	583	40
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.0			4.0	4.0	4.0	4.5		4.0	4.5	4.5
Lane Util. Factor		1.00			1.00	1.00	1.00	1.00		1.00	1.00	1.00
Frpb, ped/bikes		0.99			1.00	0.96	1.00	0.99		1.00	1.00	0.97
Flpb, ped/bikes		1.00			1.00	1.00	1.00	1.00		1.00	1.00	1.00
Frt		0.95			1.00	0.85	1.00	0.97		1.00	1.00	0.85
Flt Protected		0.99			0.97	1.00	0.95	1.00		0.95	1.00	1.00
Satd. Flow (prot)		1729			1820	1541	1752	1774		1784	1827	1543
Flt Permitted		0.80			0.66	1.00	0.34	1.00		0.28	1.00	1.00
Satd. Flow (perm)		1405			1236	1541	636	1774		530	1827	1543
Peak-hour factor, PHF	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Adj. Flow (vph)	35	56	51	132	85	166	77	502	129	170	607	42
RTOR Reduction (vph)	0	21	0	0	0	118	0	7	0	0	0	16
Lane Group Flow (vph)	0	121	0	0	217	48	77	624	0	170	607	26
Confl. Peds. (#/hr)	7		1	1		7	2		16	16		2
Confl. Bikes (#/hr)									1			1
Heavy Vehicles (%)	3%	0%	4%	2%	0%	1%	3%	3%	2%	1%	4%	2%
Turn Type	Perm	NA		Perm	NA	Perm	pm+pt	NA		pm+pt	NA	Perm
Protected Phases		8			4		1	6		5	2	
Permitted Phases	8			4		4	6			2		2
Actuated Green, G (s)		20.7			20.7	20.7	63.9	58.7		69.7	61.6	61.6
Effective Green, g (s)		20.7			20.7	20.7	63.9	58.7		69.7	61.6	61.6
Actuated g/C Ratio		0.21			0.21	0.21	0.64	0.59		0.70	0.62	0.62
Clearance Time (s)		4.0			4.0	4.0	4.0	4.5		4.0	4.5	4.5
Vehicle Extension (s)		2.5			2.5	2.5	2.3	4.2		2.3	4.2	4.2
Lane Grp Cap (vph)		290			255	318	464	1041		470	1125	950
v/s Ratio Prot							0.01	c0.35		c0.03	0.33	
v/s Ratio Perm		0.09			c0.18	0.03	0.10			0.22		0.02
v/c Ratio		0.42			0.85	0.15	0.17	0.60		0.36	0.54	0.03
Uniform Delay, d1		34.4			38.2	32.5	7.6	13.2		7.8	11.0	7.5
Progression Factor		1.00			1.00	1.00	1.00	1.00		1.00	1.00	1.00
Incremental Delay, d2		0.7			22.6	0.2	0.1	2.5		0.3	1.9	0.1
Delay (s)		35.1			60.8	32.6	7.7	15.7		8.1	12.9	7.6
Level of Service		D			E	C	A	B		A	B	A
Approach Delay (s)		35.1			48.6			14.8			11.6	
Approach LOS		D			D			B			B	

Intersection Summary			
HCM 2000 Control Delay	21.3	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.64		
Actuated Cycle Length (s)	100.0	Sum of lost time (s)	12.5
Intersection Capacity Utilization	70.7%	ICU Level of Service	C
Analysis Period (min)	15		
c Critical Lane Group			

Appendix D ODOT Crash Data

Intersectional Crashes at Fir St & Beavercreek Rd
January 1, 2013 through December 31, 2017

COLLISION TYPE	FATAL CRASHES	NON-FATAL CRASHES	PROPERTY DAMAGE ONLY	TOTAL CRASHES	PEOPLE KILLED	PEOPLE INJURED	TRUCKS	DRY SURF	WET SURF	DAY	DARK	INTER-SECTION	INTER-SECTION RELATED	OFF-ROAD
YEAR: 2017														
REAR-END	0	0	1	1	0	0	0	1	0	1	0	1	0	0
TURNING MOVEMENTS	0	3	4	7	0	6	0	4	3	5	2	7	0	0
2017 TOTAL	0	3	5	8	0	6	0	5	3	6	2	8	0	0
YEAR: 2016														
ANGLE	0	1	1	2	0	2	0	1	1	2	0	2	0	0
REAR-END	0	1	0	1	0	1	0	1	0	1	0	1	0	0
TURNING MOVEMENTS	1	0	0	1	1	0	1	1	0	1	0	1	0	0
2016 TOTAL	1	2	1	4	1	3	1	3	1	4	0	4	0	0
YEAR: 2015														
REAR-END	0	1	1	2	0	1	0	2	0	2	0	2	0	0
TURNING MOVEMENTS	0	1	0	1	0	1	0	1	0	1	0	1	0	0
2015 TOTAL	0	2	1	3	0	2	0	3	0	3	0	3	0	0
YEAR: 2014														
ANGLE	0	0	1	1	0	0	0	1	0	1	0	1	0	0
TURNING MOVEMENTS	1	1	0	2	1	1	0	2	0	2	0	2	0	0
2014 TOTAL	1	1	1	3	1	1	0	3	0	3	0	3	0	0
YEAR: 2013														
REAR-END	0	1	0	1	0	2	0	1	0	1	0	1	0	0
TURNING MOVEMENTS	0	1	2	3	0	2	0	2	1	3	0	3	0	0
2013 TOTAL	0	2	2	4	0	4	0	3	1	4	0	4	0	0
FINAL TOTAL	2	10	10	22	2	16	1	17	5	20	2	22	0	0

Disclaimers: *Effective 2016,* ***collection of "Property Damage Only" (PDO) crash data elements was reduced for vehicles and participants.*** *Age, Gender, License, Error and other elements are no longer available for PDO crash reporting. Please keep this in mind when comparing 2016 PDO crash data to prior years.*

A higher number of crashes may be reported as of 2011 compared to prior years. This does not necessarily reflect an increase in annual crashes. The higher numbers may result from a change to an internal departmental process that allows the Crash Analysis and Reporting Unit to add previously unavailable, non-fatal crash reports to the annual data file. Please be aware of this change when comparing pre-2011 crash statistics. For all disclaimers, see https://www.oregon.gov/ODOT/Data/documents/Crash_Data_Disclaimers.pdf.

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Intersectional Crashes at Fir St & Beavercreek Rd
January 1, 2013 through December 31, 2017

SER# / INVEST / UNLOC?	SPED	ALC	DRUG/MJ	SCHL	WOR K	DATE / DAY/TIME / *LAT/LONG*	FC / DISTNC	CITY STREET / FIRST STREET / SECOND STREET / INTERSECTION SEQ #	RD CHAR / DIRECT / LOCTN	INT-TYP (MEDIAN) / LEGS / (#LANES)	INT-REL / TRAF- / CONTL	OFF-RD / RNDBT / DRVWY	WTHR / SURF / LIGHT	CRASH TYP / COLL TYP / SVRTY	V#	SPCL USE / TRLR QTY / OWNER	MOVE / FROM / TO	P#	PRTC TYPE	INJ SVRTY	AGE	SEX	LICNS RES	PED LOC	ERROR	ACTN	EVENT	CAUSE
01491	N	N	N			03/11/2015	16	S BEAVERCREEK RD	INTER	CROSS	N	N	CLR	S-1STOP	01	NONE 0	STRGHT											29
NONE			N			Wed 11A	0	FIR ST	SE		TRF SIGNAL	N	DRY	REAR		PRVTE	SE NW										000		00
No	*45 19 57.32*		*-122 34 44.74*					1	06	0		N	DAY	INJ		PSNGR CAR		01	DRVR	NONE	00	F	OR-Y OR<25		026	000		29
															02	NONE 0	STOP											
																PRVTE	SE NW									011		00
																PSNGR CAR		01	DRVR	INJC	66	F	OR-Y OR<25		000	000		00
01899	N	N	N			05/31/2013	16	S BEAVERCREEK RD	INTER	CROSS	N	N	CLR	O-1 L-TURN	01	NONE 0	STRGHT											08,02
CITY			N			Fri 10A	0	FIR ST	W		TRF SIGNAL	N	DRY	TURN		PRVTE	E W									000		00
No	*45 19 57.32*		*-122 34 44.74*					1	05	0		N	DAY	PDO		PSNGR CAR		01	DRVR	NONE	22	M	OR-Y OR<25		000	000		00
															02	NONE 0	U-TURN											
																PRVTE	W W									000		00
																PSNGR CAR		01	DRVR	NONE	69	M	OR-Y OR<25		028,004	000		02,08
03168	N	N	N	N	N	08/26/2013	16	S BEAVERCREEK RD	INTER	CROSS	N	N	CLR	S-1STOP	01	NONE 0	STRGHT											27,07
CITY			N			Mon 5P	0	FIR ST	W		TRF SIGNAL	N	DRY	REAR		PRVTE	W E									000		00
No	*45 19 57.32*		*-122 34 44.74*					1	06	0		N	DAY	INJ		PSNGR CAR		01	DRVR	INJC	51	F	OR-Y OR<25		016,026	038		27,07
															02	NONE 0	STOP											
																PRVTE	W E									011		00
																PSNGR CAR		01	DRVR	INJC	57	F	OR-Y OR<25		000	000		00
03898	N	N	N			09/22/2015	16	S BEAVERCREEK RD	INTER	CROSS	N	N	CLR	S-1STOP	01	NONE 0	STRGHT											29
NONE			N			Tue 4P	0	FIR ST	W		TRF SIGNAL	N	DRY	REAR		PRVTE	W E									000		00
No	*45 19 57.32*		*-122 34 44.74*					1	06	0		N	DAY	PDO		PSNGR CAR		01	DRVR	NONE	23	M	OR-Y OR<25		026	000		29
															02	NONE 0	STOP											
																PRVTE	W E									011		00
																PSNGR CAR		01	DRVR	NONE	48	F	OR-Y OR<25		000	000		00
																		02	PSNG	NO<5	02	M			000	000		00
																		03	PSNG	NO<5	02	F			000	000		00
																		04	PSNG	NO<5	04	F			000	000		00
																		05	PSNG	NO<5	04	M			000	000		00
04715	N	N	N	N	N	10/12/2016	16	S BEAVERCREEK RD	INTER	CROSS	N	N	CLR	S-1STOP	01	NONE 0	STRGHT											29,32
CITY			N			Wed 7A	0	FIR ST	W		TRF SIGNAL	N	DRY	REAR		PRVTE	W E									000		00
No	*45 19 57.32*		*-122 34 44.74*					1	06	0		N	DAY	INJ		PSNGR CAR		01	DRVR	NONE	17	F	OR-Y OR<25		026,052	000		29,32

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SER# / INVEST / UNLOC?	SPED	ALC	DRUG/MJ	SCHL	SWORK	DATE / DAY/TIME / *LAT/LONG*	FC / DISTNC	CITY STREET / FIRST STREET / SECOND STREET / INTERSECTION SEQ #	RD CHAR / DIRECT / LOCTN	INT-TYP (MEDIAN) / LEGS / (#LANES)	INT-REL / TRAF- / CONTL	OFF-RD / RNDBT / DRVWY	WTHR / SURF / LIGHT	CRASH TYP / COLL TYP / SVRTY	V#	SPCL USE / TRLR QTY / OWNER	MOVE / FROM / TO	P#	PRTC TYPE	INJ SVRTY	AGE	SEX	LICNS RES	PED LOC	ERROR	ACTN	EVENT	CAUSE
															02	NONE 0 PRVTE	STOP W E									011	00
																PSNGR CAR		01	DRVR	INJC	40	M	OR-Y OR<25		000	000	00
03061 NONE	N	N	N N			07/27/2017 Thu 3P	16 0	S BEAVERCREEK RD FIR ST	INTER W	CROSS	N TRF SIGNAL	N N	CLR DRY	S-1STOP REAR	01	NONE 9 N/A	STRGHT W E										29 00
No	*45 19 57.32*					*-122 34 44.74*		1	06	0		N	DAY	PDO		PSNGR CAR		01	DRVR	NONE	00	U	UNK UNK		000	000	00
															02	NONE 9 N/A	STOP W E									011	00
																PSNGR CAR		01	DRVR	NONE	00	U	UNK UNK		000	000	00
03527 CITY	N	N	N N			08/03/2016 Wed 11A	16 0	S BEAVERCREEK RD FIR ST	INTER CN	CROSS	N TRF SIGNAL	N N	CLR DRY	ANGL-OTH ANGL	01	NONE 9 N/A	STRGHT E W										04 00
No	*45 19 57.32*					*-122 34 44.74*		1	01	0		N	DAY	PDO		PSNGR CAR		01	DRVR	NONE	00	U	UNK UNK		000	000	00
															02	NONE 9 N/A	STOP N S									011	00
																PSNGR CAR		01	DRVR	NONE	00	U	UNK UNK		000	000	00
04234 NO RPT	N	N	N N			10/12/2017 Thu 3P	16	S BEAVERCREEK RD FIR ST	INTER CN	3-LEG	N TRF SIGNAL	N N	RAIN WET	ANGL-OTH TURN	01	NONE 9 N/A	TURN-L S W										04 00
No	*45 19 57.32*					*-122 34 44.74*		1	02	0		Y	DAY	PDO		PSNGR CAR		01	DRVR	NONE	00	U	UNK UNK		000	000	00
															02	NONE 9 N/A	STRGHT E W									000	00
																PSNGR CAR		01	DRVR	NONE	00	U	UNK UNK		000	000	00
02787 NONE	N	N	N N			07/19/2014 Sat 1P	16 0	S BEAVERCREEK RD FIR ST	INTER CN	CROSS	N TRF SIGNAL	N N	CLR DRY	ANGL-OTH ANGL	01	NONE 0 PRVTE	STRGHT E W									000	04 00
No	*45 19 57.32*					*-122 34 44.74*		1	02	0		N	DAY	PDO		PSNGR CAR		01	DRVR	NONE	00	F	OR-Y OR<25		000	000	00
															02	NONE 0 PRVTE	STRGHT S N									000	00
																PSNGR CAR		01	DRVR	NONE	60	M	OR-Y OR<25		020	000	04
00793 NONE	N	N	N N			03/04/2015 Wed 6P	16 0	S BEAVERCREEK RD FIR ST	INTER CN	CROSS	N TRF SIGNAL	N N	CLR DRY	O-1 L-TURN TURN	01	NONE 0 PRVTE	STRGHT E W									000	02 00
No	*45 19 57.32*					*-122 34 44.74*		1	02	0		N	DAY	INJ		PSNGR CAR		01	DRVR	INJC	29	F	OR-Y OR<25		000	000	00
																		02	PSNG	NO<5	04	F			000	000	

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SER# / INVEST / UNLOC?	SPED	ALC	DRUG/MJ	SCHL	WORK	DATE / DAY/TIME / *LAT/LONG*	FC / DISTNC	CITY STREET / FIRST STREET / SECOND STREET / INTERSECTION SEQ #	RD CHAR / DIRECT / LOCTN	INT-TYP (MEDIAN) / LEGS (#LANES)	INT-REL / TRAF- / CONTL	OFF-RD / RNDBT / DRVWY	WTHR / SURF / LIGHT	CRASH TYP / COLL TYP / SVRTY	V#	SPCL USE / TRLR QTY / OWNER	MOVE / FROM / TO	P#	PRTC TYPE	INJ SVRTY	AGE	SEX	LICNS RES	PED LOC	ERROR	ACTN	EVENT	CAUSE
															02	NONE 0 PRVTE	TURN-L W N								000		00
																PSNGR CAR		01	DRVR	NONE	23	M	OR-Y OR<25		028,004	000		02
00132	N	Y	N	N	N	01/10/2017	16	S BEAVERCREEK RD	INTER	CROSS	N	N	SNOW	O-1 L-TURN	01	NONE 0	TURN-L										124	02,08,33
CITY		N				Tue 7P	0	FIR ST	CN		TRF SIGNAL	N	WET	TURN		PRVTE	W N								000	124	00
No	*45 19 57.32*		*-122 34 44.74*					1	02	0		N	DLIT	INJ		PSNGR CAR		01	DRVR	NONE	56	M	OR-Y OR<25		028,004,051	000		02,08,33
															02	NONE 0 PRVTE	STRGHT E W								000		00
																PSNGR CAR		01	DRVR	INJB	16	F	OR-Y OR<25		000	000		00
03760	N	N	N			10/04/2013	16	S BEAVERCREEK RD	INTER	CROSS	N	N	CLR	O-1 L-TURN	01	NONE 0	STRGHT											04
CITY		N				Fri 2P	0	FIR ST	CN		TRF SIGNAL	N	DRY	TURN		PRVTE	W E								000		00
No	*45 19 57.32*		*-122 34 44.74*					1	03	0		N	DAY	INJ		PSNGR CAR		01	DRVR	INJC	29	M	OR-Y OR<25		020	000		04
																		01	PSNG	NO<5	01	M			000	000		00
															02	NONE 0 PRVTE	TURN-L E S								000		00
																PSNGR CAR		01	DRVR	INJC	37	M	OR-Y OR<25		000	000		00
02184	N	N	N	N	N	05/31/2014	16	S BEAVERCREEK RD	INTER	CROSS	N	N	CLR	O-1 L-TURN	01	NONE 0	STRGHT											04
CITY		N				Sat 12P	0	FIR ST	CN		L-GRN-SIG	N	DRY	TURN		PRVTE	W E								001		00
No	*45 19 57.32*		*-122 34 44.74*					1	03	0		N	DAY	FAT		MTRCYCLE		01	DRVR	KILL	45	M	OR-Y OR<25		020	000		04
															02	NONE 0 PRVTE	TURN-L E S								000		00
																PSNGR CAR		01	DRVR	NONE	39	F	OR-Y OR<25		000	000		00
05269	N	N	N			12/28/2014	16	S BEAVERCREEK RD	INTER	CROSS	N	N	CLR	O-1 L-TURN	01	NONE 0	STRGHT											02
NO RPT		N				Sun 12P	0	FIR ST	CN		TRF SIGNAL	N	DRY	TURN		PRVTE	W E								000		00
No	*45 19 57.32*		*-122 34 44.74*					1	03	0		N	DAY	INJ		PSNGR CAR		01	DRVR	NONE	21	F	OR-Y OR<25		000	000		00
															02	NONE 0 PRVTE	TURN-L E S								000		00
																PSNGR CAR		01	DRVR	INJB	27	F	OR-Y OR<25		028,004	000		02
																		02	PSNG	NO<5	02	M			000	000		00
02779	Y	N	N	N	N	02/15/2016	16	S BEAVERCREEK RD	INTER	CROSS	N	N	CLR	O-1 L-TURN	01	NONE 0	STRGHT										001	02,01
CITY		N				Mon 4P	0	FIR ST	CN		TRF SIGNAL	N	DRY	TURN		PRVTE	W E								000		00
No	*45 19 57.32*		*-122 34 44.74*					1	03	0		N	DAY	FAT		MTRCYCLE		01	DRVR	KILL	26	M	OR-Y OR<25		047	000	001	

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Intersectional Crashes at Fir St & Beavercreek Rd
January 1, 2013 through December 31, 2017

SER# / INVEST / UNLOC?	SPED	ALC	DRUG/MJ	SCHL	SWOR	DATE / DAY/TIME / *LAT/LONG*	FC / DISTNC	CITY STREET / FIRST STREET / SECOND STREET / INTERSECTION SEQ #	RD CHAR / DIRECT / LOCTN	INT-TYP (MEDIAN) / LEGS / (#LANES)	INT-REL / TRAF- / CONTL	OFF-RD / RNDBT / DRVWY	WTHR / SURF / LIGHT	CRASH TYP / COLL TYP / SVRTY	V#	SPCL USE / TRLR QTY / OWNER	MOVE / FROM / TO	P#	PRTC TYPE	INJ SVRTY	AGE	SEX	LICNS RES	PED LOC	ERROR	ACTN EVENT	CAUSE
															02	NONE 0 PRVTE	TURN-L E S									000	00
																TRUCK		01	DRVR	NONE	46	M	OTH-Y N-RES		004,028	000	02
05666	N	N	N	N	N	12/06/2016	16	S BEAVERCREEK RD	INTER	CROSS	N		N	CLD	ANGL-OTH	01	NONE 0	STRGHT										04
CITY		N				Tue 11A	0	FIR ST	CN		TRF SIGNAL		N	WET	ANGL		PRVTE	W E								006	00
No	*45 19 57.32*		*-122 34 44.74*					1	03	0			N	DAY	INJ		PSNGR CAR		01	DRVR	NONE	60	F	OR-Y OR<25		020	000	04
															02	NONE 0 PRVTE	STRGHT S N									000	00
																PSNGR CAR		01	DRVR	INJC	40	M	OR-Y OR<25		000	000	00
																		02	PSNG	INJC	37	F			000	000	00
00511	N	N	N	N	N	02/07/2017	16	S BEAVERCREEK RD	INTER	CROSS	N		N	RAIN	O-1 L-TURN	01	NONE 0	STRGHT										02,08
CITY		N				Tue 5P	0	FIR ST	CN		TRF SIGNAL		N	WET	TURN		PRVTE	W E								000	00
No	*45 19 57.32*		*-122 34 44.74*					1	03	0			N	DAY	INJ		PSNGR CAR		01	DRVR	INJB	30	F	OR-Y OR<25		000	000	00
															02	NONE 0 PRVTE	TURN-L E S									000	00
																PSNGR CAR		01	DRVR	INJC	69	F	OR-Y OR<25		028,004	000	02,08
01488	N	N	N			04/20/2017	16	S BEAVERCREEK RD	INTER	3-LEG	N		N	CLR	O-1 L-TURN	01	NONE 9	STRGHT										02
NO RPT		N				Thu 11A	0	FIR ST	CN		TRF SIGNAL		N	DRY	TURN		N/A	NW SE								000	00
No	*45 19 58.70*		*-122 34 57.05*					1	03	0			Y	DAY	PDO		PSNGR CAR		01	DRVR	NONE	00	U	UNK UNK		000	000	00
															02	NONE 9 N/A	TURN-L SE SW									000	00
																PSNGR CAR		01	DRVR	NONE	00	U	UNK UNK		000	000	00
02788	N	N	N			07/13/2017	16	S BEAVERCREEK RD	INTER	CROSS	N		N	CLD	O-1 L-TURN	01	NONE 9	STRGHT										02,08,14
CITY		N				Thu 8A	0	FIR ST	CN		TRF SIGNAL		N	DRY	TURN		N/A	W E								000	00
No	*45 19 57.32*		*-122 34 44.74*					1	03	0			N	DAY	PDO		PSNGR CAR		01	DRVR	NONE	00	U	UNK UNK		000	000	00
															02	NONE 9 N/A	TURN-L E S									000	00
																PSNGR CAR		01	DRVR	NONE	00	U	UNK UNK		000	000	00
04670	N	N	N	N	N	11/07/2017	16	S BEAVERCREEK RD	INTER	CROSS	N		N	CLD	O-1 L-TURN	01	NONE 0	TURN-L										02
CITY		N				Tue 7A	0	FIR ST	CN		TRF SIGNAL		N	DRY	TURN		PRVTE	E S								000	00
No	*45 19 57.32*		*-122 34 44.74*					1	03	0			N	DAY	INJ		PSNGR CAR		01	DRVR	INJA	88	F	OR-Y OR<25		004,028	000	
																		02	PSNG	INJC	57	M			000	000	

CITY OF OREGON CITY, CLACKAMAS COUNTY

Intersectional Crashes at Fir St & Beavercreek Rd
January 1, 2013 through December 31, 2017

SER# / INVEST / UNLOC?	SPED	ALC	DRUG/MJ	SCHL	WORK	DATE / DAY/TIME / *LAT/LONG*	FC / DISTNC	CITY STREET / FIRST STREET / SECOND STREET / INTERSECTION SEQ #	RD CHAR / DIRECT / LOCTN	INT-TYP (MEDIAN) / LEGS / (#LANES)	INT-REL / TRAF- / CONTL	OFF-RD / RNDBT / DRVWY	WTHR / SURF / LIGHT	CRASH TYP / COLL TYP / SVRTY	V#	SPCL USE / TRLR QTY / OWNER	MOVE / FROM / TO	P#	PRTC TYPE	INJ SVRTY	AGE	SEX	LICNS / RES	PED LOC	ERROR	ACTN	EVENT	CAUSE
															02	NONE 0 PRVTE	STRGHT W E									000	00
																PSNGR CAR		01	DRVR	INJC	54	F	OR-Y OR<25		000	000	00
04776 CITY	N	N	N	N	N	12/12/2013 Thu 3P	16 0	S BEAVERCREEK RD FIR ST	INTER CN	3-LEG	N TRF SIGNAL	N N	CLD WET	O-OTHER TURN	01	NONE 0 PRVTE	TURN-L N E									018	08 00
No	*45 19 57.32*		*-122 34 44.74*				1		04	0		Y	DAY	PDO		PSNGR CAR		01	DRVR	NONE	21	F	OR-Y OR<25		001	000		08
															02	NONE 1 PRVTE	TURN-R S E									000	00
																PSNGR CAR		01	DRVR	NONE	62	M	OR-Y OR<25		000	000	00
00397 CITY	N	N	N	N	N	01/29/2017 Sun 8P	16 0	S BEAVERCREEK RD FIR ST	INTER CN	CROSS	N TRF SIGNAL	N N	CLR DRY	O-1 L-TURN TURN	01	NONE 9 N/A	STRGHT S N									000	02 00
No	*45 19 57.32*		*-122 34 44.74*				1		04	0		N	DLIT	PDO		PSNGR CAR		01	DRVR	NONE	00	U	UNK UNK		000	000	00
															02	NONE 9 N/A	TURN-L N E									000	00
																PSNGR CAR		01	DRVR	NONE	00	U	UNK UNK		000	000	00

Intersectional Crashes at Fir St & Molalla Ave
January 1, 2013 through December 31, 2017

COLLISION TYPE	FATAL CRASHES	NON-FATAL CRASHES	PROPERTY DAMAGE ONLY	TOTAL CRASHES	PEOPLE KILLED	PEOPLE INJURED	TRUCKS	DRY SURF	WET SURF	DAY	DARK	INTER-SECTION	INTER-SECTION RELATED	OFF-ROAD
YEAR: 2017														
REAR-END	0	1	0	1	0	1	0	0	1	0	1	1	0	0
2017 TOTAL	0	1	0	1	0	1	0	0	1	0	1	1	0	0
YEAR: 2016														
REAR-END	0	0	1	1	0	0	0	1	0	1	0	1	0	0
2016 TOTAL	0	0	1	1	0	0	0	1	0	1	0	1	0	0
YEAR: 2013														
REAR-END	0	1	0	1	0	1	0	1	0	1	0	1	0	0
2013 TOTAL	0	1	0	1	0	1	0	1	0	1	0	1	0	0
FINAL TOTAL	0	2	1	3	0	2	0	2	1	2	1	3	0	0

Disclaimers: *Effective 2016,* ***collection of "Property Damage Only" (PDO) crash data elements was reduced for vehicles and participants.*** *Age, Gender, License, Error and other elements are no longer available for PDO crash reporting. Please keep this in mind when comparing 2016 PDO crash data to prior years.*

A higher number of crashes may be reported as of 2011 compared to prior years. This does not necessarily reflect an increase in annual crashes. The higher numbers may result from a change to an internal departmental process that allows the Crash Analysis and Reporting Unit to add previously unavailable, non-fatal crash reports to the annual data file. Please be aware of this change when comparing pre-2011 crash statistics. For all disclaimers, see https://www.oregon.gov/ODOT/Data/documents/Crash_Data_Disclaimers.pdf.

CITY OF OREGON CITY, CLACKAMAS COUNTY

Intersectional Crashes at Fir St & Molalla Ave
January 1, 2013 through December 31, 2017

SER# / INVEST / UNLOC?	SPED	ALC	DRUG/MJ	SCHL	WORK	DATE / DAY/TIME / *LAT/LONG*	FC / DISTNC	CITY STREET / FIRST STREET / SECOND STREET / INTERSECTION SEQ #	RD CHAR / DIRECT / LOCTN	INT-TYP (MEDIAN) / LEGS (#LANES)	INT-REL / TRAF- / CONTL	OFF-RD / RNDBT / DRVWY	WTHR / SURF / LIGHT	CRASH TYP / COLL TYP / SVRTY	V#	SPCL USE / TRLR QTY / OWNER	MOVE / FROM / TO	P#	PRTC TYPE	INJ SVRTY	AGE	SEX	LICNS RES	PED LOC	ERROR	ACTN	EVENT	CAUSE
05108	N	N	N			11/15/2013	19	FIR ST	INTER	3-LEG	N	N	CLR	S-1STOP	01	NONE 0	STRGHT											07
NONE			N			Fri 12P	0	MOLALLA AVE	E		STOP SIGN	N	DRY	REAR		PRVTE	E W									000		00
No	*45 19 43.71*					*-122 35 3.47*	1		06	0		N	DAY	INJ		PSNGR CAR		01	DRVR	NONE	80	F	OR-Y OR<25		026	000		07
															02	NONE 0	STOP									011		00
																PRVTE	E W											
																PSNGR CAR		01	DRVR	INJC	43	M	OR-Y OR<25		000	000		00
01154	N	N	N			03/07/2016	16	FIR ST	INTER	3-LEG	N	N	CLR	S-1STOP	01	NONE 9	STRGHT											29
NONE			N			Mon UNK	0	MOLALLA AVE	SE		STOP SIGN	N	DRY	REAR		N/A	SE NW									000		00
No	*45 19 43.71*					*-122 35 3.47*	1		06	0		N	DAY	PDO		UNKNOWN		01	DRVR	NONE	00	U	UNK UNK		000	000		00
															02	NONE 9	STOP									011		00
																N/A	SE NW											
																PSNGR CAR		01	DRVR	NONE	00	U	UNK UNK		000	000		00
04354	N	N	N			10/20/2017	16	FIR ST	INTER	3-LEG	N	N	CLD	S-1STOP	01	NONE 0	STRGHT											29
CITY			N			Fri 9P	0	MOLALLA AVE	SE		STOP SIGN	N	WET	REAR		UNKN	SE NW									000		00
No	*45 19 43.71*					*-122 35 3.47*	1		06	0		N	DLIT	INJ		UNKNOWN		01	DRVR	NONE	00	U	UNK UNK		026	000		29
															02	NONE 0	STOP									011		00
																PRVTE	SE NW											
																PSNGR CAR		01	DRVR	NONE	34	M	OR-Y OR<25		000	000		00
																		02	PSNG	INJC	36	F			000	000		00

OREGON DEPARTMENT OF TRANSPORTATION - TRANSPORTATION DEVELOPMENT DIVISION
TRANSPORTATION DATA SECTION - CRASH ANALYSIS AND REPORTING UNIT
CRASH SUMMARIES BY YEAR BY COLLISION TYPE

Intersectional Crashes at Molalla Ave & Gaffney Ln
January 1, 2013 through December 31, 2017

COLLISION TYPE	FATAL CRASHES	NON-FATAL CRASHES	PROPERTY DAMAGE ONLY	TOTAL CRASHES	PEOPLE KILLED	PEOPLE INJURED	TRUCKS	DRY SURF	WET SURF	DAY	DARK	INTER-SECTION	INTER-SECTION RELATED	OFF-ROAD
YEAR: 2017														
PEDESTRIAN	0	1	0	1	0	1	0	1	0	1	0	1	0	0
REAR-END	0	1	1	2	0	1	0	2	0	2	0	2	0	0
TURNING MOVEMENTS	0	1	1	2	0	2	0	0	2	0	2	2	0	0
2017 TOTAL	0	3	2	5	0	4	0	3	2	3	2	5	0	0
YEAR: 2016														
ANGLE	0	1	0	1	0	2	0	0	1	1	0	1	0	0
PEDESTRIAN	0	2	0	2	0	2	0	0	2	1	1	2	0	0
2016 TOTAL	0	3	0	3	0	4	0	0	3	2	1	3	0	0
YEAR: 2015														
REAR-END	0	1	2	3	0	1	0	2	1	3	0	3	0	0
TURNING MOVEMENTS	0	0	1	1	0	0	0	1	0	0	1	1	0	0
2015 TOTAL	0	1	3	4	0	1	0	3	1	3	1	4	0	0
YEAR: 2014														
PEDESTRIAN	0	1	0	1	0	1	0	0	1	0	1	1	0	0
REAR-END	0	0	1	1	0	0	0	1	0	1	0	1	0	0
SIDESWIPE - MEETING	0	1	0	1	0	3	0	0	1	0	1	1	0	0
2014 TOTAL	0	2	1	3	0	4	0	1	2	1	2	3	0	0
YEAR: 2013														
PEDESTRIAN	0	1	0	1	0	1	0	1	0	1	0	1	0	0
REAR-END	0	1	1	2	0	2	0	1	1	2	0	2	0	0
TURNING MOVEMENTS	0	1	0	1	0	2	0	0	1	1	0	1	0	0
2013 TOTAL	0	3	1	4	0	5	0	2	2	4	0	4	0	0
FINAL TOTAL	0	12	7	19	0	18	0	9	10	13	6	19	0	0

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CITY OF OREGON CITY, CLACKAMAS COUNTY

Intersectional Crashes at Molalla Ave & Gaffney Ln
January 1, 2013 through December 31, 2017

SER# / INVEST / UNLOC?	SPED	ALC	DRUG/MJ	SCHL	WORK	DATE / DAY/TIME / *LAT/LONG*	FC / DISTNC	CITY STREET / FIRST STREET / SECOND STREET / INTERSECTION SEQ #	RD CHAR / DIRECT / LOCTN	INT-TYP (MEDIAN) / LEGS / (#LANES)	INT-REL / TRAF- / CONTL	OFF-RD / RNDBT / DRVWY	WTHR / SURF / LIGHT	CRASH TYP / COLL TYP / SVRTY	V#	SPCL USE / TRLR QTY / OWNER	MOVE / FROM / TO	P#	PRTC TYPE	INJ SVRTY	AGE	SEX	LICNS RES	PED LOC	ERROR	ACTN	EVENT	CAUSE
02531	N	N	N			07/15/2013	16	GAFFNEY LN	INTER	3-LEG	N	N	CLR	PED	01	NONE 0	TURN-L											02
STATE			N			Mon 6P	0	MOLALLA AVE	SE		TRF SIGNAL	N	DRY	PED		PRVTE	NE SE									018		00
No	*45 19 47.76*					*-122 35 6.76*	1		05	0		Y	DAY	INJ		PSNGR CAR		01	DRVR	NONE	25	F	OR-Y OR<25		029	000		02
																	STRGHT SW NE	01	PED	INJC	50	F		01	000	035		00
05153	N	N	N			12/19/2014	16	GAFFNEY LN	INTER	3-LEG	N	N	RAIN	PED	01	NONE 0	TURN-L											02
NO RPT			N			Fri 6P	0	MOLALLA AVE	SE		TRF SIGNAL	N	WET	PED		PRVTE	NE SE									018		00
No	*45 19 47.76*					*-122 35 6.76*	1		05	0		Y	DARK	INJ		PSNGR CAR		01	DRVR	NONE	59	F	OR-Y OR<25		029	000		02
																	STRGHT SW NE	01	PED	INJC	13	M		01	000	035		00
05029	N	N	N	N	N	10/31/2016	16	GAFFNEY LN	INTER	CROSS	N	N	CLD	PED	01	NONE 0	TURN-L											02
CITY			N			Mon 12P	0	MOLALLA AVE	SE		TRF SIGNAL	N	WET	PED		PRVTE	NE SE									000		00
No	*45 19 47.76*					*-122 35 6.76*	1		05	0		N	DAY	INJ		PSNGR CAR		01	DRVR	NONE	19	F	OR-Y OR>25		029	000		02
																	STRGHT SW NE	01	PED	INJC	07	M		01	000	035		00
01098	N	N	N			04/01/2013	16	GAFFNEY LN	INTER	3-LEG	N	N	CLR	S-1STOP	01	NONE 0	STRGHT											07
NONE			N			Mon 4P	0	MOLALLA AVE	SE		TRF SIGNAL	N	DRY	REAR		PRVTE	SE NW									000		00
No	*45 19 47.76*					*-122 35 6.76*	1		06	0		N	DAY	PDO		PSNGR CAR		01	DRVR	NONE	19	F	OR-Y OR<25		026	000		07
															02	NONE 0	STOP											
																PRVTE	SE NW									011		00
																PSNGR CAR		01	DRVR	NONE	20	F	OR-Y UNK		000	000		00
00729	N	N	N			02/27/2015	16	GAFFNEY LN	INTER	3-LEG	N	N	CLR	S-1STOP	01	NONE 0	STRGHT											29
NONE			N			Fri 2P	0	MOLALLA AVE	SE		TRF SIGNAL	N	DRY	REAR		PRVTE	SE NW									000		00
No	*45 19 47.76*					*-122 35 6.76*	1		06	0		N	DAY	PDO		PSNGR CAR		01	DRVR	NONE	00	F	OR-Y UNK		026	000		29
															02	NONE 0	STOP											
																PRVTE	SE NW									011		00
																PSNGR CAR		01	DRVR	NONE	59	F	OR-Y OR<25		000	000		00
01153	N	N	N			04/02/2015	16	GAFFNEY LN	INTER	CROSS	N	N	CLR	S-1STOP	01	NONE 0	STRGHT											29
NONE			N			Thu 3P	0	MOLALLA AVE	SE		TRF SIGNAL	N	DRY	REAR		PRVTE	SE NW									000		00
No	*45 19 47.76*					*-122 35 6.76*	1		06	0		N	DAY	INJ		PSNGR CAR		01	DRVR	NONE	19	M	OR-Y OR<25		026	000		29
															02	NONE 0	STOP											
																PRVTE	SE NW									011		00
																PSNGR CAR		01	DRVR	INJC	42	F	OR-Y OR<25		000	000		00

CITY OF OREGON CITY, CLACKAMAS COUNTY

Intersectional Crashes at Molalla Ave & Gaffney Ln
January 1, 2013 through December 31, 2017

SER# / INVEST / UNLOC?	SPED	ALC	DRUG/MJ	SCHL	SWOR K	DATE / DAY/TIME / *LAT/LONG*	FC / DISTNC	CITY STREET / FIRST STREET / SECOND STREET / INTERSECTION SEQ #	RD CHAR / DIRECT / LOCTN	INT-TYP (MEDIAN) / LEGS (#LANES)	INT-REL / TRAF- / CONTL	OFF-RD / RNDBT / DRVWY	WTHR / SURF / LIGHT	CRASH TYP / COLL TYP / SVRTY	V#	SPCL USE / TRLR QTY / OWNER	MOVE / FROM / TO	P#	PRTC TYPE	INJ SVRTY	AGE	SEX	LICNS RES	PED LOC	ERROR	ACTN	EVENT	CAUSE
00149	N	N	N			01/10/2017	16	GAFFNEY LN	INTER	3-LEG	N	N	CLR	S-1STOP	01	NONE 9	STRGHT											29
NONE			N			Tue 4P	0	MOLALLA AVE	SE		TRF SIGNAL	N	DRY	REAR		N/A	SE NW									000		00
No	*45 19 47.76*					*-122 35 6.76*	1		06	0		N	DAY	PDO		PSNGR CAR		01	DRVR	NONE	00	U	UNK UNK		000	000		00
															02	NONE 9	STOP											
																N/A	SE NW									011		00
																PSNGR CAR		01	DRVR	NONE	00	U	UNK UNK		000	000		00
01776	N	N	N			05/08/2017	16	GAFFNEY LN	INTER	3-LEG	N	N	CLR	S-1STOP	01	NONE 0	STRGHT											29
NONE			N			Mon 10A	0	MOLALLA AVE	SE		TRF SIGNAL	N	DRY	REAR		PRVTE	SE NW									000		00
No	*45 19 47.76*					*-122 35 6.76*	1		06	0		N	DAY	INJ		PSNGR CAR		01	DRVR	NONE	33	F	OR-Y OR<25		026	000		29
															02	NONE 0	STOP											
																PRVTE	SE NW									011		00
																PSNGR CAR		01	DRVR	INJC	57	F	OR-Y OR<25		000	000		00
04409	N	N	N	N	N	10/23/2017	16	GAFFNEY LN	INTER	3-LEG	N	N	CLR	PED	01	NONE 0	TURN-L											27,02
CITY			N			Mon 1P	0	MOLALLA AVE	SW		TRF SIGNAL	N	DRY	PED		PRVTE	SE SW									000		00
No	*45 19 47.76*					*-122 35 6.76*	1		05	0		N	DAY	INJ		PSNGR CAR		01	DRVR	NONE	48	F	OR-Y OR<25		029	000		02
																	STRGHT NW SE	01	PED	INJB	61	M		01	000	035		00
04637	N	N	N			10/08/2016	16	GAFFNEY LN	INTER	3-LEG	N	N	CLD	PED	01	NONE 0	STRGHT											19,18
CITY			N			Sat 8P	0	MOLALLA AVE	NW		TRF SIGNAL	N	WET	PED		PRVTE	SE NW									000		00
No	*45 19 47.76*					*-122 35 6.76*	1		05	0		N	DLIT	INJ		PSNGR CAR		01	DRVR	NONE	53	M	OR-Y OR<25		000	000		00
																	STRGHT NE SW	01	PED	INJA	43	M		02	054	034		19,18
00766	N	N	N			03/06/2013	16	GAFFNEY LN	INTER	CROSS	N	N	RAIN	S-1STOP	01	NONE 0	STRGHT											07
NO RPT			N			Wed 12P	0	MOLALLA AVE	NW		TRF SIGNAL	N	WET	REAR		PRVTE	NW SE									000		00
No	*45 19 47.76*					*-122 35 6.76*	1		06	0		N	DAY	INJ		PSNGR CAR		01	DRVR	NONE	00	M	OTH-Y N-RES		026	000		07
															02	NONE 0	STOP											
																PRVTE	NW SE									011		00
																PSNGR CAR		01	DRVR	INJC	26	M	OR-Y OR<25		000	000		00
																		02	PSNG	INJC	22	F			000	000		00
																		03	PSNG	NO<5	04	M			000	000		00
03020	N	N	N			08/06/2014	16	GAFFNEY LN	INTER	3-LEG	N	N	CLR	S-1STOP	01	NONE 0	STRGHT											29
NONE			N			Wed 11A	0	MOLALLA AVE	NW		TRF SIGNAL	N	DRY	REAR		PRVTE	SE NW									000		00
No	*45 19 47.76*					*-122 35 6.76*	1		06	0		N	DAY	PDO		PSNGR CAR		01	DRVR	NONE	30	M	OR-Y OR<25		026	000		

CITY OF OREGON CITY, CLACKAMAS COUNTY

Intersectional Crashes at Molalla Ave & Gaffney Ln
January 1, 2013 through December 31, 2017

SER# / INVEST / UNLOC?	SPED	ALC	DRUG/MJ	SCHL	WORK	DATE / DAY/TIME / *LAT/LONG*	FC / DISTNC	CITY STREET / FIRST STREET / SECOND STREET / INTERSECTION SEQ #	RD CHAR / DIRECT / LOCTN	INT-TYP (MEDIAN) / LEGS / (#LANES)	INT-REL / TRAF- / CONTL	OFF-RD / RNDBT / DRVWY	WTHR / SURF / LIGHT	CRASH TYP / COLL TYP / SVRTY	V#	SPCL USE / TRLR QTY / OWNER	MOVE / FROM / TO	P#	PRTC TYPE	INJ SVRTY	AGE	SEX	LICNS RES	PED LOC	ERROR	ACTN	EVENT	CAUSE
															02	NONE 0 PRVTE	STOP SE NW									011	00
																PSNGR CAR		01	DRVR	NONE	40	F	OR-Y OR<25		000	000	00
00715 NONE	N	N	N N			02/26/2015 Thu 2P	16 0	GAFFNEY LN MOLALLA AVE	INTER NW	3-LEG	N L-GRN-SIG	N N	RAIN WET	S-1STOP REAR	01	NONE 0 PRVTE	STRGHT NW SE									000	29 00
No	*45 19 47.76*					*-122 35 6.76*	1		06	0		Y	DAY	PDO		PSNGR CAR		01	DRVR	NONE	00	M	OR-Y OR<25		026	000		29
															02	NONE 0 PRVTE	STOP NW SE									011	00
																PSNGR CAR		01	DRVR	NONE	48	M	OR-Y OR<25		000	000	00
00351 NONE	N	N	N N			01/29/2013 Tue 3P	16 0	GAFFNEY LN MOLALLA AVE	INTER CN	CROSS	N TRF SIGNAL	N N	RAIN WET	O-1 L-TURN TURN	01	NONE 0 PRVTE	STRGHT SW NE									000	02 00
No	*45 19 47.76*					*-122 35 6.76*	1		01	0		Y	DAY	INJ		PSNGR CAR		01	DRVR	INJC	30	F	OR-Y OR<25		000	000	00	
															02	NONE 0 PRVTE	TURN-L NE SE									000	00
																PSNGR CAR		01	DRVR	INJC	27	M	OTH-Y OR<25		028,004	000		02
00368 CITY	Y	N	Y N			01/28/2014 Tue 7P	16 0	GAFFNEY LN MOLALLA AVE	INTER CN	3-LEG	N TRF SIGNAL	N N	RAIN WET	O-STRGHT SS-M	01	NONE 0 PRVTE	STRGHT NW SE									000	16,05,30 00
No	*45 19 47.76*					*-122 35 6.76*	1		02	0		N	DLIT	INJ		PSNGR CAR		01	DRVR	INJB	26	F	OR-Y OR<25		039,050	025		16,05,30
															02	NONE 0 PRVTE	STRGHT SE NW									000	00
																PSNGR CAR		01	DRVR	INJB	23	F	OR-Y OR<25		000	000	00	
																		02	PSNG	INJB	03	M			000	000	00	
01618 NONE	N	N	N N			04/30/2015 Thu 9P	16 0	GAFFNEY LN MOLALLA AVE	INTER CN	3-LEG	N TRF SIGNAL	N N	CLR DRY	O-1 L-TURN TURN	01	NONE 0 PRVTE	TURN-L SW NW									000	02 00
No	*45 19 47.76*					*-122 35 6.76*	1		02	0		Y	DLIT	PDO		PSNGR CAR		01	DRVR	NONE	56	F	OR-Y OR<25		028	000		02
															02	NONE 0 PRVTE	STRGHT NE SW									018	00
																UNKNOWN		01	DRVR	NONE	00	U	UNK UNK		000	000	00	
01080 NO RPT	N	N	N N			03/08/2016 Tue 1P	16 0	GAFFNEY LN MOLALLA AVE	INTER CN	3-LEG	N TRF SIGNAL	N N	RAIN WET	ANGL-OTH ANGL	01	NONE 0 UNKN	STRGHT NW SE									000	04 00
No	*45 19 47.76*					*-122 35 6.76*	1		03	0		Y	DAY	INJ		UNKNOWN		01	DRVR	NONE	00	U	UNK UNK		020	000		

CITY OF OREGON CITY, CLACKAMAS COUNTY

Intersectional Crashes at Molalla Ave & Gaffney Ln
January 1, 2013 through December 31, 2017

SER# / INVEST / UNLOC?	SPEED	ALC	DRUG/MJ	SCHL	WORK	DATE / DAY/TIME / *LAT/LONG*	FC / DISTNC	CITY STREET / FIRST STREET / SECOND STREET / INTERSECTION SEQ #	RD CHAR / DIRECT / LOCTN	INT-TYP (MEDIAN) / LEGS / (#LANES)	INT-REL / TRAF- / CONTL	OFF-RD / RNDBT / DRVWY	WTHR / SURF / LIGHT	CRASH TYP / COLL TYP / SVRTY	V#	SPCL USE / TRLR QTY / OWNER	MOVE / FROM / TO	P#	PRTC TYPE	INJ SVRTY	AGE	SEX	LICNS / RES	PED LOC	ERROR	ACTN	EVENT	CAUSE
															02	NONE 0 PRVTE	STRGHT SW NE									019	00
																PSNGR CAR		01	DRVR	INJB	31	M	OR-Y OR<25		000	000	00
																		02	PSNG	INJB	07	F			000	000	00
01025 CITY	N	N	N	N	N	03/14/2017 Tue 8P	16 0	GAFFNEY LN MOLALLA AVE	INTER CN	3-LEG	N TRF SIGNAL	N N	RAIN WET	O-1 L-TURN TURN	01	NONE 0 PRVTE	STRGHT SW NE										019	02,32 00
No	*45 19 47.76*					*-122 35 6.76*	1		03	0		Y	DUSK	INJ		PSNGR CAR		01	DRVR	INJC	30	F	OR-Y OR<25		000	000	00
															02	NONE 0 PRVTE	TURN-L NE SE									018	00
																PSNGR CAR		01	DRVR	INJC	27	M	OR-Y OR<25		028,052	000	02,32
00774 NONE	N	N	N			02/26/2017 Sun 5P	16 0	GAFFNEY LN MOLALLA AVE	INTER CN	CROSS	N TRF SIGNAL	N N	RAIN WET	O-1 L-TURN TURN	01	NONE 9 N/A	TURN-L NW NE										019	02 00
No	*45 19 47.76*					*-122 35 6.76*	1		04	0		Y	DUSK	PDO		PSNGR CAR		01	DRVR	NONE	00	U	UNK UNK		000	000	00
															02	NONE 9 N/A	STRGHT SE NW									000	00
																PSNGR CAR		01	DRVR	NONE	00	U	UNK UNK		000	000	00

ACTION CODE TRANSLATION LIST

ACTION CODE	SHORT DESCRIPTION	LONG DESCRIPTION
000	NONE	NO ACTION OR NON-WARRANTED
001	SKIDDED	SKIDDED
002	ON/OFF V	GETTING ON OR OFF STOPPED OR PARKED VEHICLE
003	LOAD OVR	OVERHANGING LOAD STRUCK ANOTHER VEHICLE, ETC.
006	SLOW DN	SLOWED DOWN
007	AVOIDING	AVOIDING MANEUVER
008	PAR PARK	PARALLEL PARKING
009	ANG PARK	ANGLE PARKING
010	INTERFERE	PASSENGER INTERFERING WITH DRIVER
011	STOPPED	STOPPED IN TRAFFIC NOT WAITING TO MAKE A LEFT TURN
012	STP/L TRN	STOPPED BECAUSE OF LEFT TURN SIGNAL OR WAITING, ETC.
013	STP TURN	STOPPED WHILE EXECUTING A TURN
014	EMR V PKD	EMERGENCY VEHICLE LEGALLY PARKED IN THE ROADWAY
015	GO A/STOP	PROCEED AFTER STOPPING FOR A STOP SIGN/FLASHING RED.
016	TRN A/RED	TURNED ON RED AFTER STOPPING
017	LOSTCTRL	LOST CONTROL OF VEHICLE
018	EXIT DWY	ENTERING STREET OR HIGHWAY FROM ALLEY OR DRIVEWAY
019	ENTR DWY	ENTERING ALLEY OR DRIVEWAY FROM STREET OR HIGHWAY
020	STR ENTR	BEFORE ENTERING ROADWAY, STRUCK PEDESTRIAN, ETC. ON SIDEWALK OR SHOULDER
021	NO DRVR	CAR RAN AWAY - NO DRIVER
022	PREV COL	STRUCK, OR WAS STRUCK BY, VEHICLE OR PEDESTRIAN IN PRIOR COLLISION BEFORE ACC. STABILIZED
023	STALLED	VEHICLE STALLED OR DISABLED
024	DRVR DEAD	DEAD BY UNASSOCIATED CAUSE
025	FATIGUE	FATIGUED, SLEEPY, ASLEEP
026	SUN	DRIVER BLINDED BY SUN
027	HDLGHTS	DRIVER BLINDED BY HEADLIGHTS
028	ILLNESS	PHYSICALLY ILL
029	THRU MED	VEHICLE CROSSED, PLUNGED OVER, OR THROUGH MEDIAN BARRIER
030	PURSUIT	PURSUING OR ATTEMPTING TO STOP A VEHICLE
031	PASSING	PASSING SITUATION
032	PRKOFFRD	VEHICLE PARKED BEYOND CURB OR SHOULDER
033	CROS MED	VEHICLE CROSSED EARTH OR GRASS MEDIAN
034	X N/SGNL	CROSSING AT INTERSECTION - NO TRAFFIC SIGNAL PRESENT
035	X W/ SGNL	CROSSING AT INTERSECTION - TRAFFIC SIGNAL PRESENT
036	DIAGONAL	CROSSING AT INTERSECTION - DIAGONALLY
037	BTWN INT	CROSSING BETWEEN INTERSECTIONS
038	DISTRACT	DRIVER'S ATTENTION DISTRACTED
039	W/TRAF-S	WALKING, RUNNING, RIDING, ETC., ON SHOULDER WITH TRAFFIC
040	A/TRAF-S	WALKING, RUNNING, RIDING, ETC., ON SHOULDER FACING TRAFFIC
041	W/TRAF-P	WALKING, RUNNING, RIDING, ETC., ON PAVEMENT WITH TRAFFIC
042	A/TRAF-P	WALKING, RUNNING, RIDING, ETC., ON PAVEMENT FACING TRAFFIC
043	PLAYINRD	PLAYING IN STREET OR ROAD
044	PUSH MV	PUSHING OR WORKING ON VEHICLE IN ROAD OR ON SHOULDER
045	WORK ON	WORKING IN ROADWAY OR ALONG SHOULDER
046	W/ TRAFIC	NON-MOTORIST WALKING, RUNNING, RIDING, ETC. WITH TRAFFIC
047	A/ TRAFIC	NON-MOTORIST WALKING, RUNNING, RIDING, ETC. FACING TRAFFIC
050	LAY ON RD	STANDING OR LYING IN ROADWAY
051	ENT OFFRD	ENTERING / STARTING IN TRAFFIC LANE FROM OFF ROAD
052	MERGING	MERGING

ACTION CODE TRANSLATION LIST

ACTION CODE	SHORT DESCRIPTION	LONG DESCRIPTION
055	SPRAY	BLINDED BY WATER SPRAY
088	OTHER	OTHER ACTION
099	UNK	UNKNOWN ACTION

CAUSE CODE TRANSLATION LIST

CAUSE CODE	SHORT DESCRIPTION	LONG DESCRIPTION
00	NO CODE	NO CAUSE ASSOCIATED AT THIS LEVEL
01	TOO-FAST	TOO FAST FOR CONDITIONS (NOT EXCEED POSTED SPEED
02	NO-YIELD	DID NOT YIELD RIGHT-OF-WAY
03	PAS-STOP	PASSED STOP SIGN OR RED FLASHER
04	DIS SIG	DISREGARDED TRAFFIC SIGNAL
05	LEFT-CTR	DROVE LEFT OF CENTER ON TWO-WAY ROAD; STRADDLING
06	IMP-OVER	IMPROPER OVERTAKING
07	TOO-CLOS	FOLLOWED TOO CLOSELY
08	IMP-TURN	MADE IMPROPER TURN
09	DRINKING	ALCOHOL OR DRUG INVOLVED
10	OTHR-IMP	OTHER IMPROPER DRIVING
11	MECH-DEF	MECHANICAL DEFECT
12	OTHER	OTHER (NOT IMPROPER DRIVING)
13	IMP LN C	IMPROPER CHANGE OF TRAFFIC LANES
14	DIS TCD	DISREGARDED OTHER TRAFFIC CONTROL DEVICE
15	WRNG WAY	WRONG WAY ON ONE-WAY ROAD; WRONG SIDE DIVIDED RO
16	FATIGUE	DRIVER DROWSY/FATIGUED/SLEEPY
17	ILLNESS	PHYSICAL ILLNESS
18	IN RDWY	NON-MOTORIST ILLEGALLY IN ROADWAY
19	NT VISBL	NON-MOTORIST NOT VISIBLE; NON-REFLECTIVE CLOTHIN
20	IMP PKNG	VEHICLE IMPROPERLY PARKED
21	DEF STER	DEFECTIVE STEERING MECHANISM
22	DEF BRKE	INADEQUATE OR NO BRAKES
24	LOADSHFT	VEHICLE LOST LOAD OR LOAD SHIFTED
25	TIREFAIL	TIRE FAILURE
26	PHANTOM	PHANTOM / NON-CONTACT VEHICLE
27	INATTENT	INATTENTION
28	NM INATT	NON-MOTORIST INATTENTION
29	F AVOID	FAILED TO AVOID VEHICLE AHEAD
30	SPEED	DRIVING IN EXCESS OF POSTED SPEED
31	RACING	SPEED RACING (PER PAR)
32	CARELESS	CARELESS DRIVING (PER PAR)
33	RECKLESS	RECKLESS DRIVING (PER PAR)
34	AGGRESV	AGGRESSIVE DRIVING (PER PAR)
35	RD RAGE	ROAD RAGE (PER PAR)
40	VIEW OBS	VIEW OBSCURED
50	USED MDN	IMPROPER USE OF MEDIAN OR SHOULDER
51	FAIL LN	FAILED TO MAINTAIN LANE
52	OFF RD	RAN OFF ROAD

COLLISION TYPE CODE TRANSLATION LIST

COLL CODE	SHORT DESCRIPTION	LONG DESCRIPTION
&	OTH	MISCELLANEOUS
-	BACK	BACKING
0	PED	PEDESTRIAN
1	ANGL	ANGLE
2	HEAD	HEAD-ON
3	REAR	REAR-END
4	SS-M	SIDESWIPE - MEETING
5	SS-O	SIDESWIPE - OVERTAKING
6	TURN	TURNING MOVEMENT
7	PARK	PARKING MANEUVER
8	NCOL	NON-COLLISION
9	FIX	FIXED OBJECT OR OTHER OBJECT

CRASH TYPE CODE TRANSLATION LIST

CRASH TYPE	SHORT DESCRIPTION	LONG DESCRIPTION
&	OVERTURN	OVERTURNED
0	NON-COLL	OTHER NON-COLLISION
1	OTH RDWY	MOTOR VEHICLE ON OTHER ROADWAY
2	PRKD MV	PARKED MOTOR VEHICLE
3	PED	PEDESTRIAN
4	TRAIN	RAILWAY TRAIN
6	BIKE	PEDALCYCLIST
7	ANIMAL	ANIMAL
8	FIX OBJ	FIXED OBJECT
9	OTH OBJ	OTHER OBJECT
A	ANGL-STP	ENTERING AT ANGLE - ONE VEHICLE STOPPED
B	ANGL-OTH	ENTERING AT ANGLE - ALL OTHERS
C	S-STRGHT	FROM SAME DIRECTION - BOTH GOING STRAIGHT
D	S-1TURN	FROM SAME DIRECTION - ONE TURN, ONE STRAIGHT
E	S-1STOP	FROM SAME DIRECTION - ONE STOPPED
F	S-OTHER	FROM SAME DIRECTION-ALL OTHERS, INCLUDING PARKING
G	O-STRGHT	FROM OPPOSITE DIRECTION - BOTH GOING STRAIGHT
H	O-1 L-TURN	FROM OPPOSITE DIRECTION-ONE LEFT TURN,ONE STRAIGHT
I	O-1STOP	FROM OPPOSITE DIRECTION - ONE STOPPED
J	O-OTHER	FROM OPPOSITE DIRECTION-ALL OTHERS INCL. PARKING

DRIVER LICENSE CODE TRANSLATION LIST

LIC CODE	SHORT DESC	LONG DESCRIPTION
0	NONE	NOT LICENSED (HAD NEVER BEEN LICENSED)
1	OR-Y	VALID OREGON LICENSE
2	OTH-Y	VALID LICENSE, OTHER STATE OR COUNTRY
3	SUSP	SUSPENDED/REVOKED
4	EXP	EXPIRED
8	N-VAL	OTHER NON-VALID LICENSE
9	UNK	UNKNOWN IF DRIVER WAS LICENSED AT TIME OF CRASH

DRIVER RESIDENCE CODE TRANSLATION LIST

RES CODE	SHORT DESC	LONG DESCRIPTION
1	OR<25	OREGON RESIDENT WITHIN 25 MILE OF HOME
2	OR>25	OREGON RESIDENT 25 OR MORE MILES FROM HOME
3	OR-?	OREGON RESIDENT - UNKNOWN DISTANCE FROM HOME
4	N-RES	NON-RESIDENT
9	UNK	UNKNOWN IF OREGON RESIDENT

ERROR CODE TRANSLATION LIST

ERROR CODE	SHORT DESCRIPTION	FULL DESCRIPTION
000	NONE	NO ERROR
001	WIDE TRN	WIDE TURN
002	CUT CORN	CUT CORNER ON TURN
003	FAIL TRN	FAILED TO OBEY MANDATORY TRAFFIC TURN SIGNAL, SIGN OR LANE MARKINGS
004	L IN TRF	LEFT TURN IN FRONT OF ONCOMING TRAFFIC
005	L PROHIB	LEFT TURN WHERE PROHIBITED
006	FRM WRNG	TURNED FROM WRONG LANE
007	TO WRONG	TURNED INTO WRONG LANE
008	ILLEG U	U-TURNED ILLEGALLY
009	IMP STOP	IMPROPERLY STOPPED IN TRAFFIC LANE
010	IMP SIG	IMPROPER SIGNAL OR FAILURE TO SIGNAL
011	IMP BACK	BACKING IMPROPERLY (NOT PARKING)
012	IMP PARK	IMPROPERLY PARKED
013	UNPARK	IMPROPER START LEAVING PARKED POSITION
014	IMP STRT	IMPROPER START FROM STOPPED POSITION
015	IMP LGHT	IMPROPER OR NO LIGHTS (VEHICLE IN TRAFFIC)
016	INATTENT	INATTENTION (FAILURE TO DIM LIGHTS PRIOR TO 4/1/97)
017	UNSF VEH	DRIVING UNSAFE VEHICLE (NO OTHER ERROR APPARENT)
018	OTH PARK	ENTERING/EXITING PARKED POSITION W/ INSUFFICIENT CLEARANCE; OTHER IMPROPER PARKING MANEUVER
019	DIS DRIV	DISREGARDED OTHER DRIVER'S SIGNAL
020	DIS SGNL	DISREGARDED TRAFFIC SIGNAL
021	RAN STOP	DISREGARDED STOP SIGN OR FLASHING RED
022	DIS SIGN	DISREGARDED WARNING SIGN, FLARES OR FLASHING AMBER
023	DIS OFCR	DISREGARDED POLICE OFFICER OR FLAGMAN
024	DIS EMER	DISREGARDED SIREN OR WARNING OF EMERGENCY VEHICLE
025	DIS RR	DISREGARDED RR SIGNAL, RR SIGN, OR RR FLAGMAN
026	REAR-END	FAILED TO AVOID STOPPED OR PARKED VEHICLE AHEAD OTHER THAN SCHOOL BUS
027	BIKE ROW	DID NOT HAVE RIGHT-OF-WAY OVER PEDALCYCLIST
028	NO ROW	DID NOT HAVE RIGHT-OF-WAY
029	PED ROW	FAILED TO YIELD RIGHT-OF-WAY TO PEDESTRIAN
030	PAS CURV	PASSING ON A CURVE
031	PAS WRNG	PASSING ON THE WRONG SIDE
032	PAS TANG	PASSING ON STRAIGHT ROAD UNDER UNSAFE CONDITIONS
033	PAS X-WK	PASSED VEHICLE STOPPED AT CROSSWALK FOR PEDESTRIAN
034	PAS INTR	PASSING AT INTERSECTION
035	PAS HILL	PASSING ON CREST OF HILL
036	N/PAS ZN	PASSING IN "NO PASSING" ZONE
037	PAS TRAF	PASSING IN FRONT OF ONCOMING TRAFFIC
038	CUT-IN	CUTTING IN (TWO LANES - TWO WAY ONLY)
039	WRNGSIDE	DRIVING ON WRONG SIDE OF THE ROAD (2-WAY UNDIVIDED ROADWAYS)

ERROR CODE TRANSLATION LIST

ERROR CODE	SHORT DESCRIPTION	FULL DESCRIPTION
040	THRU MED	DRIVING THROUGH SAFETY ZONE OR OVER ISLAND
041	F/ST BUS	FAILED TO STOP FOR SCHOOL BUS
042	F/SLO MV	FAILED TO DECREASE SPEED FOR SLOWER MOVING VEHICLE
043	TOO CLOSE	FOLLOWING TOO CLOSELY (MUST BE ON OFFICER'S REPORT)
044	STRDL LN	STRADDLING OR DRIVING ON WRONG LANES
045	IMP CHG	IMPROPER CHANGE OF TRAFFIC LANES
046	WRNG WAY	WRONG WAY ON ONE-WAY ROADWAY; WRONG SIDE DIVIDED ROAD
047	BASCRULE	DRIVING TOO FAST FOR CONDITIONS (NOT EXCEEDING POSTED SPEED)
048	OPN DOOR	OPENED DOOR INTO ADJACENT TRAFFIC LANE
049	IMPEDING	IMPEDING TRAFFIC
050	SPEED	DRIVING IN EXCESS OF POSTED SPEED
051	RECKLESS	RECKLESS DRIVING (PER PAR)
052	CARELESS	CARELESS DRIVING (PER PAR)
053	RACING	SPEED RACING (PER PAR)
054	X N/SGNL	CROSSING AT INTERSECTION, NO TRAFFIC SIGNAL PRESENT
055	X W/SGNL	CROSSING AT INTERSECTION, TRAFFIC SIGNAL PRESENT
056	DIAGONAL	CROSSING AT INTERSECTION - DIAGONALLY
057	BTWN INT	CROSSING BETWEEN INTERSECTIONS
059	W/TRAF-S	WALKING, RUNNING, RIDING, ETC., ON SHOULDER WITH TRAFFIC
060	A/TRAF-S	WALKING, RUNNING, RIDING, ETC., ON SHOULDER FACING TRAFFIC
061	W/TRAF-P	WALKING, RUNNING, RIDING, ETC., ON PAVEMENT WITH TRAFFIC
062	A/TRAF-P	WALKING, RUNNING, RIDING, ETC., ON PAVEMENT FACING TRAFFIC
063	PLAYINRD	PLAYING IN STREET OR ROAD
064	PUSH MV	PUSHING OR WORKING ON VEHICLE IN ROAD OR ON SHOULDER
065	WORK IN RD	WORKING IN ROADWAY OR ALONG SHOULDER
070	LAY ON RD	STANDING OR LYING IN ROADWAY
071	NM IMP USE	IMPROPER USE OF TRAFFIC LANE BY NON-MOTORIST
073	ELUDING	ELUDING / ATTEMPT TO ELUDE
079	F NEG CURV	FAILED TO NEGOTIATE A CURVE
080	FAIL LN	FAILED TO MAINTAIN LANE
081	OFF RD	RAN OFF ROAD
082	NO CLEAR	DRIVER MISJUDGED CLEARANCE
083	OVRSTEER	OVER-CORRECTING
084	NOT USED	CODE NOT IN USE
085	OVRLOAD	OVERLOADING OR IMPROPER LOADING OF VEHICLE WITH CARGO OR PASSENGERS
097	UNA DIS TC	UNABLE TO DETERMINE WHICH DRIVER DISREGARDED TRAFFIC CONTROL DEVICE

EVENT CODE TRANSLATION LIST

EVENT CODE	SHORT DESCRIPTION	LONG DESCRIPTION
001	FEL/JUMP	OCCUPANT FELL, JUMPED OR WAS EJECTED FROM MOVING VEHICLE
002	INTERFER	PASSENGER INTERFERED WITH DRIVER
003	BUG INTF	ANIMAL OR INSECT IN VEHICLE INTERFERED WITH DRIVER
004	INDRCT PED	PEDESTRIAN INDIRECTLY INVOLVED (NOT STRUCK)
005	SUB-PED	"SUB-PED": PEDESTRIAN INJURED SUBSEQUENT TO COLLISION, ETC.
006	INDRCT BIK	PEDALCYCLIST INDIRECTLY INVOLVED (NOT STRUCK)
007	HITCHIKR	HITCHHIKER (SOLICITING A RIDE)
008	PSNGR TOW	PASSENGER OR NON-MOTORIST BEING TOWED OR PUSHED ON CONVEYANCE
009	ON/OFF V	GETTING ON/OFF STOPPED/PARKED VEHICLE (OCCUPANTS ONLY; MUST HAVE PHYSICAL CONTACT W/ VEHIC
010	SUB OTRN	OVERTURNED AFTER FIRST HARMFUL EVENT
011	MV PUSHD	VEHICLE BEING PUSHED
012	MV TOWED	VEHICLE TOWED OR HAD BEEN TOWING ANOTHER VEHICLE
013	FORCED	VEHICLE FORCED BY IMPACT INTO ANOTHER VEHICLE, PEDALCYCLIST OR PEDESTRIAN
014	SET MOTN	VEHICLE SET IN MOTION BY NON-DRIVER (CHILD RELEASED BRAKES, ETC.)
015	RR ROW	AT OR ON RAILROAD RIGHT-OF-WAY (NOT LIGHT RAIL)
016	LT RL ROW	AT OR ON LIGHT-RAIL RIGHT-OF-WAY
017	RR HIT V	TRAIN STRUCK VEHICLE
018	V HIT RR	VEHICLE STRUCK TRAIN
019	HIT RR CAR	VEHICLE STRUCK RAILROAD CAR ON ROADWAY
020	JACKNIFE	JACKKNIFE; TRAILER OR TOWED VEHICLE STRUCK TOWING VEHICLE
021	TRL OTRN	TRAILER OR TOWED VEHICLE OVERTURNED
022	CN BROKE	TRAILER CONNECTION BROKE
023	DETACH TRL	DETACHED TRAILING OBJECT STRUCK OTHER VEHICLE, NON-MOTORIST, OR OBJECT
024	V DOOR OPN	VEHICLE DOOR OPENED INTO ADJACENT TRAFFIC LANE
025	WHEELOFF	WHEEL CAME OFF
026	HOOD UP	HOOD FLEW UP
028	LOAD SHIFT	LOST LOAD, LOAD MOVED OR SHIFTED
029	TIREFAIL	TIRE FAILURE
030	PET	PET: CAT, DOG AND SIMILAR
031	LVSTOCK	STOCK: COW, CALF, BULL, STEER, SHEEP, ETC.
032	HORSE	HORSE, MULE, OR DONKEY
033	HRSE&RID	HORSE AND RIDER
034	GAME	WILD ANIMAL, GAME (INCLUDES BIRDS; NOT DEER OR ELK)
035	DEER ELK	DEER OR ELK, WAPITI
036	ANML VEH	ANIMAL-DRAWN VEHICLE
037	CULVERT	CULVERT, OPEN LOW OR HIGH MANHOLE
038	ATENUATN	IMPACT ATTENUATOR
039	PK METER	PARKING METER
040	CURB	CURB (ALSO NARROW SIDEWALKS ON BRIDGES)
041	JIGGLE	JIGGLE BAR OR TRAFFIC SNAKE FOR CHANNELIZATION
042	GDRL END	LEADING EDGE OF GUARDRAIL
043	GARDRAIL	GUARD RAIL (NOT METAL MEDIAN BARRIER)
044	BARRIER	MEDIAN BARRIER (RAISED OR METAL)
045	WALL	RETAINING WALL OR TUNNEL WALL
046	BR RAIL	BRIDGE RAILING OR PARAPET (ON BRIDGE OR APPROACH)
047	BR ABUTMNT	BRIDGE ABUTMENT (INCLUDED "APPROACH END" THRU 2013)
048	BR COLMN	BRIDGE PILLAR OR COLUMN
049	BR GIRDR	BRIDGE GIRDER (HORIZONTAL BRIDGE STRUCTURE OVERHEAD)
050	ISLAND	TRAFFIC RAISED ISLAND
051	GORE	GORE
052	POLE UNK	POLE - TYPE UNKNOWN
053	POLE UTL	POLE - POWER OR TELEPHONE
054	ST LIGHT	POLE - STREET LIGHT ONLY
055	TRF SGNL	POLE - TRAFFIC SIGNAL AND PED SIGNAL ONLY
056	SGN BRDG	POLE - SIGN BRIDGE
057	STOPSIGN	STOP OR YIELD SIGN

EVENT CODE TRANSLATION LIST

EVENT CODE	SHORT DESCRIPTION	LONG DESCRIPTION
058	OTH SIGN	OTHER SIGN, INCLUDING STREET SIGNS
059	HYDRANT	HYDRANT
060	MARKER	DELINEATOR OR MARKER (REFLECTOR POSTS)
061	MAILBOX	MAILBOX
062	TREE	TREE, STUMP OR SHRUBS
063	VEG OHED	TREE BRANCH OR OTHER VEGETATION OVERHEAD, ETC.
064	WIRE/CBL	WIRE OR CABLE ACROSS OR OVER THE ROAD
065	TEMP SGN	TEMPORARY SIGN OR BARRICADE IN ROAD, ETC.
066	PERM SGN	PERMANENT SIGN OR BARRICADE IN/OFF ROAD
067	SLIDE	SLIDES, FALLEN OR FALLING ROCKS
068	FRGN OBJ	FOREIGN OBSTRUCTION/DEBRIS IN ROAD (NOT GRAVEL)
069	EQP WORK	EQUIPMENT WORKING IN/OFF ROAD
070	OTH EQP	OTHER EQUIPMENT IN OR OFF ROAD (INCLUDES PARKED TRAILER, BOAT)
071	MAIN EQP	WRECKER, STREET SWEEPER, SNOW PLOW OR SANDING EQUIPMENT
072	OTHER WALL	ROCK, BRICK OR OTHER SOLID WALL
073	IRRGL PVMT	OTHER BUMP (NOT SPEED BUMP), POTHOLE OR PAVEMENT IRREGULARITY (PER PAR)
074	OVERHD OBJ	OTHER OVERHEAD OBJECT (HIGHWAY SIGN, SIGNAL HEAD, ETC.); NOT BRIDGE
075	CAVE IN	BRIDGE OR ROAD CAVE IN
076	HI WATER	HIGH WATER
077	SNO BANK	SNOW BANK
078	LO-HI EDGE	LOW OR HIGH SHOULDER AT PAVEMENT EDGE
079	DITCH	CUT SLOPE OR DITCH EMBANKMENT
080	OBJ FRM MV	STRUCK BY ROCK OR OTHER OBJECT SET IN MOTION BY OTHER VEHICLE (INCL. LOST LOADS)
081	FLY-OBJ	STRUCK BY ROCK OR OTHER MOVING OR FLYING OBJECT (NOT SET IN MOTION BY VEHICLE)
082	VEH HID	VEHICLE OBSCURED VIEW
083	VEG HID	VEGETATION OBSCURED VIEW
084	BLDG HID	VIEW OBSCURED BY FENCE, SIGN, PHONE BOOTH, ETC.
085	WIND GUST	WIND GUST
086	IMMERSED	VEHICLE IMMERSED IN BODY OF WATER
087	FIRE/EXP	FIRE OR EXPLOSION
088	FENC/BLD	FENCE OR BUILDING, ETC.
089	OTHR CRASH	CRASH RELATED TO ANOTHER SEPARATE CRASH
090	TO 1 SIDE	TWO-WAY TRAFFIC ON DIVIDED ROADWAY ALL ROUTED TO ONE SIDE
091	BUILDING	BUILDING OR OTHER STRUCTURE
092	PHANTOM	OTHER (PHANTOM) NON-CONTACT VEHICLE
093	CELL PHONE	CELL PHONE (ON PAR OR DRIVER IN USE)
094	VIOL GDL	TEENAGE DRIVER IN VIOLATION OF GRADUATED LICENSE PGM
095	GUY WIRE	GUY WIRE
096	BERM	BERM (EARTHEN OR GRAVEL MOUND)
097	GRAVEL	GRAVEL IN ROADWAY
098	ABR EDGE	ABRUPT EDGE
099	CELL WTNSD	CELL PHONE USE WITNESSED BY OTHER PARTICIPANT
100	UNK FIXD	FIXED OBJECT, UNKNOWN TYPE.
101	OTHER OBJ	NON-FIXED OBJECT, OTHER OR UNKNOWN TYPE
102	TEXTING	TEXTING
103	WZ WORKER	WORK ZONE WORKER
104	ON VEHICLE	PASSENGER RIDING ON VEHICLE EXTERIOR
105	PEDAL PSGR	PASSENGER RIDING ON PEDALCYCLE
106	MAN WHLCHR	PEDESTRIAN IN NON-MOTORIZED WHEELCHAIR
107	MTR WHLCHR	PEDESTRIAN IN MOTORIZED WHEELCHAIR
108	OFFICER	LAW ENFORCEMENT / POLICE OFFICER
109	SUB-BIKE	"SUB-BIKE": PEDALCYCLIST INJURED SUBSEQUENT TO COLLISION, ETC.
110	N-MTR	NON-MOTORIST STRUCK VEHICLE
111	S CAR VS V	STREET CAR/TROLLEY (ON RAILS OR OVERHEAD WIRE SYSTEM) STRUCK VEHICLE
112	V VS S CAR	VEHICLE STRUCK STREET CAR/TROLLEY (ON RAILS OR OVERHEAD WIRE SYSTEM)
113	S CAR ROW	AT OR ON STREET CAR OR TROLLEY RIGHT-OF-WAY

EVENT CODE TRANSLATION LIST

EVENT CODE	SHORT DESCRIPTION	LONG DESCRIPTION
114	RR EQUIP	VEHICLE STRUCK RAILROAD EQUIPMENT (NOT TRAIN) ON TRACKS
115	DSTRCT GPS	DISTRACTED BY NAVIGATION SYSTEM OR GPS DEVICE
116	DSTRCT OTH	DISTRACTED BY OTHER ELECTRONIC DEVICE
117	RR GATE	RAIL CROSSING DROP-ARM GATE
118	EXPNSN JNT	EXPANSION JOINT
119	JERSEY BAR	JERSEY BARRIER
120	WIRE BAR	WIRE OR CABLE MEDIAN BARRIER
121	FENCE	FENCE
123	OBJ IN VEH	LOOSE OBJECT IN VEHICLE STRUCK OCCUPANT
124	SLIPPERY	SLIDING OR SWERVING DUE TO WET, ICY, SLIPPERY OR LOOSE SURFACE (NOT GRAVEL)
125	SHLDR	SHOULDER GAVE WAY
126	BOULDER	ROCK(S), BOULDER (NOT GRAVEL; NOT ROCK SLIDE)
127	LAND SLIDE	ROCK SLIDE OR LAND SLIDE
128	CURVE INV	CURVE PRESENT AT CRASH LOCATION
129	HILL INV	VERTICAL GRADE / HILL PRESENT AT CRASH LOCATION
130	CURVE HID	VIEW OBSCURED BY CURVE
131	HILL HID	VIEW OBSCURED BY VERTICAL GRADE / HILL
132	WINDOW HID	VIEW OBSCURED BY VEHICLE WINDOW CONDITIONS
133	SPRAY HID	VIEW OBSCURED BY WATER SPRAY
134	TORRENTIAL	TORRENTIAL RAIN (EXCEPTIONALLY HEAVY RAIN)

FUNCTIONAL CLASSIFICATION TRANSLATION LIST

FUNC CLASS	DESCRIPTION
01	RURAL PRINCIPAL ARTERIAL - INTERSTATE
02	RURAL PRINCIPAL ARTERIAL - OTHER
06	RURAL MINOR ARTERIAL
07	RURAL MAJOR COLLECTOR
08	RURAL MINOR COLLECTOR
09	RURAL LOCAL
11	URBAN PRINCIPAL ARTERIAL - INTERSTATE
12	URBAN PRINCIPAL ARTERIAL - OTHER FREEWAYS AND EXP
14	URBAN PRINCIPAL ARTERIAL - OTHER
16	URBAN MINOR ARTERIAL
17	URBAN MAJOR COLLECTOR
18	URBAN MINOR COLLECTOR
19	URBAN LOCAL
78	UNKNOWN RURAL SYSTEM
79	UNKNOWN RURAL NON-SYSTEM
98	UNKNOWN URBAN SYSTEM
99	UNKNOWN URBAN NON-SYSTEM

HIGHWAY COMPONENT TRANSLATION LIST

CODE	DESCRIPTION
0	MAINLINE STATE HIGHWAY
1	COUPLET
3	FRONTAGE ROAD
6	CONNECTION
8	HIGHWAY - OTHER

INJURY SEVERITY CODE TRANSLATION LIST

CODE	SHORT DESC	LONG DESCRIPTION
1	KILL	FATAL INJURY (K)
2	INJA	SUSPECTED SERIOUS INJURY (A)
3	INJB	SUSPECTED MINOR INJURY (B)
4	INJC	POSSIBLE INJURY (C)
5	PRI	DIED PRIOR TO CRASH
7	NO<5	NO INJURY - 0 TO 4 YEARS OF AGE
9	NONE	NO APPARENT INJURY (O)

LIGHT CONDITION CODE TRANSLATION LIST

CODE	SHORT DESC	LONG DESCRIPTION
0	UNK	UNKNOWN
1	DAY	DAYLIGHT
2	DLIT	DARKNESS - WITH STREET LIGHTS
3	DARK	DARKNESS - NO STREET LIGHTS
4	DAWN	DAWN (TWILIGHT)
5	DUSK	DUSK (TWILIGHT)

MEDIAN TYPE CODE TRANSLATION LIST

CODE	SHORT DESC	LONG DESCRIPTION
0	NONE	NO MEDIAN
1	RSDMD	SOLID MEDIAN BARRIER
2	DIVMD	EARTH, GRASS OR PAVED MEDIAN

MILEAGE TYPE CODE TRANSLATION LIST

CODE	LONG DESCRIPTION
0	REGULAR MILEAGE
T	TEMPORARY
Y	SPUR
Z	OVERLAPPING

MOVEMENT TYPE CODE TRANSLATION LIST

CODE	SHORT DESC	LONG DESCRIPTION
0	UNK	UNKNOWN
1	STRGHT	STRAIGHT AHEAD
2	TURN-R	TURNING RIGHT
3	TURN-L	TURNING LEFT
4	U-TURN	MAKING A U-TURN
5	BACK	BACKING
6	STOP	STOPPED IN TRAFFIC
7	PRKD-P	PARKED - PROPERLY
8	PRKD-I	PARKED - IMPROPERLY
9	PARKNG	PARKING MANEUVER

NON-MOTORIST LOCATION CODE TRANSLATION LIST

CODE	LONG DESCRIPTION
00	AT INTERSECTION - NOT IN ROADWAY
01	AT INTERSECTION - INSIDE CROSSWALK
02	AT INTERSECTION - IN ROADWAY, OUTSIDE CROSSWALK
03	AT INTERSECTION - IN ROADWAY, XWALK AVAIL UNKNWN
04	NOT AT INTERSECTION - IN ROADWAY
05	NOT AT INTERSECTION - ON SHOULDER
06	NOT AT INTERSECTION - ON MEDIAN
07	NOT AT INTERSECTION - WITHIN TRAFFIC RIGHT-OF-WAY
08	NOT AT INTERSECTION - IN BIKE PATH OR PARKING LANE
09	NOT-AT INTERSECTION - ON SIDEWALK
10	OUTSIDE TRAFFICWAY BOUNDARIES
13	AT INTERSECTION - IN BIKE LANE
14	NOT AT INTERSECTION - IN BIKE LANE
15	NOT AT INTERSECTION - INSIDE MID-BLOCK CROSSWALK
16	NOT AT INTERSECTION - IN PARKING LANE
18	OTHER, NOT IN ROADWAY
99	UNKNOWN LOCATION

ROAD CHARACTER CODE TRANSLATION LIST

CODE	SHORT DESC	LONG DESCRIPTION
0	UNK	UNKNOWN
1	INTER	INTERSECTION
2	ALLEY	DRIVEWAY OR ALLEY
3	STRGHT	STRAIGHT ROADWAY
4	TRANS	TRANSITION
5	CURVE	CURVE (HORIZONTAL CURVE)
6	OPENAC	OPEN ACCESS OR TURNOUT
7	GRADE	GRADE (VERTICAL CURVE)
8	BRIDGE	BRIDGE STRUCTURE
9	TUNNEL	TUNNEL

PARTICIPANT TYPE CODE TRANSLATION LIST

CODE	SHORT DESC	LONG DESCRIPTION
0	OCC	UNKNOWN OCCUPANT TYPE
1	DRVR	DRIVER
2	PSNG	PASSENGER
3	PED	PEDESTRIAN
4	CONV	PEDESTRIAN USING A PEDESTRIAN CONVEYA
5	PTOW	PEDESTRIAN TOWING OR TRAILERING AN OB
6	BIKE	PEDALCYCLIST
7	BTOW	PEDALCYCLIST TOWING OR TRAILERING AN
8	PRKD	OCCUPANT OF A PARKED MOTOR VEHICLE
9	OTHR	OTHER TYPE OF NON-MOTORIST

TRAFFIC CONTROL DEVICE CODE TRANSLATION LIST

CODE	SHORT DESC	LONG DESCRIPTION
000	NONE	NO CONTROL
001	TRF SIGNAL	TRAFFIC SIGNALS
002	FLASHBCN-R	FLASHING BEACON - RED (STOP)
003	FLASHBCN-A	FLASHING BEACON - AMBER (SLOW)
004	STOP SIGN	STOP SIGN
005	SLOW SIGN	SLOW SIGN
006	REG-SIGN	REGULATORY SIGN
007	YIELD	YIELD SIGN
008	WARNING	WARNING SIGN
009	CURVE	CURVE SIGN
010	SCHL X-ING	SCHOOL CROSSING SIGN OR SPECIAL SIGNAL
011	OFCR/FLAG	POLICE OFFICER, FLAGMAN - SCHOOL PATROL
012	BRDG-GATE	BRIDGE GATE - BARRIER
013	TEMP-BARR	TEMPORARY BARRIER
014	NO-PASS-ZN	NO PASSING ZONE
015	ONE-WAY	ONE-WAY STREET
016	CHANNEL	CHANNELIZATION
017	MEDIAN BAR	MEDIAN BARRIER
018	PILOT CAR	PILOT CAR
019	SP PED SIG	SPECIAL PEDESTRIAN SIGNAL
020	X-BUCK	CROSSBUCK
021	THR-GN-SIG	THROUGH GREEN ARROW OR SIGNAL
022	L-GRN-SIG	LEFT TURN GREEN ARROW, LANE MARKINGS, OR SIGNAL
023	R-GRN-SIG	RIGHT TURN GREEN ARROW, LANE MARKINGS, OR SIGNAL
024	WIGWAG	WIGWAG OR FLASHING LIGHTS W/O DROP-ARM GATE
025	X-BUCK WRN	CROSSBUCK AND ADVANCE WARNING
026	WW W/ GATE	FLASHING LIGHTS WITH DROP-ARM GATES
027	OVRHD SGNL	SUPPLEMENTAL OVERHEAD SIGNAL (RR XING ONLY)
028	SP RR STOP	SPECIAL RR STOP SIGN
029	ILUM GRD X	ILLUMINATED GRADE CROSSING
037	RAMP METER	METERED RAMPS
038	RUMBLE STR	RUMBLE STRIP
090	L-TURN REF	LEFT TURN REFUGE (WHEN REFUGE IS INVOLVED)
091	R-TURN ALL	RIGHT TURN AT ALL TIMES SIGN, ETC.
092	EMR SGN/FL	EMERGENCY SIGNS OR FLARES
093	ACCEL LANE	ACCELERATION OR DECELERATION LANES
094	R-TURN PRO	RIGHT TURN PROHIBITED ON RED AFTER STOPPING
095	BUS STPSGN	BUS STOP SIGN AND RED LIGHTS
099	UNKNOWN	UNKNOWN OR NOT DEFINITE

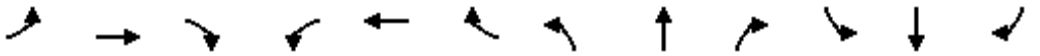
VEHICLE TYPE CODE TRANSLATION LIST

CODE	SHORT DESC	LONG DESCRIPTION
00	PDO	NOT COLLECTED FOR PDO CRASHES
01	PSNGR CAR	PASSENGER CAR, PICKUP, LIGHT DELIVERY, ETC.
02	BOBTAIL	TRUCK TRACTOR WITH NO TRAILERS (BOBTAIL)
03	FARM TRCTR	FARM TRACTOR OR SELF-PROPELLED FARM EQUIPMENT
04	SEMI TOW	TRUCK TRACTOR WITH TRAILER/MOBILE HOME IN TOW
05	TRUCK	TRUCK WITH NON-DETACHABLE BED, PANEL, ETC.
06	MOPED	MOPED, MINIBIKE, SEATED MOTOR SCOOTER, MOTOR BIKE
07	SCHL BUS	SCHOOL BUS (INCLUDES VAN)
08	OTH BUS	OTHER BUS
09	MTRCYCLE	MOTORCYCLE, DIRT BIKE
10	OTHER	OTHER: FORKLIFT, BACKHOE, ETC.
11	MOTRHOME	MOTORHOME
12	TROLLEY	MOTORIZED STREET CAR/TROLLEY (NO RAILS/WIRES)
13	ATV	ATV
14	MTRSCTR	MOTORIZED SCOOTER (STANDING)
15	SNOWMOBILE	SNOWMOBILE
99	UNKNOWN	UNKNOWN VEHICLE TYPE

WEATHER CONDITION CODE TRANSLATION LIST

CODE	SHORT DESC	LONG DESCRIPTION
0	UNK	UNKNOWN
1	CLR	CLEAR
2	CLD	CLOUDY
3	RAIN	RAIN
4	SLT	SLEET
5	FOG	FOG
6	SNOW	SNOW
7	DUST	DUST
8	SMOK	SMOKE
9	ASH	ASH

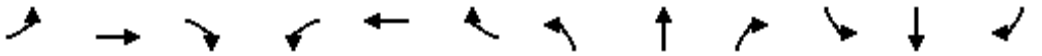
Appendix E Year 2021 Background Traffic Conditions Analysis Worksheets



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	2	583	21	104	1078	2	14	0	46	7	0	5
Future Volume (vph)	2	583	21	104	1078	2	14	0	46	7	0	5
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.5		4.0	4.5		4.5	4.5		4.5	4.5	
Lane Util. Factor	1.00	0.95		1.00	0.95		1.00	1.00		1.00	1.00	
Frpb, ped/bikes	1.00	1.00		1.00	1.00		1.00	1.00		1.00	0.99	
Flpb, ped/bikes	1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00	
Frt	1.00	0.99		1.00	1.00		1.00	0.85		1.00	0.85	
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1805	3423		1752	3504		1804	1292		1805	1595	
Flt Permitted	0.21	1.00		0.41	1.00		1.00	1.00		1.00	1.00	
Satd. Flow (perm)	408	3423		757	3504		1899	1292		1900	1595	
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	2	614	22	109	1135	2	15	0	48	7	0	5
RTOR Reduction (vph)	0	3	0	0	0	0	0	45	0	0	5	0
Lane Group Flow (vph)	2	633	0	109	1137	0	15	3	0	7	0	0
Confl. Peds. (#/hr)	4		2	2		4	1					1
Heavy Vehicles (%)	0%	5%	0%	3%	3%	0%	0%	0%	25%	0%	0%	0%
Turn Type	D.P+P	NA		D.P+P	NA		Perm	NA		Perm	NA	
Protected Phases	5	2		1	6			8			4	
Permitted Phases	6			2			8			4		
Actuated Green, G (s)	25.4	22.8		25.4	24.8		2.5	2.5		2.5	2.5	
Effective Green, g (s)	25.4	22.8		25.4	24.8		2.5	2.5		2.5	2.5	
Actuated g/C Ratio	0.62	0.56		0.62	0.61		0.06	0.06		0.06	0.06	
Clearance Time (s)	4.0	4.5		4.0	4.5		4.5	4.5		4.5	4.5	
Vehicle Extension (s)	1.0	2.0		1.0	2.0		1.0	1.0		1.0	1.0	
Lane Grp Cap (vph)	273	1908		533	2124		116	78		116	97	
v/s Ratio Prot	0.00	0.19		c0.01	c0.32			0.00			0.00	
v/s Ratio Perm	0.00			0.11			c0.01			0.00		
v/c Ratio	0.01	0.33		0.20	0.54		0.13	0.04		0.06	0.00	
Uniform Delay, d1	3.1	4.9		3.1	4.7		18.2	18.1		18.1	18.0	
Progression Factor	1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00	
Incremental Delay, d2	0.0	0.0		0.1	0.1		0.2	0.1		0.1	0.0	
Delay (s)	3.1	5.0		3.2	4.8		18.4	18.1		18.2	18.0	
Level of Service	A	A		A	A		B	B		B	B	
Approach Delay (s)		4.9			4.7			18.2			18.1	
Approach LOS		A			A			B			B	

Intersection Summary			
HCM 2000 Control Delay	5.3	HCM 2000 Level of Service	A
HCM 2000 Volume to Capacity ratio	0.50		
Actuated Cycle Length (s)	40.9	Sum of lost time (s)	13.0
Intersection Capacity Utilization	51.5%	ICU Level of Service	A
Analysis Period (min)	15		

c Critical Lane Group



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	3	0	0	21	0	31	4	434	31	40	314	6
Future Volume (vph)	3	0	0	21	0	31	4	434	31	40	314	6
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.0			4.0		4.0	4.5		4.0	4.5	
Lane Util. Factor		1.00			1.00		1.00	1.00		1.00	1.00	
Frpb, ped/bikes		1.00			1.00		1.00	1.00		1.00	1.00	
Flpb, ped/bikes		1.00			1.00		1.00	1.00		1.00	1.00	
Frt		1.00			0.92		1.00	0.99		1.00	1.00	
Flt Protected		0.95			0.98		0.95	1.00		0.95	1.00	
Satd. Flow (prot)		1805			1526		1801	1798		1671	1805	
Flt Permitted		0.84			0.87		0.56	1.00		0.45	1.00	
Satd. Flow (perm)		1602			1351		1058	1798		789	1805	
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	3	0	0	22	0	33	4	457	33	42	331	6
RTOR Reduction (vph)	0	0	0	0	52	0	0	1	0	0	0	0
Lane Group Flow (vph)	0	3	0	0	3	0	4	489	0	42	337	0
Confl. Peds. (#/hr)							3					3
Heavy Vehicles (%)	0%	0%	0%	5%	0%	17%	0%	4%	13%	8%	5%	0%
Turn Type	Perm	NA		Perm	NA		pm+pt	NA		pm+pt	NA	
Protected Phases		8			4		1	6		5	2	
Permitted Phases	8			4			6			2		
Actuated Green, G (s)		4.8			4.8		70.5	69.5		74.9	71.7	
Effective Green, g (s)		4.8			4.8		70.5	69.5		74.9	71.7	
Actuated g/C Ratio		0.05			0.05		0.78	0.77		0.83	0.80	
Clearance Time (s)		4.0			4.0		4.0	4.5		4.0	4.5	
Vehicle Extension (s)		2.5			2.5		2.3	4.2		2.3	4.2	
Lane Grp Cap (vph)		85			72		837	1388		687	1437	
v/s Ratio Prot							0.00	c0.27		c0.00	0.19	
v/s Ratio Perm		0.00			c0.00		0.00			0.05		
v/c Ratio		0.04			0.04		0.00	0.35		0.06	0.23	
Uniform Delay, d1		40.4			40.4		2.1	3.2		1.5	2.3	
Progression Factor		1.00			1.00		1.00	1.00		0.84	0.76	
Incremental Delay, d2		0.1			0.2		0.0	0.7		0.0	0.4	
Delay (s)		40.5			40.6		2.1	3.9		1.2	2.1	
Level of Service		D			D		A	A		A	A	
Approach Delay (s)		40.5			40.6			3.9			2.0	
Approach LOS		D			D			A			A	

Intersection Summary			
HCM 2000 Control Delay	5.4	HCM 2000 Level of Service	A
HCM 2000 Volume to Capacity ratio	0.32		
Actuated Cycle Length (s)	90.0	Sum of lost time (s)	12.5
Intersection Capacity Utilization	43.5%	ICU Level of Service	A
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	42	33	27	37	18	57	17	363	83	50	306	17
Future Volume (vph)	42	33	27	37	18	57	17	363	83	50	306	17
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.0			4.0	4.0	4.0	4.5		4.0	4.5	4.5
Lane Util. Factor		1.00			1.00	1.00	1.00	1.00		1.00	1.00	1.00
Frpb, ped/bikes		0.99			1.00	1.00	1.00	1.00		1.00	1.00	0.97
Flpb, ped/bikes		1.00			0.99	1.00	1.00	1.00		1.00	1.00	1.00
Frt		0.96			1.00	0.85	1.00	0.97		1.00	1.00	0.85
Flt Protected		0.98			0.97	1.00	0.95	1.00		0.95	1.00	1.00
Satd. Flow (prot)		1708			1822	1553	1801	1753		1768	1810	1321
Flt Permitted		0.84			0.69	1.00	0.55	1.00		0.41	1.00	1.00
Satd. Flow (perm)		1463			1301	1553	1047	1753		766	1810	1321
Peak-hour factor, PHF	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88
Adj. Flow (vph)	48	38	31	42	20	65	19	412	94	57	348	19
RTOR Reduction (vph)	0	17	0	0	0	57	0	6	0	0	0	5
Lane Group Flow (vph)	0	100	0	0	62	8	19	501	0	57	348	14
Confl. Peds. (#/hr)			8	8			3		3	3		3
Heavy Vehicles (%)	10%	0%	0%	0%	0%	4%	0%	6%	0%	2%	5%	19%
Turn Type	Perm	NA		Perm	NA	Perm	pm+pt	NA		pm+pt	NA	Perm
Protected Phases		8			4		1	6		5	2	
Permitted Phases	8			4		4	6			2		2
Actuated Green, G (s)		10.7			10.7	10.7	64.3	62.2		69.3	64.7	64.7
Effective Green, g (s)		10.7			10.7	10.7	64.3	62.2		69.3	64.7	64.7
Actuated g/C Ratio		0.12			0.12	0.12	0.71	0.69		0.77	0.72	0.72
Clearance Time (s)		4.0			4.0	4.0	4.0	4.5		4.0	4.5	4.5
Vehicle Extension (s)		2.5			2.5	2.5	2.3	4.2		2.3	4.2	4.2
Lane Grp Cap (vph)		173			154	184	765	1211		641	1301	949
v/s Ratio Prot							0.00	c0.29		c0.00	0.19	
v/s Ratio Perm		c0.07			0.05	0.00	0.02			0.06		0.01
v/c Ratio		0.58			0.40	0.04	0.02	0.41		0.09	0.27	0.01
Uniform Delay, d1		37.5			36.7	35.1	3.7	6.0		2.9	4.4	3.6
Progression Factor		1.00			1.00	1.00	0.62	0.58		1.00	1.00	1.00
Incremental Delay, d2		3.8			1.3	0.1	0.0	1.0		0.0	0.5	0.0
Delay (s)		41.3			37.9	35.2	2.3	4.5		3.0	4.9	3.6
Level of Service		D			D	D	A	A		A	A	A
Approach Delay (s)		41.3			36.5			4.4			4.6	
Approach LOS		D			D			A			A	

Intersection Summary			
HCM 2000 Control Delay	11.5	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.42		
Actuated Cycle Length (s)	90.0	Sum of lost time (s)	12.5
Intersection Capacity Utilization	51.7%	ICU Level of Service	A
Analysis Period (min)	15		

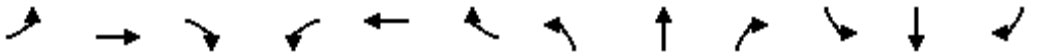
c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	10	1321	43	106	1202	10	58	3	161	7	4	6
Future Volume (vph)	10	1321	43	106	1202	10	58	3	161	7	4	6
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.5		4.0	4.5		4.5	4.5		4.5	4.5	
Lane Util. Factor	1.00	0.95		1.00	0.95		1.00	1.00		1.00	1.00	
Frpb, ped/bikes	1.00	1.00		1.00	1.00		1.00	1.00		1.00	0.99	
Flpb, ped/bikes	1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00	
Frt	1.00	1.00		1.00	1.00		1.00	0.85		1.00	0.91	
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1805	3516		1626	3534		1802	1559		1805	1715	
Flt Permitted	0.16	1.00		0.11	1.00		0.75	1.00		0.55	1.00	
Satd. Flow (perm)	309	3516		187	3534		1424	1559		1040	1715	
Peak-hour factor, PHF	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Adj. Flow (vph)	11	1420	46	114	1292	11	62	3	173	8	4	6
RTOR Reduction (vph)	0	2	0	0	0	0	0	149	0	0	5	0
Lane Group Flow (vph)	11	1464	0	114	1303	0	62	27	0	8	5	0
Confl. Peds. (#/hr)	7		4	4		7	3					3
Confl. Bikes (#/hr)			1			3						
Heavy Vehicles (%)	0%	2%	5%	11%	2%	0%	0%	0%	4%	0%	0%	0%
Turn Type	D.P+P	NA		D.P+P	NA		Perm	NA		Perm	NA	
Protected Phases	5	2		1	6			8			4	
Permitted Phases	6			2			8			4		
Actuated Green, G (s)	41.1	36.7		41.1	40.5		8.9	8.9		8.9	8.9	
Effective Green, g (s)	41.1	36.7		41.1	40.5		8.9	8.9		8.9	8.9	
Actuated g/C Ratio	0.65	0.58		0.65	0.64		0.14	0.14		0.14	0.14	
Clearance Time (s)	4.0	4.5		4.0	4.5		4.5	4.5		4.5	4.5	
Vehicle Extension (s)	1.0	2.0		1.0	2.0		1.0	1.0		1.0	1.0	
Lane Grp Cap (vph)	215	2048		222	2271		201	220		146	242	
v/s Ratio Prot	0.00	c0.42		c0.04	c0.37			0.02			0.00	
v/s Ratio Perm	0.03			0.30			c0.04			0.01		
v/c Ratio	0.05	0.71		0.51	0.57		0.31	0.12		0.05	0.02	
Uniform Delay, d1	4.5	9.4		7.0	6.4		24.3	23.6		23.4	23.3	
Progression Factor	1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00	
Incremental Delay, d2	0.0	1.0		0.8	0.2		0.3	0.1		0.1	0.0	
Delay (s)	4.6	10.4		7.8	6.6		24.6	23.7		23.5	23.3	
Level of Service	A	B		A	A		C	C		C	C	
Approach Delay (s)		10.4			6.7			24.0			23.4	
Approach LOS		B			A			C			C	

Intersection Summary			
HCM 2000 Control Delay	9.8	HCM 2000 Level of Service	A
HCM 2000 Volume to Capacity ratio	0.62		
Actuated Cycle Length (s)	63.0	Sum of lost time (s)	13.0
Intersection Capacity Utilization	64.7%	ICU Level of Service	C
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	10	4	10	44	2	58	6	644	44	38	726	23
Future Volume (vph)	10	4	10	44	2	58	6	644	44	38	726	23
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.0			4.0		4.0	4.5		4.0	4.5	
Lane Util. Factor		1.00			1.00		1.00	1.00		1.00	1.00	
Frpb, ped/bikes		1.00			0.99		1.00	1.00		1.00	1.00	
Flpb, ped/bikes		1.00			1.00		1.00	1.00		1.00	1.00	
Frt		0.94			0.92		1.00	0.99		1.00	1.00	
Flt Protected		0.98			0.98		0.95	1.00		0.95	1.00	
Satd. Flow (prot)		1752			1636		1804	1828		1555	1853	
Flt Permitted		0.87			0.85		0.26	1.00		0.32	1.00	
Satd. Flow (perm)		1549			1423		490	1828		531	1853	
Peak-hour factor, PHF	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91
Adj. Flow (vph)	11	4	11	48	2	64	7	708	48	42	798	25
RTOR Reduction (vph)	0	10	0	0	57	0	0	1	0	0	0	0
Lane Group Flow (vph)	0	16	0	0	57	0	7	755	0	42	823	0
Confl. Peds. (#/hr)	2					2	8		3	3		8
Confl. Bikes (#/hr)									1			1
Heavy Vehicles (%)	0%	0%	0%	2%	0%	5%	0%	3%	0%	16%	2%	0%
Turn Type	Perm	NA		Perm	NA		pm+pt	NA		pm+pt	NA	
Protected Phases		8			4		1	6		5	2	
Permitted Phases	8			4			6			2		
Actuated Green, G (s)		10.3			10.3		72.5	72.5		76.6	76.1	
Effective Green, g (s)		10.3			10.3		72.5	72.5		76.6	76.1	
Actuated g/C Ratio		0.10			0.10		0.72	0.72		0.77	0.76	
Clearance Time (s)		4.0			4.0		4.0	4.5		4.0	4.5	
Vehicle Extension (s)		2.5			2.5		2.3	4.2		2.3	4.2	
Lane Grp Cap (vph)		159			146		369	1325		454	1410	
v/s Ratio Prot							0.00	c0.41		0.00	c0.44	
v/s Ratio Perm		0.01			c0.04		0.01			0.07		
v/c Ratio		0.10			0.39		0.02	0.57		0.09	0.58	
Uniform Delay, d1		40.7			41.9		5.7	6.4		6.1	5.1	
Progression Factor		1.00			1.00		1.00	1.00		0.66	0.61	
Incremental Delay, d2		0.2			1.2		0.0	1.8		0.0	1.5	
Delay (s)		40.9			43.1		5.8	8.2		4.1	4.6	
Level of Service		D			D		A	A		A	A	
Approach Delay (s)		40.9			43.1			8.2			4.6	
Approach LOS		D			D			A			A	

Intersection Summary			
HCM 2000 Control Delay	9.2	HCM 2000 Level of Service	A
HCM 2000 Volume to Capacity ratio	0.57		
Actuated Cycle Length (s)	100.0	Sum of lost time (s)	12.5
Intersection Capacity Utilization	55.3%	ICU Level of Service	B
Analysis Period (min)	15		
c Critical Lane Group			



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	35	56	51	132	85	165	77	501	129	170	607	42
Future Volume (vph)	35	56	51	132	85	165	77	501	129	170	607	42
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.0			4.0	4.0	4.0	4.5		4.0	4.5	4.5
Lane Util. Factor		1.00			1.00	1.00	1.00	1.00		1.00	1.00	1.00
Frpb, ped/bikes		0.99			1.00	0.98	1.00	1.00		1.00	1.00	0.94
Flpb, ped/bikes		1.00			0.99	1.00	1.00	1.00		1.00	1.00	1.00
Frt		0.95			1.00	0.85	1.00	0.97		1.00	1.00	0.85
Flt Protected		0.99			0.97	1.00	0.95	1.00		0.95	1.00	1.00
Satd. Flow (prot)		1724			1809	1563	1747	1783		1787	1827	1492
Flt Permitted		0.80			0.66	1.00	0.32	1.00		0.26	1.00	1.00
Satd. Flow (perm)		1396			1226	1563	593	1783		486	1827	1492
Peak-hour factor, PHF	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Adj. Flow (vph)	36	58	53	138	89	172	80	522	134	177	632	44
RTOR Reduction (vph)	0	21	0	0	0	115	0	8	0	0	0	17
Lane Group Flow (vph)	0	126	0	0	227	57	80	648	0	177	632	27
Confl. Peds. (#/hr)	1		7	7		1	16		2	2		16
Confl. Bikes (#/hr)									1			1
Heavy Vehicles (%)	3%	0%	4%	2%	0%	1%	3%	3%	2%	1%	4%	2%
Turn Type	Perm	NA		Perm	NA	Perm	pm+pt	NA		pm+pt	NA	Perm
Protected Phases		8			4		1	6		5	2	
Permitted Phases	8			4		4	6			2		2
Actuated Green, G (s)		21.7			21.7	21.7	62.8	57.5		68.8	60.5	60.5
Effective Green, g (s)		21.7			21.7	21.7	62.8	57.5		68.8	60.5	60.5
Actuated g/C Ratio		0.22			0.22	0.22	0.63	0.58		0.69	0.60	0.60
Clearance Time (s)		4.0			4.0	4.0	4.0	4.5		4.0	4.5	4.5
Vehicle Extension (s)		2.5			2.5	2.5	2.3	4.2		2.3	4.2	4.2
Lane Grp Cap (vph)		302			266	339	433	1025		442	1105	902
v/s Ratio Prot							0.01	c0.36		c0.03	0.35	
v/s Ratio Perm		0.09			c0.19	0.04	0.11			0.24		0.02
v/c Ratio		0.42			0.85	0.17	0.18	0.63		0.40	0.57	0.03
Uniform Delay, d1		33.7			37.6	31.8	8.3	14.2		8.8	11.9	7.9
Progression Factor		1.00			1.00	1.00	0.52	0.65		1.00	1.00	1.00
Incremental Delay, d2		0.7			22.1	0.2	0.1	2.6		0.3	2.2	0.1
Delay (s)		34.4			59.7	32.0	4.4	11.8		9.1	14.1	8.0
Level of Service		C			E	C	A	B		A	B	A
Approach Delay (s)		34.4			47.8			11.0			12.7	
Approach LOS		C			D			B			B	

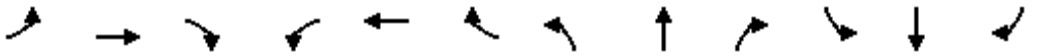
Intersection Summary			
HCM 2000 Control Delay	20.2	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.67		
Actuated Cycle Length (s)	100.0	Sum of lost time (s)	12.5
Intersection Capacity Utilization	72.5%	ICU Level of Service	C
Analysis Period (min)	15		
c Critical Lane Group			

Appendix F Year 2021 Total Traffic Conditions Analysis Worksheets

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	2	583	21	117	1078	2	14	0	56	7	0	5
Future Volume (vph)	2	583	21	117	1078	2	14	0	56	7	0	5
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.5		4.0	4.5		4.5	4.5		4.5	4.5	
Lane Util. Factor	1.00	0.95		1.00	0.95		1.00	1.00		1.00	1.00	
Frpb, ped/bikes	1.00	1.00		1.00	1.00		1.00	1.00		1.00	0.99	
Flpb, ped/bikes	1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00	
Frt	1.00	0.99		1.00	1.00		1.00	0.85		1.00	0.85	
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1805	3423		1752	3504		1804	1292		1805	1595	
Flt Permitted	0.21	1.00		0.41	1.00		1.00	1.00		1.00	1.00	
Satd. Flow (perm)	407	3423		757	3504		1899	1292		1900	1595	
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	2	614	22	123	1135	2	15	0	59	7	0	5
RTOR Reduction (vph)	0	3	0	0	0	0	0	55	0	0	5	0
Lane Group Flow (vph)	2	633	0	123	1137	0	15	4	0	7	0	0
Confl. Peds. (#/hr)	4		2	2		4	1					1
Heavy Vehicles (%)	0%	5%	0%	3%	3%	0%	0%	0%	25%	0%	0%	0%
Turn Type	D.P+P	NA		D.P+P	NA		Perm	NA		Perm	NA	
Protected Phases	5	2		1	6			8			4	
Permitted Phases	6			2			8			4		
Actuated Green, G (s)	25.2	21.5		25.2	24.6		2.5	2.5		2.5	2.5	
Effective Green, g (s)	25.2	21.5		25.2	24.6		2.5	2.5		2.5	2.5	
Actuated g/C Ratio	0.62	0.53		0.62	0.60		0.06	0.06		0.06	0.06	
Clearance Time (s)	4.0	4.5		4.0	4.5		4.5	4.5		4.5	4.5	
Vehicle Extension (s)	1.0	2.0		1.0	2.0		1.0	1.0		1.0	1.0	
Lane Grp Cap (vph)	272	1808		559	2117		116	79		116	97	
v/s Ratio Prot	0.00	0.18		c0.02	c0.32			0.00			0.00	
v/s Ratio Perm	0.00			0.12			c0.01			0.00		
v/c Ratio	0.01	0.35		0.22	0.54		0.13	0.05		0.06	0.00	
Uniform Delay, d1	3.1	5.6		3.2	4.7		18.1	18.0		18.0	17.9	
Progression Factor	1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00	
Incremental Delay, d2	0.0	0.0		0.1	0.1		0.2	0.1		0.1	0.0	
Delay (s)	3.1	5.6		3.2	4.8		18.3	18.1		18.1	17.9	
Level of Service	A	A		A	A		B	B		B	B	
Approach Delay (s)		5.6			4.7			18.1			18.0	
Approach LOS		A			A			B			B	

Intersection Summary			
HCM 2000 Control Delay	5.6	HCM 2000 Level of Service	A
HCM 2000 Volume to Capacity ratio	0.51		
Actuated Cycle Length (s)	40.7	Sum of lost time (s)	13.0
Intersection Capacity Utilization	51.5%	ICU Level of Service	A
Analysis Period (min)	15		

c Critical Lane Group



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	3	0	0	25	0	42	4	434	36	54	314	6
Future Volume (vph)	3	0	0	25	0	42	4	434	36	54	314	6
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.0			4.0		4.0	4.5		4.0	4.5	
Lane Util. Factor		1.00			1.00		1.00	1.00		1.00	1.00	
Frpb, ped/bikes		1.00			1.00		1.00	1.00		1.00	1.00	
Flpb, ped/bikes		1.00			1.00		1.00	1.00		1.00	1.00	
Frt		1.00			0.92		1.00	0.99		1.00	1.00	
Flt Protected		0.95			0.98		0.95	1.00		0.95	1.00	
Satd. Flow (prot)		1805			1517		1801	1794		1671	1805	
Flt Permitted		0.75			0.88		0.56	1.00		0.43	1.00	
Satd. Flow (perm)		1434			1354		1058	1794		761	1805	
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	3	0	0	26	0	44	4	457	38	57	331	6
RTOR Reduction (vph)	0	0	0	0	63	0	0	2	0	0	0	0
Lane Group Flow (vph)	0	3	0	0	7	0	4	493	0	57	337	0
Confl. Peds. (#/hr)							3					3
Heavy Vehicles (%)	0%	0%	0%	5%	0%	17%	0%	4%	13%	8%	5%	0%
Turn Type	Perm	NA		Perm	NA		pm+pt	NA		pm+pt	NA	
Protected Phases		8			4		1	6		5	2	
Permitted Phases	8			4			6			2		
Actuated Green, G (s)		5.3			5.3		68.8	67.8		75.6	71.2	
Effective Green, g (s)		5.3			5.3		68.8	67.8		75.6	71.2	
Actuated g/C Ratio		0.06			0.06		0.76	0.75		0.84	0.79	
Clearance Time (s)		4.0			4.0		4.0	4.5		4.0	4.5	
Vehicle Extension (s)		2.5			2.5		2.3	4.2		2.3	4.2	
Lane Grp Cap (vph)		84			79		817	1351		683	1427	
v/s Ratio Prot							0.00	c0.27		c0.00	c0.19	
v/s Ratio Perm		0.00			c0.01		0.00			0.07		
v/c Ratio		0.04			0.09		0.00	0.37		0.08	0.24	
Uniform Delay, d1		39.9			40.1		2.5	3.8		1.5	2.4	
Progression Factor		1.00			1.00		1.00	1.00		0.81	0.75	
Incremental Delay, d2		0.1			0.4		0.0	0.8		0.0	0.4	
Delay (s)		40.1			40.4		2.5	4.5		1.3	2.2	
Level of Service		D			D		A	A		A	A	
Approach Delay (s)		40.1			40.4			4.5			2.1	
Approach LOS		D			D			A			A	

Intersection Summary			
HCM 2000 Control Delay	6.2	HCM 2000 Level of Service	A
HCM 2000 Volume to Capacity ratio	0.33		
Actuated Cycle Length (s)	90.0	Sum of lost time (s)	12.5
Intersection Capacity Utilization	43.8%	ICU Level of Service	A
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	42	33	28	37	18	57	18	373	83	50	319	17
Future Volume (vph)	42	33	28	37	18	57	18	373	83	50	319	17
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.0			4.0	4.0	4.0	4.5		4.0	4.5	4.5
Lane Util. Factor		1.00			1.00	1.00	1.00	1.00		1.00	1.00	1.00
Frpb, ped/bikes		0.99			1.00	1.00	1.00	1.00		1.00	1.00	0.97
Flpb, ped/bikes		1.00			0.99	1.00	1.00	1.00		1.00	1.00	1.00
Frt		0.96			1.00	0.85	1.00	0.97		1.00	1.00	0.85
Flt Protected		0.98			0.97	1.00	0.95	1.00		0.95	1.00	1.00
Satd. Flow (prot)		1707			1822	1553	1801	1754		1768	1810	1321
Flt Permitted		0.84			0.69	1.00	0.54	1.00		0.40	1.00	1.00
Satd. Flow (perm)		1465			1301	1553	1033	1754		753	1810	1321
Peak-hour factor, PHF	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88
Adj. Flow (vph)	48	38	32	42	20	65	20	424	94	57	362	19
RTOR Reduction (vph)	0	17	0	0	0	57	0	6	0	0	0	5
Lane Group Flow (vph)	0	101	0	0	62	8	20	512	0	57	363	14
Confl. Peds. (#/hr)			8	8			3		3	3		3
Heavy Vehicles (%)	10%	0%	0%	0%	0%	4%	0%	6%	0%	2%	5%	19%
Turn Type	Perm	NA		Perm	NA	Perm	pm+pt	NA		pm+pt	NA	Perm
Protected Phases		8			4		1	6		5	2	
Permitted Phases	8			4		4	6			2		2
Actuated Green, G (s)		10.8			10.8	10.8	64.2	62.1		69.2	64.6	64.6
Effective Green, g (s)		10.8			10.8	10.8	64.2	62.1		69.2	64.6	64.6
Actuated g/C Ratio		0.12			0.12	0.12	0.71	0.69		0.77	0.72	0.72
Clearance Time (s)		4.0			4.0	4.0	4.0	4.5		4.0	4.5	4.5
Vehicle Extension (s)		2.5			2.5	2.5	2.3	4.2		2.3	4.2	4.2
Lane Grp Cap (vph)		175			156	186	754	1210		630	1299	948
v/s Ratio Prot							0.00	c0.29		c0.00	0.20	
v/s Ratio Perm		c0.07			0.05	0.01	0.02			0.06		0.01
v/c Ratio		0.58			0.40	0.04	0.03	0.42		0.09	0.28	0.01
Uniform Delay, d1		37.4			36.6	35.0	3.7	6.1		3.0	4.5	3.6
Progression Factor		1.00			1.00	1.00	0.64	0.55		1.00	1.00	1.00
Incremental Delay, d2		3.8			1.2	0.1	0.0	1.1		0.0	0.5	0.0
Delay (s)		41.2			37.8	35.1	2.4	4.4		3.0	5.0	3.6
Level of Service		D			D	D	A	A		A	A	A
Approach Delay (s)		41.2			36.4			4.3			4.7	
Approach LOS		D			D			A			A	

Intersection Summary			
HCM 2000 Control Delay	11.4	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.42		
Actuated Cycle Length (s)	90.0	Sum of lost time (s)	12.5
Intersection Capacity Utilization	52.3%	ICU Level of Service	A
Analysis Period (min)	15		

c Critical Lane Group

Intersection	
Int Delay, s/veh	2.1

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	19	71	52	13	10	15
Future Vol, veh/h	19	71	52	13	10	15
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	95	95	95	95	95	95
Heavy Vehicles, %	2	10	12	2	2	2
Mvmt Flow	20	75	55	14	11	16

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	69	0	-	0	177	62
Stage 1	-	-	-	-	62	-
Stage 2	-	-	-	-	115	-
Critical Hdwy	4.12	-	-	-	6.42	6.22
Critical Hdwy Stg 1	-	-	-	-	5.42	-
Critical Hdwy Stg 2	-	-	-	-	5.42	-
Follow-up Hdwy	2.218	-	-	-	3.518	3.318
Pot Cap-1 Maneuver	1532	-	-	-	813	1003
Stage 1	-	-	-	-	961	-
Stage 2	-	-	-	-	910	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	1532	-	-	-	802	1003
Mov Cap-2 Maneuver	-	-	-	-	802	-
Stage 1	-	-	-	-	948	-
Stage 2	-	-	-	-	910	-

Approach	EB	WB	SB
HCM Control Delay, s	1.6	0	9.1
HCM LOS			A

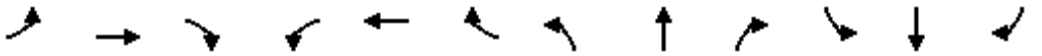
Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	1532	-	-	-	912
HCM Lane V/C Ratio	0.013	-	-	-	0.029
HCM Control Delay (s)	7.4	0	-	-	9.1
HCM Lane LOS	A	A	-	-	A
HCM 95th %tile Q(veh)	0	-	-	-	0.1

Total Traffic Conditions
1: Fir Street & Beavercreek Road

Weekday PM Peak Hc
02/11/2020

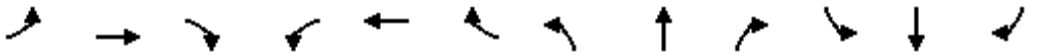
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	10	1321	43	112	1202	10	58	3	187	7	4	6
Future Volume (vph)	10	1321	43	112	1202	10	58	3	187	7	4	6
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.5		4.0	4.5		4.5	4.5		4.5	4.5	
Lane Util. Factor	1.00	0.95		1.00	0.95		1.00	1.00		1.00	1.00	
Frpb, ped/bikes	1.00	1.00		1.00	1.00		1.00	1.00		1.00	0.99	
Flpb, ped/bikes	1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00	
Frt	1.00	1.00		1.00	1.00		1.00	0.85		1.00	0.91	
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1805	3516		1626	3534		1802	1558		1805	1715	
Flt Permitted	0.16	1.00		0.11	1.00		0.75	1.00		0.47	1.00	
Satd. Flow (perm)	306	3516		193	3534		1424	1558		894	1715	
Peak-hour factor, PHF	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Adj. Flow (vph)	11	1420	46	120	1292	11	62	3	201	8	4	6
RTOR Reduction (vph)	0	2	0	0	0	0	0	172	0	0	5	0
Lane Group Flow (vph)	11	1464	0	120	1303	0	62	32	0	8	5	0
Confl. Peds. (#/hr)	7		4	4		7	3					3
Confl. Bikes (#/hr)			1			3						
Heavy Vehicles (%)	0%	2%	5%	11%	2%	0%	0%	0%	4%	0%	0%	0%
Turn Type	D.P+P	NA		D.P+P	NA		Perm	NA		Perm	NA	
Protected Phases	5	2		1	6			8			4	
Permitted Phases	6			2			8			4		
Actuated Green, G (s)	39.8	35.4		39.8	39.2		8.9	8.9		8.9	8.9	
Effective Green, g (s)	39.8	35.4		39.8	39.2		8.9	8.9		8.9	8.9	
Actuated g/C Ratio	0.65	0.57		0.65	0.64		0.14	0.14		0.14	0.14	
Clearance Time (s)	4.0	4.5		4.0	4.5		4.5	4.5		4.5	4.5	
Vehicle Extension (s)	1.0	2.0		1.0	2.0		1.0	1.0		1.0	1.0	
Lane Grp Cap (vph)	211	2017		226	2245		205	224		128	247	
v/s Ratio Prot	0.00	c0.42		c0.04	c0.37			0.02			0.00	
v/s Ratio Perm	0.03			0.30			c0.04			0.01		
v/c Ratio	0.05	0.73		0.53	0.58		0.30	0.14		0.06	0.02	
Uniform Delay, d1	4.6	9.6		7.1	6.5		23.6	23.1		22.8	22.7	
Progression Factor	1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00	
Incremental Delay, d2	0.0	1.1		1.2	0.2		0.3	0.1		0.1	0.0	
Delay (s)	4.7	10.7		8.3	6.7		23.9	23.2		22.9	22.7	
Level of Service	A	B		A	A		C	C		C	C	
Approach Delay (s)		10.7			6.9			23.3			22.8	
Approach LOS		B			A			C			C	

Intersection Summary			
HCM 2000 Control Delay	10.1	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.62		
Actuated Cycle Length (s)	61.7	Sum of lost time (s)	13.0
Intersection Capacity Utilization	66.7%	ICU Level of Service	C
Analysis Period (min)	15		
c Critical Lane Group			



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	10	4	10	54	2	88	6	644	46	46	726	23
Future Volume (vph)	10	4	10	54	2	88	6	644	46	46	726	23
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.0			4.0		4.0	4.5		4.0	4.5	
Lane Util. Factor		1.00			1.00		1.00	1.00		1.00	1.00	
Frpb, ped/bikes		1.00			0.98		1.00	1.00		1.00	1.00	
Flpb, ped/bikes		1.00			1.00		1.00	1.00		1.00	1.00	
Frt		0.94			0.92		1.00	0.99		1.00	1.00	
Flt Protected		0.98			0.98		0.95	1.00		0.95	1.00	
Satd. Flow (prot)		1752			1623		1804	1827		1555	1853	
Flt Permitted		0.82			0.87		0.25	1.00		0.31	1.00	
Satd. Flow (perm)		1458			1432		472	1827		505	1853	
Peak-hour factor, PHF	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91
Adj. Flow (vph)	11	4	11	59	2	97	7	708	51	51	798	25
RTOR Reduction (vph)	0	10	0	0	72	0	0	2	0	0	1	0
Lane Group Flow (vph)	0	16	0	0	86	0	7	757	0	51	822	0
Confl. Peds. (#/hr)	2					2	8		3	3		8
Confl. Bikes (#/hr)									1			1
Heavy Vehicles (%)	0%	0%	0%	2%	0%	5%	0%	3%	0%	16%	2%	0%
Turn Type	Perm	NA		Perm	NA		pm+pt	NA		pm+pt	NA	
Protected Phases		8			4		1	6		5	2	
Permitted Phases	8			4			6			2		
Actuated Green, G (s)		11.5			11.5		69.5	69.5		75.4	74.9	
Effective Green, g (s)		11.5			11.5		69.5	69.5		75.4	74.9	
Actuated g/C Ratio		0.12			0.12		0.70	0.70		0.75	0.75	
Clearance Time (s)		4.0			4.0		4.0	4.5		4.0	4.5	
Vehicle Extension (s)		2.5			2.5		2.3	4.2		2.3	4.2	
Lane Grp Cap (vph)		167			164		342	1269		449	1387	
v/s Ratio Prot							0.00	c0.41		0.01	c0.44	
v/s Ratio Perm		0.01			c0.06		0.01			0.08		
v/c Ratio		0.10			0.53		0.02	0.60		0.11	0.59	
Uniform Delay, d1		39.6			41.7		6.8	7.9		7.6	5.7	
Progression Factor		1.00			1.00		1.00	1.00		0.65	0.62	
Incremental Delay, d2		0.2			2.3		0.0	2.1		0.1	1.6	
Delay (s)		39.8			44.0		6.8	10.0		5.0	5.1	
Level of Service		D			D		A	B		A	A	
Approach Delay (s)		39.8			44.0			10.0			5.1	
Approach LOS		D			D			A			A	

Intersection Summary			
HCM 2000 Control Delay	11.0	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.60		
Actuated Cycle Length (s)	100.0	Sum of lost time (s)	12.5
Intersection Capacity Utilization	57.8%	ICU Level of Service	B
Analysis Period (min)	15		
c Critical Lane Group			



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	35	56	52	132	85	165	80	528	129	170	614	42
Future Volume (vph)	35	56	52	132	85	165	80	528	129	170	614	42
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.0			4.0	4.0	4.0	4.5		4.0	4.5	4.5
Lane Util. Factor		1.00			1.00	1.00	1.00	1.00		1.00	1.00	1.00
Frpb, ped/bikes		0.99			1.00	0.98	1.00	1.00		1.00	1.00	0.94
Flpb, ped/bikes		1.00			0.99	1.00	1.00	1.00		1.00	1.00	1.00
Frt		0.95			1.00	0.85	1.00	0.97		1.00	1.00	0.85
Flt Protected		0.99			0.97	1.00	0.95	1.00		0.95	1.00	1.00
Satd. Flow (prot)		1723			1809	1563	1747	1785		1787	1827	1492
Flt Permitted		0.80			0.66	1.00	0.32	1.00		0.24	1.00	1.00
Satd. Flow (perm)		1396			1223	1563	581	1785		453	1827	1492
Peak-hour factor, PHF	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Adj. Flow (vph)	36	58	54	138	89	172	83	550	134	177	640	44
RTOR Reduction (vph)	0	22	0	0	0	115	0	7	0	0	0	17
Lane Group Flow (vph)	0	126	0	0	227	57	83	677	0	177	640	27
Confl. Peds. (#/hr)	1		7	7		1	16		2	2		16
Confl. Bikes (#/hr)									1			1
Heavy Vehicles (%)	3%	0%	4%	2%	0%	1%	3%	3%	2%	1%	4%	2%
Turn Type	Perm	NA		Perm	NA	Perm	pm+pt	NA		pm+pt	NA	Perm
Protected Phases		8			4		1	6		5	2	
Permitted Phases	8			4		4	6			2		2
Actuated Green, G (s)		21.7			21.7	21.7	62.9	57.5		68.7	60.4	60.4
Effective Green, g (s)		21.7			21.7	21.7	62.9	57.5		68.7	60.4	60.4
Actuated g/C Ratio		0.22			0.22	0.22	0.63	0.58		0.69	0.60	0.60
Clearance Time (s)		4.0			4.0	4.0	4.0	4.5		4.0	4.5	4.5
Vehicle Extension (s)		2.5			2.5	2.5	2.3	4.2		2.3	4.2	4.2
Lane Grp Cap (vph)		302			265	339	428	1026		421	1103	901
v/s Ratio Prot							0.01	c0.38		c0.03	0.35	
v/s Ratio Perm		0.09			c0.19	0.04	0.11			0.25		0.02
v/c Ratio		0.42			0.86	0.17	0.19	0.66		0.42	0.58	0.03
Uniform Delay, d1		33.7			37.7	31.8	8.4	14.5		9.3	12.1	8.0
Progression Factor		1.00			1.00	1.00	0.52	0.68		1.00	1.00	1.00
Incremental Delay, d2		0.7			22.6	0.2	0.1	2.9		0.4	2.2	0.1
Delay (s)		34.4			60.2	32.0	4.4	12.7		9.7	14.3	8.0
Level of Service		C			E	C	A	B		A	B	A
Approach Delay (s)		34.4			48.0			11.8			13.0	
Approach LOS		C			D			B			B	

Intersection Summary			
HCM 2000 Control Delay	20.5	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.69		
Actuated Cycle Length (s)	100.0	Sum of lost time (s)	12.5
Intersection Capacity Utilization	74.0%	ICU Level of Service	D
Analysis Period (min)	15		
c Critical Lane Group			

Intersection	
Int Delay, s/veh	2.6

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	10	86	104	6	26	40
Future Vol, veh/h	10	86	104	6	26	40
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	91	91	91	91	91	91
Heavy Vehicles, %	2	7	4	2	2	2
Mvmt Flow	11	95	114	7	29	44

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	121	0	-	0	235	118
Stage 1	-	-	-	-	118	-
Stage 2	-	-	-	-	117	-
Critical Hdwy	4.12	-	-	-	6.42	6.22
Critical Hdwy Stg 1	-	-	-	-	5.42	-
Critical Hdwy Stg 2	-	-	-	-	5.42	-
Follow-up Hdwy	2.218	-	-	-	3.518	3.318
Pot Cap-1 Maneuver	1467	-	-	-	753	934
Stage 1	-	-	-	-	907	-
Stage 2	-	-	-	-	908	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	1467	-	-	-	747	934
Mov Cap-2 Maneuver	-	-	-	-	747	-
Stage 1	-	-	-	-	900	-
Stage 2	-	-	-	-	908	-

Approach	EB	WB	SB
HCM Control Delay, s	0.8	0	9.6
HCM LOS			A

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	1467	-	-	-	850
HCM Lane V/C Ratio	0.007	-	-	-	0.085
HCM Control Delay (s)	7.5	0	-	-	9.6
HCM Lane LOS	A	A	-	-	A
HCM 95th %tile Q(veh)	0	-	-	-	0.3

Chicago Title
Company of Oregon

PRELIMINARY REPORT

In response to the application for a policy of title insurance referenced herein Chicago Title Company of Oregon hereby reports that it is prepared to issue, or cause to be issued, as of the specified date, a policy or policies of title insurance describing the land and the estate or interest hereinafter set forth, insuring against loss which may be sustained by reason of any defect, lien or encumbrance not shown or referred to as an exception herein or not excluded from coverage pursuant to the printed Schedules, Conditions and Stipulations or Conditions of said policy forms.

The printed Exceptions and Exclusions from the coverage of said policy or policies are set forth in Exhibit One. The policy to be issued may contain an arbitration clause. When the Amount of Insurance is less than that set forth in the arbitration clause, all arbitrable matters shall be arbitrated at the option of either the Company or the Insured as the exclusive remedy of the parties. Copies of the policy forms should be read. They are available from the office which issued this report.

This report (and any supplements or amendments hereto) is issued solely for the purpose of facilitating the issuance of a policy of title insurance and no liability is assumed hereby.

The policy(s) of title insurance to be issued hereunder will be policy(s) of Chicago Title Insurance Company, a/an Florida corporation.

Please read the exceptions shown or referred to herein and the Exceptions and Exclusions set forth in Exhibit One of this report carefully. The Exceptions and Exclusions are meant to provide you with notice of matters which are not covered under the terms of the title insurance policy and should be carefully considered.

It is important to note that this preliminary report is not a written representation as to the condition of title and may not list all liens, defects and encumbrances affecting title to the land.

This preliminary report is for the exclusive use of the parties to the contemplated transaction, and the Company does not have any liability to any third parties nor any liability until the full premium is paid and a policy is issued. Until all necessary documents are placed of record, the Company reserves the right to amend or supplement this preliminary report.

Countersigned

Maggie Metcalf

Chicago Title
Company of Oregon
1211 SW Fifth Ave., Ste 2130, Portland, OR 97204
(503)973-7400 FAX (503)248-0324

PRELIMINARY REPORT

ESCROW OFFICER: Wendy Geurin
wendy.geurin@ctt.com
503-973-7412

ORDER NO.: 472518001742

TITLE OFFICER: Tony Schadle

TO: Chicago Title Company of Oregon
1211 SW Fifth Ave., Ste 2130
Portland, OR 97204

ESCROW LICENSE NO.: 201004072
OWNER/SELLER: GDI RE Acquisition LLC
BUYER/BORROWER: City of Oregon City
PROPERTY ADDRESS: 13895 Fir Street, Oregon City, OR 97045

EFFECTIVE DATE: April 10, 2018, 08:00 AM

1. THE POLICY AND ENDORSEMENTS TO BE ISSUED AND THE RELATED CHARGES ARE:

	AMOUNT	PREMIUM
ALTA Standard Owner's Policy 2006 **Owner's Standard (Short Term Rate)**	$ 7,100,000.00	$ 8,438.00
ALTA Extended Loan Policy 2006 **Extended Lender's**	$ TBD	$ TBD
OTIRO 222-06 - Location (ALTA 22-06)		$ 0.00
OTIRO 209.10-06 - Restrictions, Encroachments, Minerals - Current Violations (ALTA 9.10-06)		$ 100.00
Government Lien Search		$ 30.00

2. THE ESTATE OR INTEREST IN THE LAND HEREINAFTER DESCRIBED OR REFERRED TO COVERED BY THIS REPORT IS:

   A Fee

3. TITLE TO SAID ESTATE OR INTEREST AT THE DATE HEREOF IS VESTED IN:

   GDI RE Acquisition LLC, a Delaware limited liability company

4. THE LAND REFERRED TO IN THIS REPORT IS SITUATED IN THE CITY OF OREGON CITY, COUNTY OF CLACKAMAS, STATE OF OREGON, AND IS DESCRIBED AS FOLLOWS:

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

Order No.: 472518001742

EXHIBIT "A"

Legal Description

Lots 2 and 3, CLAIRMONT ACREAGE TRACTS NO. 3, in the City of Oregon City, County of Clackamas and State of Oregon.

Order No.: 472518001742

AS OF THE DATE OF THIS REPORT, ITEMS TO BE CONSIDERED AND EXCEPTIONS TO COVERAGE IN ADDITION TO THE PRINTED EXCEPTIONS AND EXCLUSIONS IN THE POLICY FORM WOULD BE AS FOLLOWS:

GENERAL EXCEPTIONS:

1. Taxes or assessments which are not shown as existing liens by the records of any taxing authority that levies taxes or assessments on real property or by the Public Records; proceedings by a public agency which may result in taxes or assessments, or notices of such proceedings, whether or not shown by the records of such agency or by the Public Records.

2. Any facts, rights, interests or claims, which are not shown by the Public Records but which could be ascertained by an inspection of the Land or by making inquiry of persons in possession thereof.

3. Easements, or claims of easement, which are not shown by the Public Records; reservations or exceptions in patents or in Acts authorizing the issuance thereof; water rights, claims or title to water.

4. Any encroachment (of existing improvements located on the Land onto adjoining land or of existing improvements located on adjoining land onto the subject Land), encumbrance, violation, variation or adverse circumstance affecting the Title that would be disclosed by an accurate and complete land survey of the subject Land.

5. Any lien or right to a lien for services, labor, material, equipment rental or workers compensation heretofore or hereafter furnished, imposed by law and not shown by the Public Records.

SPECIFIC ITEMS AND EXCEPTIONS:

6. City Liens, if any, in favor of the City of Oregon City. None found as of April 13, 2018.

NOTE: Said city lien search disclosed a balance of $730.83 for the monthly utilities. Please contact the City of Oregon City prior to closing to verify for any amounts that may be owing.

7. Waiver of Remonstrance and Consent to Local Improvement District:
Purpose: Local improvement district
Recording Date: June 24, 1992
Recording No.: 92-038577

8. Easement for the purpose shown below and rights incidental thereto, as granted in a document:
Granted to: The City of Oregon City
Purpose: Public utilities
Recording Date: November 18, 1992
Recording No.: 92-073642
Affects: The Northerly and Northwesterly portions

9. Easement for the purpose shown below and rights incidental thereto, as granted in a document:
Granted to: The City of Oregon City
Purpose: Public utilities
Recording Date: April 21, 1993
Recording No.: 93-026153
Affects: The Westerly portion

10. Easement for the purpose shown below and rights incidental thereto, as granted in a document:
Granted to: The City of Oregon City
Purpose: Public utilities
Recording Date: April 21, 1993
Recording No.: 93-026154
Affects: The Northerly and Northwesterly portions

11. Waiver of Remonstrance and Consent to Local Improvement District:
Purpose: Local improvement district
Recording Date: May 23, 2005
Recording No.: 2005-046765

12. Please be advised that our search did not disclose any open Deeds of Trust of record. If you should have knowledge of any outstanding obligation, please contact the Title Department immediately for further review prior to closing.

13. The Company will require the following documents for review prior to the issuance of any title insurance predicated upon a conveyance or encumbrance from the entity named below.
Limited Liability Company: GDI RE Acquisition LLC
a. A copy of its operating agreement, if any, and any and all amendments, supplements and/or modifications thereto, certified by the appropriate manager or member.
b. If a domestic Limited Liability Company, a copy of its Articles of Organization and all amendment thereto with the appropriate filing stamps.
c. If the Limited Liability Company is member-managed a full and complete current list of members certified by the appropriate manager or member.
d. A current dated certificate of good standing from the proper governmental authority of the state in which the entity was created
e. If less than all members, or managers, as appropriate, will be executing the closing documents, furnish evidence of the authority of those signing.

The Company reserves the right to add additional items or make further requirements after review of the requested documentation.

14. Facts, rights, interests or claims which are not shown by the public records but which could be ascertained by an inspection of the Land or by making inquiry of persons in possession thereof.

To remove this item, the Company will require an affidavit and indemnity on a form supplied by the Company.

15. Any lien or right to a lien for services, labor, material, equipment rental or workers compensation heretofore or hereafter furnished, imposed by law and not shown by the public records.

To remove this item, the Company will require an affidavit and indemnity on a form supplied by the Company.

ADDITIONAL REQUIREMENTS/NOTES:

A. NOTE: Property taxes for the fiscal year shown below are paid in full.
Fiscal Year: 2017-2018
Amount: $60,503.32
Levy Code: 062-002
Account No.: 00869509
Map No.: 32E09B 01101

Prior to close of escrow, please contact the Tax Collector's Office to confirm all amounts owing, including current fiscal year taxes, supplemental taxes, escaped assessments and any delinquencies.

B. NOTE: The Company will require the following documents for review prior to the issuance of any title insurance predicated upon a conveyance or encumbrance by the corporation named below:
Name of Corporation: The City of Oregon City
a) A Copy of the corporation By-laws and Articles of Incorporation
b) An original or certified copy of a resolution authorizing the transaction contemplated herein
c) If the Articles and/or By-laws require approval by a 'parent' organization, a copy of the Articles and By-laws of the parent
d) A current dated certificate of good standing from the proper governmental authority of the state in which the entity was created

The Company reserves the right to add additional items or make further requirements after review of the requested documentation.

C. In addition to the standard policy exceptions, the exceptions enumerated above shall appear on the final 2006 ALTA Policy unless removed prior to issuance.

D. NOTE: No utility search has been made or will be made for water, sewer or storm drainage charges unless the City/Service District claims them as liens (i.e. foreclosable) and reflects them on its lien docket as of the date of closing. Buyers should check with the appropriate city bureau or water service district and obtain a billing cutoff. Such charges must be adjusted outside of escrow.

E. NOTE: The only conveyance affecting said Land, which recorded within 24 months of the date of this report, are as follows:
Warranty Deed
Grantor: General Distributors, Inc., an Oregon corporation
Grantee: GDI RE Acquisition LLC, a Delaware limited liability company
Recording Date: March 29, 2018
Recording No.: 2018-019432

F. NOTE: The following are required when a principal to the proposed transaction is an instrumentality of the state, such as a municipality, a county or other governmental body:
- Certification, with supporting documentation, that the board or other governing authority of the governmental body has approved the transaction in accordance with applicable practices, procedures, rules, ordinances and statutes.
- Certification that a named person or persons, identified by name and position, are authorized to act on behalf of the governmental body in the proposed transaction.
- Verification of the current legal name and good standing of the governmental body when it is a local governmental body other than a city or county.

WARNING REGARDING DEED OR CONTRACT TO TAX-EXEMPT GOVERNMENTAL TRANSFEREE. Oregon law prohibits the county recording officer from recording a deed or contract to a tax-exempt governmental transferee, unless the deed or contract is accompanied by a certificate of payment of ad valorem county taxes. The certificate must be attested by the county assessor using a form prescribed by the Oregon Department of Revenue. Failure to allow adequate time for obtaining a certificate of payment may delay recording. This requirement is contained in Chapter 96, Oregon Laws 2015, effective Oct. 5, 2015.

G. NOTE: Effective January 1, 2008, Oregon law (ORS 314.258) mandates withholding of Oregon income taxes from sellers who do not continue to be Oregon residents or qualify for an exemption. Please contact your Escrow Closer for further information.

H. THE FOLLOWING NOTICE IS REQUIRED BY STATE LAW: YOU WILL BE REVIEWING, APPROVING AND SIGNING IMPORTANT DOCUMENTS AT CLOSING. LEGAL CONSEQUENCES FOLLOW FROM THE SELECTION AND USE OF THESE DOCUMENTS. YOU MAY CONSULT AN ATTORNEY ABOUT THESE DOCUMENTS. YOU SHOULD CONSULT AN ATTORNEY IF YOU HAVE QUESTIONS OR CONCERNS ABOUT THE TRANSACTION OR ABOUT THE DOCUMENTS. IF YOU WISH TO REVIEW TRANSACTION DOCUMENTS THAT YOU HAVE NOT SEEN, PLEASE CONTACT THE ESCROW AGENT.

I. NOTE: This map/plat is being furnished as an aid in locating the herein described Land in relation to adjoining streets, natural boundaries and other land. Except to the extent a policy of title insurance is expressly modified by endorsement, if any, the Company does not insure dimensions, distances or acreage shown thereon.

J. Recording Charge (Per Document) is the following:

County	First Page	Each Additional Page
Clackamas	$53.00	$5.00

NOTE: When possible the company will record electronically. An additional charge of $5.00 applies to each document that is recorded electronically.

K. NOTICE: Please be aware that due to the conflict between federal and state laws concerning the cultivation, distribution, manufacture or sale of marijuana, the Company is not able to close or insure any transaction involving Land that is associated with these activities.

EXHIBIT ONE

2006 AMERICAN LAND TITLE ASSOCIATION LOAN POLICY (06-17-06)
EXCLUSIONS FROM COVERAGE

The following matters are expressly excluded from the coverage of this policy and the Company will not pay loss or damage, costs, attorneys' fees or expenses that arise by reason of:

1. (a) Any law, ordinance or governmental regulation (including but not limited to building and zoning) restricting, regulating, prohibiting or relating to
   (i) the occupancy, use, or enjoyment of the Land;
   (ii) the character, dimensions or location of any improvement erected on the land;
   (iii) the subdivision of land; or
   (iv) environmental protection;
   or the effect of any violation of these laws, ordinances or governmental regulations. This Exclusion 1(a) does not modify or limit the coverage provided under Covered Risk 5.
   (b) Any governmental police power. This Exclusion 1(b) does not modify or limit the coverage provided under Covered Risk 6.
2. Rights of eminent domain. This Exclusion does not modify or limit the coverage provided under Covered Risk 7 or 8.
3. Defects, liens, encumbrances, adverse claims, or other matters
   (a) created, suffered, assumed or agreed to by the Insured Claimant;
   (b) not known to the Company, not recorded in the Public Records at Date of Policy, but known to the Insured Claimant and not disclosed in writing to the Company by the Insured Claimant prior to the date the Insured Claimant became an Insured under this policy;
   (c) resulting in no loss or damage to the Insured Claimant;
   (d) attaching or created subsequent to Date of Policy (however, this does not modify or limit the coverage provided under Covered Risk 11, 13, or 14); or
   (e) resulting in loss or damage that would not have been sustained if the Insured Claimant had paid value for the Insured Mortgage.
4. Unenforceability of the lien of the Insured Mortgage because of the inability or failure of an Insured to comply with the applicable doing-business laws of the state where the Land is situated.
5. Invalidity or unenforceability in whole or in part of the lien of the Insured Mortgage that arises out of the transaction evidenced by the Insured Mortgage and is based upon usury or any consumer credit protection or truth-in-lending law.
6. Any claim, by reason of the operation of federal bankruptcy, state insolvency or similar creditors' rights laws, that the transaction creating the lien of the Insured Mortgage, is
   (a) a fraudulent conveyance or fraudulent transfer, or
   (b) a preferential transfer for any reason not stated in the Covered Risk 13(b) of this policy.
7. Any lien on the Title for real estate taxes or assessments imposed by governmental authority and created or attaching between Date of Policy and the date of recording of the Insured Mortgage in the Public Records. This Exclusion does not modify or limit the coverage provided under Covered Risk 11(b).

The above policy form may be issued to afford either Standard Coverage or Extended Coverage. In addition to the above Exclusions from Coverage, the Exceptions from Coverage in a Standard Coverage policy will also include the following Exceptions from Coverage.

SCHEDULE B - GENERAL EXCEPTIONS FROM COVERAGE

This policy does not insure against loss or damage (and the Company will not pay costs, attorneys' fees or expenses) which arise by reason of:

1. Taxes or assessments which are not shown as existing liens by the records of any taxing authority that levies taxes or assessments on real property or by the Public Records; proceedings by a public agency which may result in taxes or assessments, or notices of such proceedings, whether or not shown by the records of such agency or by the Public Records.
2. Facts, rights, interests or claims which are not shown by the Public Records but which could be ascertained by an inspection of the Land or by making inquiry of persons in possession thereof.
3. Easements, or claims of easement, not shown by the Public Records; reservations or exceptions in patents or in Acts authorizing the issuance thereof, water rights, claims or title to water.
4. Any encroachment, encumbrance, violation, variation, or adverse circumstance affecting the Title that would be disclosed by an accurate and complete land survey of the Land. The term "encroachment" includes encroachments of existing improvements located on the Land onto adjoining land, and encroachments onto the Land of existing improvements located on adjoining land.
5. Any lien for services, labor or material heretofore or hereafter furnished, or for contributions due to the State of Oregon for unemployment compensation or worker's compensation, imposed by law and not shown by the Public Records.

2006 AMERICAN LAND TITLE ASSOCIATION OWNER'S POLICY (06-17-06)
EXCLUSIONS FROM COVERAGE

The following matters are expressly excluded from the coverage of this policy and the Company will not pay loss or damage, costs, attorneys' fees or expenses that arise by reason of:

1. (a) Any law, ordinance or governmental regulation (including but not limited to building and zoning) restricting, regulating, prohibiting or relating to
   (i) the occupancy, use, or enjoyment of the Land;
   (ii) the character, dimensions or location of any improvement erected on the land;
   (iii) the subdivision of land; or
   (iv) environmental protection;
   or the effect of any violation of these laws, ordinances or governmental regulations. This Exclusion 1(a) does not modify or limit the coverage provided under Covered Risk 5.
   (b) Any governmental police power. This Exclusion 1(b) does not modify or limit the coverage provided under Covered Risk 6.
2. Rights of eminent domain. This Exclusion does not modify or limit the coverage provided under Covered Risk 7 or 8.
3. Defects, liens, encumbrances, adverse claims, or other matters
   (a) created, suffered, assumed or agreed to by the Insured Claimant;
   (b) not known to the Company, not recorded in the Public Records at Date of Policy, but known to the Insured Claimant and not disclosed in writing to the Company by the Insured Claimant prior to the date the Insured Claimant became an Insured under this policy;
   (c) resulting in no loss or damage to the Insured Claimant;
   (d) attaching or created subsequent to Date of Policy (however, this does not modify or limit the coverage provided under Covered Risk 9 and 10); or
   (e) resulting in loss or damage that would not have been sustained if the Insured Claimant had paid value for the Title.
4. Any claim, by reason of the operation of federal bankruptcy, state insolvency or similar creditors' rights laws, that the transaction creating the lien of the Insured Mortgage, is
   (a) a fraudulent conveyance or fraudulent transfer, or
   (b) a preferential transfer for any reason not stated in the Covered Risk 9 of this policy.
7. Any lien on the Title for real estate taxes or assessments imposed by governmental authority and created or attaching between Date of Policy and the date of recording of the deed or other instrument of transfer in the Public Records that vests Title as shown in Schedule A.

The above policy form may be issued to afford either Standard Coverage or Extended Coverage. In addition to the above Exclusions from Coverage, the Exceptions from Coverage in a Standard Coverage policy will also include the following Exceptions from Coverage.

SCHEDULE B - GENERAL EXCEPTIONS FROM COVERAGE

This policy does not insure against loss or damage (and the Company will not pay costs, attorneys' fees or expenses) which arise by reason of:

1. Taxes or assessments which are not shown as existing liens by the records of any taxing authority that levies taxes or assessments on real property or by the Public Records; proceedings by a public agency which may result in taxes or assessments, or notices of such proceedings, whether or not shown by the records of such agency or by the Public Records.
2. Facts, rights, interests or claims which are not shown by the Public Records but which could be ascertained by an inspection of the Land or by making inquiry of persons in possession thereof.
3. Easements, or claims of easement, not shown by the Public Records; reservations or exceptions in patents or in Acts authorizing the issuance thereof, water rights, claims or title to water.
4. Any encroachment, encumbrance, violation, variation, or adverse circumstance affecting the Title that would be disclosed by an accurate and complete land survey of the Land. The term "encroachment" includes encroachments of existing improvements located on the Land onto adjoining land, and encroachments onto the Land of existing improvements located on adjoining land.
5. Any lien for services, labor or material heretofore or hereafter furnished, or for contributions due to the State of Oregon for unemployment compensation or worker's compensation, imposed by law and not shown by the Public Records.

WIRE SAFE™ | Inquire before you wire!

WIRE FRAUD ALERT

This Notice is not intended to provide legal or professional advice. If you have any questions, please consult with a lawyer.

All parties to a real estate transaction are targets for wire fraud and many have lost hundreds of thousands of dollars because they simply relied on the wire instructions received via email, without further verification. **If funds are to be wired in conjunction with this real estate transaction, we strongly recommend verbal verification of wire instructions through a known, trusted phone number prior to sending funds.**

In addition, the following non-exclusive self-protection strategies are recommended to minimize exposure to possible wire fraud.

- **NEVER RELY** on emails purporting to change wire instructions. Parties to a transaction rarely change wire instructions in the course of a transaction.
- **ALWAYS VERIFY** wire instructions, specifically the ABA routing number and account number, by calling the party who sent the instructions to you. DO NOT use the phone number provided in the email containing the instructions, use phone numbers you have called before or can otherwise verify. **Obtain the number of relevant parties to the transaction as soon as an escrow account is opened.** DO NOT send an email to verify as the email address may be incorrect or the email may be intercepted by the fraudster.
- **USE COMPLEX EMAIL PASSWORDS** that employ a combination of mixed case, numbers, and symbols. Make your passwords greater than eight (8) characters. Also, change your password often and do NOT reuse the same password for other online accounts.
- **USE MULTI-FACTOR AUTHENTICATION** for email accounts. Your email provider or IT staff may have specific instructions on how to implement this feature.

For more information on wire-fraud scams or to report an incident, please refer to the following links:

Federal Bureau of Investigation:
http://www.fbi.gov

Internet Crime Complain Center:
http://www.ic3.gov

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FIDELITY NATIONAL FINANCIAL
PRIVACY NOTICE
Effective: May 1, 2015; Last Updated: March 1, 2017

At Fidelity National Financial, Inc., we respect and believe it is important to protect the privacy of consumers and our customers. This Privacy Notice explains how we collect, use, and protect any information that we collect from you, when and to whom we disclose such information, and the choices you have about the use of that information. A summary of the Privacy Notice is below, and we encourage you to review the entirety of the Privacy Notice following this summary. You can opt-out of certain disclosures by following our opt-out procedure set forth at the end of this Privacy Notice.

Types of Information Collected. You may provide us with certain personal information about you, like your contact information, address demographic information, social security number (SSN), driver's license, passport, other government ID numbers and/or financial information. We may also receive browsing information from your Internet browser, computer and/or mobile device if you visit or use our websites or applications.	**How Information is Collected**. We may collect personal information from you via applications, forms, and correspondence we receive from you and others related to our transactions with you. When you visit our websites from your computer or mobile device, we automatically collect and store certain information available to us through your Internet browser or computer equipment to optimize your website experience.
Use of Collected Information. We request and use your personal information to provide products and services to you, to improve our products and services, and to communicate with you about these products and services. We may also share your contact information with our affiliates for marketing purposes.	**When Information Is Disclosed**. We may disclose your information to our affiliates and/or nonaffiliated parties providing services for you or us, to law enforcement agencies or governmental authorities, as required by law, and to parties whose interest in title must be determined.
Choices With Your Information. Your decision to submit information to us is entirely up to you. You can opt-out of certain disclosure or use of your information or choose to not provide any personal information to us.	**Information From Children**. We do not knowingly collect information from children who are under the age of 13, and our website is not intended to attract children.
Privacy Outside the Website. We are not responsible for the privacy practices of third parties, even if our website links to those parties' websites.	**International Users**. By providing us with your information, you consent to its transfer, processing and storage outside of your country of residence, as well as the fact that we will handle such information consistent with this Privacy Notice.
The California Online Privacy Protection Act. Some FNF companies provide services to mortgage loan servicers and, in some cases, their websites collect information on behalf of mortgage loan servicers. The mortgage loan servicer is responsible for taking action or making changes to any consumer information submitted through those websites.	
Your Consent To This Privacy Notice. By submitting information to us or by using our website, you are accepting and agreeing to the terms of this Privacy Notice.	**Access and Correction; Contact Us**. If you desire to contact us regarding this notice or your information, please contact us at privacy@fnf.com or as directed at the end of this Privacy Notice.

FIDELITY NATIONAL FINANCIAL
PRIVACY NOTICE
Effective: May 1, 2015; Last Updated: March 1, 2017

Fidelity National Financial, Inc. and its majority-owned subsidiary companies providing title insurance, real estate- and loan-related services (collectively, "FNF", "our" or "we") respect and are committed to protecting your privacy. We will take reasonable steps to ensure that your Personal Information and Browsing Information will only be used in compliance with this Privacy Notice and applicable laws. This Privacy Notice is only in effect for Personal Information and Browsing Information collected and/or owned by or on behalf of FNF, including Personal Information and Browsing Information collected through any FNF website, online service or application (collectively, the "Website").

Types of Information Collected

We may collect two types of information from you: Personal Information and Browsing Information.

Personal Information. FNF may collect the following categories of Personal Information:
- contact information (*e.g.*, name, address, phone number, email address);
- demographic information (*e.g.*, date of birth, gender, marital status);
- social security number (SSN), driver's license, passport, and other government ID numbers;
- financial account information; and
- other personal information needed from you to provide title insurance, real estate- and loan-related services to you.

Browsing Information. FNF may collect the following categories of Browsing Information:
- Internet Protocol (or IP) address or device ID/UDID, protocol and sequence information;
- browser language and type;
- domain name system requests;
- browsing history, such as time spent at a domain, time and date of your visit and number of clicks;
- http headers, application client and server banners; and
- operating system and fingerprinting data.

How Information is Collected

In the course of our business, we may collect *Personal Information* about you from the following sources:
- applications or other forms we receive from you or your authorized representative;
- the correspondence you and others send to us;
- information we receive through the Website;
- information about your transactions with, or services performed by, us, our affiliates or nonaffiliated third parties; and
- information from consumer or other reporting agencies and public records maintained by governmental entities that we obtain directly from those entities, our affiliates or others.

If you visit or use our Website, we may collect *Browsing Information* from you as follows:
- Browser Log Files. Our servers automatically log each visitor to the Website and collect and record certain browsing information about each visitor. The Browsing Information includes generic information and reveals nothing personal about the user.
- Cookies. When you visit our Website, a "cookie" may be sent to your computer. A cookie is a small piece of data that is sent to your Internet browser from a web server and stored on your computer's hard drive. When you visit a website again, the cookie allows the website to recognize your computer. Cookies may store user preferences and other information. You can choose whether or not to accept cookies by changing your Internet browser settings, which may impair or limit some functionality of the Website.

Use of Collected Information

Information collected by FNF is used for three main purposes:
- To provide products and services to you or any affiliate or third party who is obtaining services on your behalf or in connection with a transaction involving you.
- To improve our products and services.
- To communicate with you and to inform you about our, our affiliates' and third parties' products and services, jointly or independently.

When Information Is Disclosed

We may provide your Personal Information (excluding information we receive from consumer or other credit reporting agencies) and Browsing Information to various individuals and companies, as permitted by law, without obtaining your prior authorization. Such laws do not allow consumers to restrict these disclosures. Please see the section "Choices With Your Personal Information" to learn how to limit the discretionary disclosure of your Personal Information and Browsing Information.

Disclosures of your Personal Information may be made to the following categories of affiliates and nonaffiliated third parties:

- to third parties to provide you with services you have requested, and to enable us to detect or prevent criminal activity, fraud, material misrepresentation, or nondisclosure;
- to our affiliate financial service providers for their use to market their products or services to you;
- to nonaffiliated third party service providers who provide or perform services on our behalf and use the disclosed information only in connection with such services;
- to nonaffiliated third party service providers with whom we perform joint marketing, pursuant to an agreement with them to market financial products or services to you;
- to law enforcement or other governmental authority in connection with an investigation, or civil or criminal subpoena or court order;
- to lenders, lien holders, judgment creditors, or other parties claiming an interest in title whose claim or interest must be determined, settled, paid, or released prior to closing; and
- other third parties for whom you have given us written authorization to disclose your Personal Information.

We may disclose Personal Information and/or Browsing Information when required by law or in the good-faith belief that such disclosure is necessary to:

- comply with a legal process or applicable laws;
- enforce this Privacy Notice;
- investigate or respond to claims that any material, document, image, graphic, logo, design, audio, video or any other information provided by you violates the rights of a third party; or
- protect the rights, property or personal safety of FNF, its users or the public.

We maintain reasonable safeguards to keep your Personal Information secure. When we provide Personal Information to our affiliates or third party service providers as discussed in this Privacy Notice, we expect that these parties process such information in compliance with our Privacy Notice or in a manner that is in compliance with applicable privacy laws. The use of your information by a business partner may be subject to that party's own Privacy Notice. Unless permitted by law, we do not disclose information we collect from consumer or credit reporting agencies with our affiliates or others without your consent.

We reserve the right to transfer your Personal Information, Browsing Information, and any other information, in connection with the sale or other disposition of all or part of the FNF business and/or assets, or in the event of our bankruptcy, reorganization, insolvency, receivership or an assignment for the benefit of creditors. You expressly agree and consent to the use and/or transfer of the foregoing information in connection with any of the above described proceedings. We cannot and will not be responsible for any breach of security by a third party or for any actions of any third party that receives any of the information that is disclosed to us.

Choices With Your Information

Whether you submit Personal Information or Browsing Information to FNF is entirely up to you. If you decide not to submit Personal Information or Browsing Information, FNF may not be able to provide certain services or products to you. The uses of your Personal Information and/or Browsing Information that, by law, you cannot limit, include:

- for our everyday business purposes – to process your transactions, maintain your account(s), to respond to law enforcement or other governmental authority in connection with an investigation, or civil or criminal subpoenas or court orders, or report to credit bureaus;
- for our own marketing purposes;
- for joint marketing with financial companies; and
- for our affiliates' everyday business purposes – information about your transactions and experiences.

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- for our affiliates' everyday business purposes – information about your creditworthiness; and
- for our affiliates to market to you.

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The Website is meant for adults and is not intended or designed to attract children under the age of thirteen (13).We do not collect Personal Information from any person that we know to be under the age of thirteen (13) without permission from a parent or guardian. By using the Website, you affirm that you are over the age of 13 and will abide by the terms of this Privacy Notice.

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The California Online Privacy Protection Act

For some FNF websites, such as the Customer CareNet ("CCN"), FNF is acting as a third party service provider to a mortgage loan servicer. In those instances, we may collect certain information on behalf of that mortgage loan servicer via the website. The information which we may collect on behalf of the mortgage loan servicer is as follows:

- first and last name;
- property address;
- user name and password;
- loan number;
- social security number - masked upon entry;
- email address;
- three security questions and answers; and
- IP address.

The information you submit through the website is then transferred to your mortgage loan servicer by way of CCN.

The mortgage loan servicer is responsible for taking action or making changes to any consumer information submitted through this website. For example, if you believe that your payment or user information is incorrect, you must contact your mortgage loan servicer.

CCN does not share consumer information with third parties, other than (1) those with which the mortgage loan servicer has contracted to interface with the CCN application, or (2) law enforcement or other governmental authority in connection with an investigation, or civil or criminal subpoenas or court orders. All sections of this Privacy Notice apply to your interaction with CCN, except for the sections titled "Choices with Your Information" and "Access and Correction." If you have questions regarding the choices you have with regard to your personal information or how to access or correct your personal information, you should contact your mortgage loan servicer.

Your Consent To This Privacy Notice

By submitting Personal Information and/or Browsing Information to FNF, you consent to the collection and use of the information by us in compliance with this Privacy Notice. Amendments to the Privacy Notice will be posted on the Website. Each time you provide information to us, or we receive information about you, following any amendment of this Privacy Notice will signify your assent to and acceptance of its revised terms for all previously collected information and information collected from you in the future. We may use comments, information or feedback that you submit to us in any manner that we may choose without notice or compensation to you.

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If you have questions, would like to access or correct your Personal Information, or want to opt-out of information sharing with our affiliates for their marketing purposes, please send your requests to privacy@fnf.com or by mail or phone to:

Fidelity National Financial, Inc.
601 Riverside Avenue
Jacksonville, Florida 32204
Attn: Chief Privacy Officer
(888) 934-3354

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Clackamas County Official Records
Sherry Hall, County Clerk
2018-019432
03/29/2018 02:56:00 PM
D-D Cnt=1 Stn=73 KARLYN
$20.00 $16.00 $10.00 $22.00
$68.00

AFTER RECORDING, RETURN TO:

James K. Hein, Esq.
Tonkon Torp LLP
888 SW Fifth Avenue, Suite 1600
Portland, OR 97204

UNTIL A CHANGE IS REQUESTED,
SEND ALL TAX STATEMENTS TO:

GDI RE Acquisition LLC
c/o CoHo Distributing LLC
6840 N. Cutter Circle
Portland, OR 97217

Chicago Title © 47251800479-SD comm

SPECIAL WARRANTY DEED

GENERAL DISTRIBUTORS, INC., an Oregon corporation, Grantor, conveys and specially warrants to GDI RE ACQUISITION LLC, a Delaware limited liability company, Grantee, that certain real property located in Clackamas County, Oregon, and more particularly described on Exhibit A attached hereto, free of all liens and encumbrances created or suffered by Seller except those set forth on Exhibit B attached hereto.

The true consideration for this conveyance is $7,342,067.

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

DATED this 28th day of March, 2018.

GRANTOR:

GENERAL DISTRIBUTORS, INC., an Oregon corporation

By: Charles A. Fick III
Charles A. Fick, III, President

STATE OF OREGON)
) ss.
County of Multnomah)

The foregoing instrument was acknowledged before me on the 28 day of March, 2018, by Charles A. Fick, III, as President of General Distributors, Inc., an Oregon corporation.

Notary Public for Oregon
My commission expires: 10/25/20

OFFICIAL STAMP
DONNA LEE TOWNSEND
NOTARY PUBLIC-OREGON
COMMISSION NO. 955751
MY COMMISSION EXPIRES OCTOBER 25, 2020

034576/00071/8833874v3

EXHIBIT A

Legal Description

Lots 2 and 3, CLAIRMONT ACREAGE TRACTS NO. 3, in the City of Oregon City, County of Clackamas and State of Oregon.

EXHIBIT B

Permitted Exceptions

1. The lien, if any, for real estate taxes due and payable for the year 2018-2019 and subsequent periods, which are not yet due and payable or delinquent.

2. Provisions of existing building or zoning laws.

3. Such matters as would be evidenced by an accurate survey of the subject property.

4. Waiver of Remonstrance and Consent to Local Improvement District:
   Purpose: Local improvement district
   Recording Date: June 24, 1992
   Recording No.: 92-038577

5. Easement for the purpose shown below and rights incidental thereto, as granted in a document:
   Granted to: The City of Oregon City
   Purpose: Public utilities
   Recording Date: November 18, 1992
   Recording No.: 92-073642
   Affects: The Northerly and Northwesterly portions

6. Easement for the purpose shown below and rights incidental thereto, as granted in a document:
   Granted to: The City of Oregon City
   Purpose: Public utilities
   Recording Date: April 21, 1993
   Recording No.: 93-026153
   Affects: The Westerly portion

7. Easement for the purpose shown below and rights incidental thereto, as granted in a document:
   Granted to: The City of Oregon City
   Purpose: Public utilities
   Recording Date: April 21, 1993
   Recording No.: 93-026154
   Affects: The Northerly and Northwesterly portions

8. Waiver of Remonstrance and Consent to Local Improvement District:
   Purpose: Local improvement district
   Recording Date: May 23, 2005
   Recording No.: 2005-046765

OCMC | NARRATIVE

Chapter 17.52 Off-Street Parking and Loading

17.52.010 - Applicability.

The construction of a new structure or parking lot, or alterations to the size or use of an existing structure, parking lot or property use shall require site plan review approval and compliance with this chapter. This chapter does not apply to single-family attached, detached residential dwellings and duplexes.

Applicant's Response:

The applicant acknowledges and understands the proposed development will require site plan review approval and compliance with OCMC 17.52.

17.52.015 - Planning commission adjustment of parking standards.

A. Purpose: The purpose of permitting a Planning Commission adjustment to parking standards is to provide for flexibility in modifying parking standards in all zoning districts, without permitting an adjustment that would adversely impact the surrounding or planned neighborhood. Adjustments provide flexibility to those uses which may be extraordinary, unique, or provide greater flexibility for areas that can accommodate a denser development pattern based on existing infrastructure and ability to access the site by means of walking, biking or transit. An adjustment to a minimum parking standard may be approved based on a determination by the Planning Commission that the adjustment is consistent with the purpose of this Code, and the approval criteria can be met.

B. Procedure: A request for a Planning Commission parking adjustment shall be initiated by a property owner or authorized agent by filing a land use application. The application shall be accompanied by a site plan, drawn to scale, showing the dimensions and arrangement of the proposed development and parking plan, the extent of the adjustment requested along with findings for each applicable approval criteria. A request for a parking adjustment shall be processed as a Type III application as set forth in Chapter 17.50.

Applicant's Response:

The applicant acknowledges and understands the purpose and procedure for an adjustment to the minimum parking standards. The OCPW is not requesting an adjustment to the minimum parking standard, therefore, this section is not applicable.

C. Approval criteria for the adjustment are as follows:

1. Documentation: The applicant shall document that the individual project will require an amount of parking that is different from that required after all applicable reductions have been taken.

Applicant's Response:
The OCPW is not requesting an adjustment to the minimum parking standard, therefore, this section is not applicable.

2. *Parking analysis for surrounding uses and on-street parking availability: The applicant shall show that there is a continued fifteen percent parking vacancy in the area adjacent to the use during peak parking periods and that the applicant has permission to occupy this area to serve the use pursuant to the procedures set forth by the Community Development Director.*
    a. *For the purposes of demonstrating the availability of on street parking as defined in OCMC 17.52.020.B.3., the applicant shall undertake a parking study during time periods specified by the Community Development Director. The time periods shall include those during which the highest parking demand is anticipated by the proposed use. Multiple observations during multiple days shall be required. Distances are to be calculated as traversed by a pedestrian that utilizes sidewalks and legal crosswalks or an alternative manner as accepted by the Community Development Director.*
    b. *The onsite parking requirements may be reduced based on the parking vacancy identified in the parking study. The amount of the reduction in onsite parking shall be calculated as follows:*
        i. *Vacant on-street parking spaces within three hundred feet of the site will reduce onsite parking requirements by 0.5 parking spaces; and*
        ii. *Vacant on-street parking spaces between three hundred and six hundred feet of the site will reduce onsite parking requirements by 0.2 parking spaces.*

Applicant's Response:
The OCPW is not requesting an adjustment to the minimum parking standard, therefore, this section is not applicable.

3. *Function and Use of Site: The applicant shall demonstrate that modifying the amount of required parking spaces will not significantly impact the use or function of the site and/or adjacent sites.*

Applicant's Response:
The OCPW is not requesting an adjustment to the minimum parking standard, therefore, this section is not applicable.

4. *Compatibility: The proposal is compatible with the character, scale and existing or planned uses of the surrounding neighborhood.*

Applicant's Response:
The OCPW is not requesting an adjustment to the minimum parking standard, therefore, this section is not applicable.

5. *Safety: The proposal does not significantly impact the safety of adjacent properties and rights-of-way.*

Applicant's Response:
The OCPW is not requesting an adjustment to the minimum parking standard, therefore, this section is not applicable.

6. *Services: The proposal will not create a significant impact to public services, including fire and emergency services.*

Applicant's Response:
The OCPW is not requesting an adjustment to the minimum parking standard, therefore, this section is not applicable.

17.52.020 - Number of automobile spaces required.

A. *The number of parking spaces shall comply with the minimum and maximum standards listed in Table 17.52.020. The parking requirements are based on spaces per one thousand square feet net leasable area unless otherwise stated.*

Table 17.52.020		
LAND USE	*PARKING REQUIREMENTS*	
	MINIMUM	*MAXIMUM*
Multifamily Residential	*1.00 per unit*	*2.5 per unit*
3-4 Plex Residential	*2.00*	*4*
Hotel, Motel	*1.0 per guest room*	*1.25 per guest room*
Correctional Institution	*1 per 7 beds*	*1 per 5 beds*
Senior housing, including congregate care, residential care and assisted living facilities; nursing homes and other types of group homes	*1 per 7 beds*	*1 per 5 beds*
Hospital	*2.00*	*4.00*
Preschool Nursery/Kindergarten	*2.00*	*3.00*
Elementary/Middle School	*1 per classroom*	*1 per classroom + 1 per administrative employee + 0.25 per seat in auditorium/assembly room/stadium*
High School, College, Commercial School for Adults	*0.20 per # staff and students*	*0.30 per # staff and students*
Auditorium, Meeting Room, Stadium, Religious Assembly Building, movie theater,	*.25 per seat*	*0.5 per seat*
Retail Store, Shopping Center, Restaurants	*4.10*	*5.00*
Office	*2.70*	*3.33*

Medical or Dental Clinic	*2.70*	*3.33*
Sports Club, Recreation Facilities	*Case Specific*	*5.40*
Storage Warehouse, Freight Terminal	*0.30*	*0.40*
Manufacturing, Wholesale Establishment	*1.60*	*1.67*
Light Industrial, Industrial Park	*1.3*	*1.60*

1. *Multiple Uses. In the event several uses occupy a single structure or parcel of land, the total requirements for off-street parking shall be the sum of the requirements of the several uses computed separately.*

Applicant's Response:
The proposed development includes multiple uses that are used to calculate the allowable parking spaces. The following calculation is used to determine the min and max. parking space quantities.

Office: 23,700 Min 62 Max 77
Light Industrial: 5,638 Min 7 Max 8

Total: Min 69 Max 85 (Existing parking spaces: 110)

Total Proposed: 69 staff & visitor spaces

The proposed 69 parking spaces indicated above are considered staff and visitor parking. In addition, the development will provide 98 of fleet vehicle and equipment parking storage spaces that are to be contained within the existing secured fenced storage area. In the GI General Industrial zone, fleet vehicle and equipment parking are not included in the allowed parking space quantities.

2. *Requirements for types of buildings and uses not specifically listed herein shall be determined by the Community Development Director, based upon the requirements of comparable uses listed.*

Applicant's Response:
The applicant acknowledges and understands that the Community Development Director may determine parking requirements for buildings not indicated in Table 17.52.020.

3. *Where calculation in accordance with the above list results in a fractional space, any fraction less than one-half shall be disregarded and any fraction of one-half or more shall require one space.*

Applicant's Response:
Any resulting fractions from the parking calculation were rounded up or down per the standard.

4. *Fleet vehicle parking shall be accommodated within the maximum parking ratio, except that in GI, CI, and MUE zones, fleet vehicle parking may be included in a parking lot in addition to the maximum number of permitted parking spaces.*

Applicant's Response:
Based on the needs and uses of the OCPW the provided parking summary exhibit includes storage spaces dedicated to OCPW equipment and vehicles that are essential to the city's daily operations. The indicated fleet storage parking is understood to be in addition to the MIN and MAX parking requirements.

5. *A change in use within an existing habitable building located in the MUD Design District or the Willamette Falls Downtown District is exempt from additional parking requirements. Additions to an existing building and new construction are required to meet the minimum parking requirements for the areas as specified in Table 17.52.020 for the increased square footage.*

Applicant's Response:
The proposed development is not located with the MUD Design District, therefore, this standard is not applicable.

B. Parking requirements can be met either onsite, or offsite by meeting one or multiple of the following conditions:

1. *Parking may be located on the same site as the associated use which it is supporting.*

Applicant's Response:
The proposed development will meet the parking requirements onsite. No offsite parking is proposed.

2. Mixed Uses. If more than one type of land use occupies a single structure or parcel of land, the total requirements for off-street automobile parking shall be the sum of the requirements for all uses, unless it can be shown that the peak parking demands are actually less (e.g. the uses operate on different days or at different times of the day). In that case, the total requirements shall be reduced accordingly, up to a maximum reduction of fifty percent, as determined by the Community Development Director.

Applicant's Response:
Based on the provided parking summary and site plans office, industrial and warehouse use factors have been used to calculate the minimum and maximum parking quantities allowed.

3. *Shared Parking. Required parking facilities for two or more uses, structures, or parcels of land may be satisfied by the same parking facilities used jointly, to the extent that the owners or operators show that the need for parking facilities does not materially overlay (e.g., uses primarily of a daytime versus nighttime nature), that the shared parking facility is within one thousand feet of the potential uses, and provided that the right of joint use is evidenced by a recorded deed, lease, contract, or similar written instrument authorizing the joint use.*

Applicant's Response:
The proposed development does not include shared parking, therefore, the standard is not applicable.

4. *On-Street Parking. On-street parking may be counted toward the minimum standards when it is on the street face abutting the subject land use. An on-street parking space shall not obstruct a required clear vision area and it shall not violate any law or street standard. On-street parking for commercial uses shall conform to the following standards:*
   a. *Dimensions. The following constitutes one on-street parking space:*
      1. *Parallel parking: twenty-two feet of uninterrupted and available curb;*
      2. *Forty-five and/or sixty-degree diagonal parking: Fifteen feet of curb;*
      3. *Ninety-degree (perpendicular) parking: Twelve feet of curb.*
      4. *Public Use Required for Credit. On-street parking spaces counted toward meeting the parking requirements of a specific use may not be used exclusively by that use, but shall be available for general public use at all times. Signs or other actions that limit general public use of on-street spaces are prohibited.*

Applicant's Response:
The proposed development does not include on-street parking in the calculations used to determine the minimum and maximum parking quantities allowed.

C. *Reduction of the Number of the Minimum Automobile Spaces Required. Any combination of the reductions below is permitted unless otherwise noted.*
   1. *Downtown Parking Overlay. The minimum required number of parking stalls is reduced within the Downtown Parking Overlay by fifty percent.*
   2. *Transit Oriented Development. For projects not located within the Downtown Parking Overlay District, the minimum required number of parking stalls is reduced up to twenty-five percent when:*
      a. *In a commercial center (sixty thousand square feet or greater of retail or office use measured cumulatively within a five hundred foot radius) or*
      b. *When adjacent to multi-family development with over eighty units or*
      c. *Within 1,320 feet of an existing or planned public transit street and within 1,320 feet of the opposite use (commercial center or multi-family development with over eighty units).*

Applicant's Response:
The applicant is not requesting a reduction in the number of required automobile spaces required, therefore, this standard is not applicable.

3. *Tree Preservation. The Community Development Director may grant an adjustment to any standard of this requirement provided that the adjustment preserves a designated heritage tree or grove so that the reduction in the amount of required pavement can help preserve existing healthy trees in an undisturbed, natural condition.*

Applicant's Response:
The applicant acknowledges and understands the Community Development Director may grant an adjustment to any standard of this requirement provided the intent is to preserve a designated heritage or grove. The project parcel does not include a designated tree or grove nor is the OCPW requesting an adjustment to the standard, therefore, this section is not applicable.

4. *Transportation Demand Management. The Community Development Director shall reduce the required number of parking stalls up to twenty-five percent when a parking-traffic study prepared by a traffic engineer demonstrates alternative modes of transportation, including transit, bicycles, and walking, and/or special characteristics of the customer, client, employee or resident population will reduce expected vehicle use and parking space demand for this development, as compared to standard Institute of Transportation Engineers vehicle trip generation rates and further that the transportation demand management program promotes or achieves parking utilization lower than minimum city parking requirements.*

   A transportation demand management (TDM) program shall be developed to include strategies for reducing vehicle use and parking demand generated by the development and will be measured annually. If, at the annual assessment, the City determines the plan is not successful, the plan may be revised. If the City determines that no good-faith effort has been made to implement the plan, the City may take enforcement actions.

Applicant's Response:
The applicant is not requesting a reduction in the number of required automobile spaces required, therefore, this standard is not applicable.

5. *The minimum required number of stalls may be reduced by up to ten percent when the subject property is adjacent to an existing or planned fixed public transit route or within one thousand feet of an existing or planned transit stop.*

Applicant's Response:
The applicant is not requesting a reduction in the number of required automobile spaces required, therefore, this standard is not applicable.

17.52.030 - Standards for automobile parking.

A. *Access. Ingress and egress locations on public thoroughfares shall be located in the interests of public traffic safety and meet requirements of OCMC 16.12.035. Groups of more than four parking spaces shall be so located and served by driveways so that their use will require no backing movements or other maneuvering within a street right-of-way other than an alley.*

Applicant's Response:

All proposed parking areas of four or more spaces are located and served by driveways so that use of them require no backing movements or other maneuvering within a street right-of-way. Ingress and egress locations on Fir Street meet the requirements of OCMC 16.12.035.

B. Surfacing. Required off-street parking spaces and access aisles shall have paved surfaces adequately maintained. The use of pervious asphalt/concrete and alternative designs that reduce storm water runoff and improve water quality pursuant to the City's stormwater and low impact development design standards are encouraged.

Applicant's Response:
Due to the poor infiltration abilities of the existing soils composition the proposed development does not include any use of pervious asphalt/concrete or alternative stormwater designs.

C. Drainage. Drainage shall be designed in accordance with the requirements of OCMC 13.12 and the City public works stormwater and grading design standards.

Applicant's Response:
The proposed development's stormwater management and implementation is designed in accordance with the requirements of the OCMC 13.12 and the City public works stormwater and grading design standards.

D. Dimensional Standards.

1. Requirements for parking developed at varying angles are according to the table included in this section. A parking space shall not be less than seven feet in height when within a building or structure, and shall have access by an all-weather surface to a street or alley. Parking stalls in compliance with the American with Disabilities Act may vary in size in order to comply with the building division requirements. Up to thirty-five percent of the minimum required parking may be compact, while the remaining required parking stalls are designed to standard dimensions. The Community Development Director may approve alternative dimensions for parking stalls in excess of the minimum requirement which comply with the intent of this chapter.

Applicant's Response:
All proposed parking spaces meet the dimensional standards of the jurisdiction.

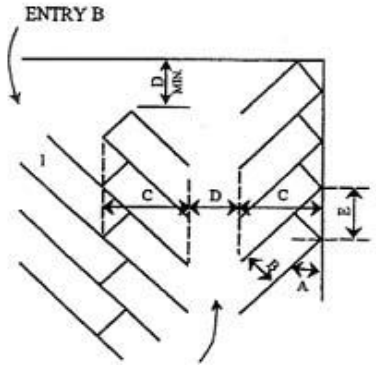
2. Alternative parking/plan. Any applicant may propose an alternative parking plan. Such plans are often proposed to address physically constrained or smaller sites, however innovative designs for larger sites may also be considered. In such situations, the Community Development Director may approve an alternative parking lot plan with variations to parking dimensions of this section. The alternative shall be consistent with the intent of this chapter and shall create a safe space for automobiles and pedestrians while providing landscaping to the quantity and quality found within parking lot landscaping requirements.

Applicant's Response:
The proposed development does not require an alternative parking plan.

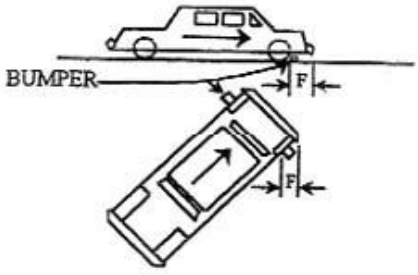
PARKING STANDARD
PARKING ANGLE SPACE DIMENSIONS

A Parking Angle		*B Stall Width*	*C Stall to Curb*	*D Aisle Width*	*E Curb Length*	*F Overhang*
0 degrees		*8.5*	*9.0*	*12*	*20*	*0*
30 degrees	*Standard* *Compact*	*9'* *8'*	*17.3'* *14.9'*	*11'* *11'*	*18'* *16'*	
45 degrees	*Standard* *Compact*	*8.5* *8.5*	*19.8'* *17.0'*	*13'* *13'*	*12.7'* *11.3'*	*1.4*
60 degrees	*Standard* *Compact*	*9'* *8'*	*21'* *17.9'*	*18'* *16'*	*10.4'* *9.2'*	*1.7*
90 degrees	*Standard* *Compact*	*9'* *8'*	*19.0'* *16.0'*	*24'* *22'*	*9'* *8'*	*1.5*

All dimensions are to the nearest tenth of a foot.



TYPICAL PARKING LAYOUT
ENTRY A



NOTE: SPACE 1 CONTINGENT UPON ENTRY B
OVERHANG
NOTE: Overhang dimensions are intended to indicate possible location from parking area edge for location of bumpers.

Applicant's Response:

The parking space dimensions above are used in configuring the proposed parking areas. There are no compact spaces proposed at this time.

E. Carpool and Vanpool Parking. New developments with seventy-five or more parking spaces, excluding projects where seventy-five percent or more of the total floor area is residential , and new hospitals, government offices, group homes, nursing and retirement homes, schools and transit park-and-ride facilities with fifty or more parking spaces, shall identify the spaces available for employee, student and commuter parking and designate at least five percent, but not fewer than two, of those spaces for exclusive carpool and vanpool parking. Carpool and vanpool parking spaces shall be located closer to the main employee, student or commuter entrance than all other employee, student or commuter parking spaces with the exception of ADA accessible parking spaces. The carpool/vanpool spaces shall be clearly marked "Reserved - Carpool/Vanpool Only."

Applicant's Response:
The applicant requests exception from this standard as the total floor area of the project is city government.

17.52.040 - Bicycle parking standards.

A. Purpose-Applicability. To encourage bicycle transportation to help reduce principal reliance on the automobile, and to ensure bicycle safety and security, bicycle parking shall be provided in conjunction with all uses other than exclusively residential use with less than five dwellings onsite (excluding cluster housing).

Applicant's Response:
The OCPWD encourages and is an active supporter of alternate methods of transportation. Electric bicycles are used by OCPW staff when traveling between city facilities and project sites. Bicycle parking will be provided for city owned bicycles, staff and visitors.

B. Number of Bicycle Spaces Required. For any use not specifically mentioned in Table A, the bicycle parking requirements shall be the same as the use which, as determined by the Community Development Director, is most similar to the use not specifically mentioned. Calculation of the number of bicycle parking spaces required shall be determined in the manner established in OCMC 17.52.020 for determining automobile parking space requirements. Modifications to bicycle parking requirements may be made through the site plan and design, conditional use, or master plan review process.

*TABLE A Required Bicycle Parking Spaces**

Where two options for a requirement are provided, the option resulting in more bicycle parking applies. Where a calculation results in a fraction, the result is rounded up to the nearest whole number.

USE	*MINIMUM BICYCLE PARKING*	*MINIMUM BICYCLE PARKING - COVERED - The following percentage of bicycle parking is required to be covered*
Multi-family (five or more units)	*1 per 10 units (minimum of 2)*	*50% (minimum of 1)*

Correctional institution	*1 per 15 auto spaces (minimum of 2)*	*30% (minimum of 1)*
Nursing home or care facility	*1 per 30 auto spaces (minimum of 2)*	*30% (minimum of 1)*
Hospital	*1 per 20 auto spaces (minimum of 2)*	*30% (minimum of 1)*
Park-and-ride lot	*1 per 5 auto spaces (minimum of 2)*	*50% (minimum of 1)*
Transit center	*1 per 5 auto spaces (minimum of 2)*	*50% (minimum of 1)*
Parks and open space	*1 per 10 auto spaces (minimum of 2)*	*0%*
Public parking lots	*1 per 10 auto spaces (minimum of 2)*	*50% (minimum of 1)*
Automobile parking structures	*1 per 10 auto spaces (minimum of 4)*	*80% (minimum of 2)*
Religious institutions, movie theater, auditorium or meeting room	*1 per 10 auto spaces (minimum of 2)*	*30% (minimum of 1)*
Libraries, museums	*1 per 5 auto spaces (minimum of 2)*	*30% (minimum of 1)*
Preschool, nursery, kindergarten	*2 per classroom (minimum of 2)*	*50% (minimum of 1)*
Elementary	*4 per classroom (minimum of 2)*	*50% (minimum of 1)*
Junior high and High school	*2 per classroom (minimum of 2)*	*50% (minimum of 2)*
College, business/commercial schools	*2 per classroom (minimum of 2)*	*50% (minimum of 1)*
Swimming pools, gymnasiums, ball courts	*1 per 10 auto spaces (minimum of 2)*	*30% (minimum of 1)*
Retail stores and shopping centers	*1 per 20 auto spaces (minimum of 2)*	*50% (minimum of 2)*
Retail stores handling exclusively bulky merchandise such as automobile, boat or trailer sales or rental	*1 per 40 auto spaces (minimum of 2)*	*0%*
Bank, office	*1 per 20 auto spaces (minimum of 2)*	*50% (minimum of 1)*

Medical and dental clinic	*1 per 20 auto spaces (minimum of 2)*	*50% (minimum of 1)*
Eating and drinking establishment	*1 per 20 auto spaces (minimum of 2)*	*0%*
Gasoline service station	*1 per 10 auto spaces (minimum of 2)*	*0%*

** Covered bicycle parking is not required for developments with two or fewer parking stalls.*

Applicant's Response:
The following calculation is used to determine the required number of bicycles parking spaces.

Office 69 office spaces x 1/20 = 4 (3.45) required spaces

A total of (6) bike parking spaces are proposed.

C. Design Standards.

1. Bicycle parking facilities shall be in the form of a lockable enclosure onsite, secure room in a building onsite, a covered or uncovered rack onsite, or within the adjacent right-of-way.

Applicant's Response:
The applicant proposes to install covered and uncovered bicycle racks onsite.

2. Bicycle parking areas shall be clearly marked or visible from on-site buildings or the street. If a bicycle parking area is not plainly visible from the street or main building entrance, a sign shall be posted indicating the location of the bicycle parking area. Indoor bicycle parking areas shall not require stairs to access the space. If sites have more than one building, bicycle parking shall be distributed as appropriate to serve all buildings.

Applicant's Response:
The proposed bicycle racks are located near the main office entrance. They are clearly visible from pedestrian pathways and the public right of way. They are easily accessible without the use of stairs.

3. All bicycle racks shall be designed so that:

a. The bicycle frame is supported horizontally at two or more places.
b. The frame and at least one wheel of the bicycle can be locked to the rack with a standard U-type lock.
c. The user is not required to lift the bicycle onto the bicycle rack.
d. Each bicycle parking space is accessible without moving another bicycle.
e. It is a minimum of thirty inches tall and eighteen inches wide between the two points of contact.
f. Provides an area of six feet by two feet per bicycle.
g. All bicycle racks and lockers shall be securely anchored to the ground or to a structure.

Applicant's Response:

The proposed bicycle to be installed are racks designed and manufactured to be used as such. The racks will be installed per manufacturer's instructions or standard construction practices. An area not less than six feet by two feet will be provided per parking space with each area configured in a manner that does not require a user to lift the bicycle onto the rack. Each parking space will be accessible with without requiring the moving of another bicycle attached to the rack.

17.52.060 - Parking lot landscaping.

Purpose. The purpose of this code section includes the following:

1. *To enhance and soften the appearance of parking lots;*
2. *To limit the visual impact of parking lots from sidewalks, streets and particularly from residential areas;*
3. *To shade and cool parking areas;*
4. *To reduce air and water pollution;*
5. *To reduce storm water impacts and improve water quality; and*
6. *To establish parking lots that are more inviting to pedestrians and bicyclists.*

A. Applicability. Unless otherwise specified, construction of new parking lots and alterations of existing parking lots shall comply with parking lot landscaping standards. Parking lot landscaping requirements within this section do not apply to parking structures or parking garages, except landscaping as required in OCMC 17.62.

Applicant's Response:

The applicant acknowledges and understands that the parking lot alterations included in the proposed development will require compliance with OCMC 17.52.060- Parking Lot Landscaping.

The proposed development site includes two parking lot areas or categories; A fenced yard used for storage of OCPW fleet vehicles and equipment and staff and an unfenced area dedicated to visitor and staff parking only.

Applicant requests the area for OCPW fleet vehicles and equipment be considered outdoor storage area and not a parking lot. The proposed increase in outdoor storage within the yard will increase the site's capacity for OCPW fleet vehicle and equipment and provide flexibility for volunteer and seasonal staff parking The applicant proposes the following improvements within the fenced portion of the site:

- **Provide 5'-0" landscape buffer along west and north property/fence line. New plantings to include ground cover and medium shrubs.**

- **Replant the existing landscape buffer along the east property/fence line. New plantings to include grounds cover and medium shrubs. Install vinyl sight obscuring slats in the existing chain link fence where replanting is not feasible.**

- **Maintain the existing landscape buffer along the south fence line.**

See the Site & Parking Lot Coverage Exhibit attached.

B. Development Standards.

1. The landscaping shall be located in defined landscaped areas that are uniformly distributed throughout the parking or loading area.

Applicant's Response:
All proposed landscaping is located within existing and new defined landscaped areas uniformly distributed throughout the parking and loading areas to the extent possible, including areas to manage stormwater.

2. All areas in a parking lot not used for parking, maneuvering, or circulation shall be landscaped.

Applicant's Response:
The applicant acknowledges and understands that all areas in the parking lot not used for parking, maneuvering, or circulation are to be landscaped. Because the site is programmed as an field operations facility, a large percentage of the site is paved for the maneuvering and storage of vehicles and equipment. These areas a primarily fenced and gated for safety and security.

3. Parking lot trees shall be a mix of deciduous shade trees and coniferous trees. The trees shall be evenly distributed throughout the parking lot as both interior and perimeter landscaping.

Applicant's Response:
The proposed parking lot trees are a mix of deciduous shade and coniferous trees. They are to be planted throughout the parking areas at both the interior and perimeters of the lots.

4. Required landscaping trees shall be of a minimum two-inch minimum caliper size (though it may not be standard for some tree types to be distinguished by caliper), planted according to American Nurseryman Standards, and selected from the Oregon City Street Tree List or approved by an arborist;

Applicant's Response:
All proposed landscaping trees are to be a minimum two-inch caliper for deciduous shade trees and 6' height for conifers, planted according to American Nurseryman Standards. All species specified are listed on the Oregon City Street Tree List.

5. At maturity, all of the landscaped area shall be planted in ground cover plants, which includes grasses. Mulch (as a ground cover) shall only be allowed underneath plants at full growth and within two feet of the base of a tree and is not a substitute for ground cover.

Applicant's Response:
All proposed landscaped areas are to be planted in ground cover plants, which includes grasses.

6. *Landscaped areas shall include irrigation systems unless an alternate plan is submitted, and approved by the Community Development Director, that can demonstrate adequate maintenance;*

Applicant's Response:
All existing landscape areas are supported by an automated irrigation system. The existing irrigation system will be extended to all new landscaped areas.

7. *All landscaping shall be installed according to accepted planting procedures, according to American Nurseryman Standards.*

Applicant's Response:
All installed landscaping will be inspected to ensure conformance to accepted planting procedures and/or according to the American Nurseryman Standards.

C. *Perimeter Parking Lot Landscaping and Parking Lot Entryway/Right-of-Way Screening. Parking lots and associated drive aisles shall include a five-foot wide landscaped buffer where the parking lot abuts the right-of-way and/or adjoining properties. In order to provide connectivity between non-single-family sites, the Community Development Director may approve an interruption in the perimeter parking lot landscaping for a single driveway where the parking lot abuts property designated as multi-family, commercial or industrial. Shared driveways and parking aisles that straddle a lot line do not need to meet perimeter landscaping requirements.*

Applicant's Response:
All staff and visitor parking areas and associated drive aisles include a minimum five-foot wide landscaped buffer where the parking lots abut a public right-of-way and adjoining properties. The majority of these landscape buffers are an existing condition that is to remain as is and will be supplemented as needed to meet the buffer requirements.

The OCPW fleet vehicle and equipment parking areas are secured with an existing chain link fence and gate. They are be buffered from the adjacent properties through the installation of a minimum five-foot landscaped area.

1. *The perimeter parking lot are[a] shall include:*
   a. *Trees spaced a maximum of thirty feet apart (minimum of one tree on either side of the entryway is required). When the parking lot is adjacent to a public right-of-way, the parking lot trees shall be offset from the street trees;*

Applicant's Response:
Proposed trees in the parking lot perimeter areas are spaced at a maximum of 35 feet on center.

b. An evergreen hedge screen of thirty to forty-two inches high or shrubs spaced no more than four feet apart on average. The hedge/shrubs shall be parallel to and not nearer than two feet from the right-of-way line. The required screening shall be designed to allow for free access to the site and sidewalk by pedestrians. Visual breaks, no more than five feet in width, shall be provided every thirty feet within evergreen hedges abutting public rights-of-way.

Applicant's Response:
Parking lot perimeter areas are proposed to include evergreen hedge of 30-42 inch height or shrubs spaced at 4 foot maximum. The evergreen hedge at the street is not closer than 2 feet from the right-of-way line and includes visual breaks every thirty feet, with each break less than 5' width.

D. Parking Area/Building Buffer. Except for parking lots with fewer than five parking stalls, parking areas (excluding drive aisles with no adjacent parking) shall be separated from the exterior wall of a structure, exclusive of pedestrian entranceways or loading areas, by one of the following:

1. Minimum five-foot wide landscaped planter strip (excluding areas for pedestrian connection) meeting the standards for perimeter parking lot area landscaping; or:

Applicant's Response:
Staff and visitor parking areas to the south and west of the building are separated from the exterior walls with minimum five-foot wide landscape buffers.

2. Minimum seven foot sidewalks with shade trees spaced a maximum of thirty feet apart in three-foot by five-foot tree wells.

Applicant's Response:
Staff and visitor parking areas to the south and west of the building are separated from the exterior walls with minimum five-foot wide landscape buffers.

E. Interior Parking Lot Landscaping. Surface parking lots with more than five parking stalls shall include at least forty-five square feet of interior parking lot landscaping per parking stall to improve the water quality, reduce storm water runoff, and provide pavement shade. Pedestrian walkways or any impervious surface in the landscaped areas are not to be counted in the percentage. Fractions shall be rounded up when calculating the required number of plantings. Interior parking lot landscaping shall include:

Applicant's Response:
A total of 13,082 sf of landscaped area is proposed for Interior Parking Lot Landscaping. A total of 69 visitor and staff parking spaces are proposed.

a. A minimum of one tree per four parking spaces.

Applicant's Response:
A total of 19 interior parking lot trees are proposed.

b. A minimum of 1.5 shrubs per parking space.

Applicant's Response:
A total of 194 shrubs are proposed for interior parking areas.

c. No more than eight contiguous parking spaces shall be created without providing an interior landscape strip between them. Landscape strips shall be provided between rows of parking shall be a minimum of six feet in width and a minimum of ten feet in length.

Applicant's Response:
For staff and visitor parking areas, no more than eight contiguous parking spaces are proposed. For the fleet and equipment parking area, the requirement is not met in order to provide adequate parking. A variance is requested for the fleet and equipment parking areas.

F. Alternative landscaping plan.

Any applicant may propose an alternative landscaping plan. Such plans are often proposed to address physically constrained or smaller sites, however innovative designs for larger sites may also be considered. Alternative plans may include the use of low impact development techniques and minimized landscaping requirements. In such situations, the Community Development Director may approve variations to the landscaping standards of OCMC 17.52.060 in accordance with A and/or B below.

1. General Review Standard. The alternative shall meet the standards in OCMC 17.62.015-Modifications that will better meet design review requirements.

Applicant's Response:
Because the applicant will be applying for a variance, an alternative landscape plan is not proposed.

2. Credit for Pervious/Low Impact Development. The Community Development Director may count up to fifty percent of the square footage of any pervious hardscaped landscape material within a parking lot that is designed and approved pursuant to the City's adopted stormwater and low impact development design standards toward minimum landscaping requirements for the site. (This includes porous pavement detention, open celled block pavers, porous asphalt, porous concrete pavement, porous turf, porous gravel, etc.).

Applicant's Response:

The proposed improvements do not include the use of pervious paving, therefore, this standard is not applicable.

17.52.080 - Maintenance.

The owner, tenant and their agent, if any, shall be jointly and severally responsible for the maintenance of the site including but not limited to the off-street parking and loading spaces, bicycle parking and all landscaping which shall be maintained in good condition so as to present a healthy, neat and orderly appearance and shall be kept free from refuse and debris.

All plant growth in interior landscaped areas shall be controlled by pruning, trimming, or otherwise so that:

a. It will not interfere with the maintenance or repair of any public utility;
b. It will not restrict pedestrian or vehicular access; and
c. It will not constitute a traffic hazard due to reduced visibility.

Applicant's Response:
The applicant acknowledges and understands the responsibility to maintain the proposed development including interior landscaped areas.

17.52.090 - Loading areas.

A. Purpose.

The purpose of this section is to provide adequate loading areas for commercial, office, retail and industrial uses that do not interfere with the operation of adjacent streets.

B. Applicability.

OCMC 17.52.090 applies to uses that are expected to have service or delivery truck visits with a forty-foot or longer wheelbase, at a frequency of one or more vehicles per week. The City Engineer and decision maker shall determine through site plan and design review the number, size, and location of required loading areas, if any.

Applicant's Response:
Though the proposed develop does include multiple loading areas the applicant does not anticipate service or delivery truck visits with forty foot or longer wheelbase vehicles occurring more than once a week. All deliveries or services requiring a loading area will be accommodated on site and will not interfere with the operation of adjacent streets.

C. Standards.

1. The off-street loading space shall be large enough to accommodate the largest vehicle that is expected to serve the use without obstructing vehicles or pedestrian traffic on adjacent streets and driveways. Applicants are advised to provide complete and accurate information about the potential need for loading spaces because the City Engineer or decision maker may restrict the use of other public right-of-way to ensure efficient loading areas and reduce interference with other uses.

Applicant's Response:

Though the proposed develop does include multiple loading areas the applicant does not anticipate service or delivery truck visits with forty foot or longer wheelbase vehicles occurring more than once a week. All deliveries or services requiring a loading area will be accommodated on site and will not interfere with the operation of adjacent streets.

2. *Where parking areas are prohibited between a building and the street, loading areas or drive isles are also prohibited.*

Applicant's Response:
Though the proposed develop does include multiple loading areas the applicant does not anticipate service or delivery truck visits with forty foot or longer wheelbase vehicles occurring more than once a week. All deliveries or services requiring a loading area will be accommodated on site and will not interfere with the operation of adjacent streets.

3. *The City Engineer and decision maker, through site plan and design review, may approve a loading area adjacent to or within a street right-of-way when all of the following loading and unloading operations conditions are met:*
   a. *Short in duration (i.e., less than one hour);*
   b. *Infrequent (less than three operations daily between 5:00 a.m. and 12:00 a.m. or all operations between 12:00 a.m. and 5:00 a.m. at a location that is not adjacent to a residential zone);*
   c. *Does not obstruct traffic during peak traffic hours;*
   d. *Does not interfere with emergency response services; and*
   e. *Is acceptable to the applicable roadway authority.*

Applicant's Response:
Though the proposed develop does include multiple loading areas the applicant does not anticipate service or delivery truck visits with forty foot or longer wheelbase vehicles occurring more than once a week. All deliveries or services requiring a loading area will be accommodated on site and will not interfere with the operation of adjacent streets.

OCMC | NARRATIVE

Chapter 17.60 Variances

17.60.010 - Authority.
According to procedures set forth in OCMC 17.60.030, the planning commission or the community development director may authorize variances from the requirements of this title. In granting a variance, the planning commission or community development director may attach conditions to protect the best interests of the surrounding property or neighborhood and otherwise achieve the purposes of this title. No variances shall be granted to allow the use of property for a purpose not authorized within the zone in which the proposed use would be located.

17.60.020 - Variances—Procedures.
A. A request for a variance shall be initiated by a property owner or authorized agent by filing an application with the city recorder. The application shall be accompanied by a site plan, drawn to scale, showing the dimensions and arrangement of the proposed development. When relevant to the request, building plans may also be required. The application shall note the zoning requirement and the extent of the variance requested. Procedures shall thereafter be held under Chapter 17.50. In addition, the procedures set forth in subsection D. of this section shall apply when applicable.

Applicant's Response:
Due to OCPW's operational needs and existing site constraints the proposed development will require three variances. The application material provided include relevant site plans and building plans for each variance being requested. The following are the zoning requirement and extent of each variance being requested:

VARIANCE I

Zoning Requirement: 17.36.040.F -Dimensional standards; Landscaping; 15% of site

F. Minimum required landscaping (including landscaping within a parking lot): Fifteen percent.

Applicant's Response:
Applicant requests a variance to the requirement that 15% of the development site be landscaping. Currently, the development site is compliant with the standard. The proposed development would reduce the percentage of site to landscaping to approximately 8%, see attached site landscape exhibit. The development site includes two parking lot areas; A fenced yard to be used for OCPW fleet vehicles and equipment with limited seasonal staff parking. Unfenced area dedicated to visitor and staff

parking exists along Fir Street and the southern property boundary. These areas will be planted to meet the parking lot landscape requirements.

A reduction in the required landscape area is requested in addition to the following improvements proposed:

- **Provide a 5'-0" landscape buffer and sight obscuring chain link fencing at the perimeter of the equipment yard.**
- **Provide additional Stormwater facilities beyond code minimums within the fenced equipment yard.**

The reduction in buffer area will increase the site's capacity for the storage of city owned fleet vehicles and equipment and improve the operation crews' abilities to deploy into the field. The OCPW intends to store over 105 different vehicles and pieces of equipment onsite used to maintain and service the city's infrastructure. Vehicles and equipment that are currently stored in multiple facilities and locations around the city will be now housed in one complex centralizing the storage of such equipment. The equipment that is to be stored onsite services multiple city departments including the engineering and facility staff fleet vehicles.

See the Site & Parking Lot Coverage Exhibit attached.

Variance II

Zoning Requirement: 17.36.040.D – Buffer Zone

D. Buffer Zone. If a use in this zone abuts or faces a residential or commercial use, a yard of at least twenty-five feet shall be required on the side abutting or facing the adjacent residential use and commercial uses in order to provide a buffer area, and sight obscuring landscaping thereof shall be subject to site plan review. The community development director may waive any of the foregoing requirements if he/she determines that the requirement is unnecessary in the particular case.

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Applicant's Response:

Applicant request a variance to the required twenty-five feet buffer zone where the project parcel abuts commercial uses along the north and west boundaries. A five-foot landscaped buffer is proposed in lieu of. The remaining site area is to be paved and striped for vehicle and equipment storage.

The reduction in buffer area will increase the site's capacity for the storage of city owned fleet vehicles and equipment and improve the operation crews abilities to deploy into the field. The OCPW intends to store over 105 different vehicles and pieces of equipment onsite used to maintain and

service the city's infrastructure. Vehicles and equipment that are currently stored in multiple facilities and locations around the city will be now housed in one complex centralizing the storage of such equipment. The equipment that is to be stored onsite services multiple city departments including the engineering and facility staff fleet vehicles. The applicant requests the following be considered when reviewing the grounds for variance:

- **The adjacent commercial uses include big box retail and smaller commercial spaces. The buildings and structures on these parcels are all oriented such that they face away from the development site. All main entrances to the surrounding buildings are oriented such they do not face the development site or are visible from the development site. The areas that are visible from the development site include parking, outdoor storage, employee break areas, loading and landscaping.**

  The applicant proposes to provide a fully planted 5'-0" landscape buffer along the entire west and north property/fence line. New plantings to include ground cover and medium shrubs.

- **The applicant proposes to replant the existing landscape buffer along the east property/fence line and nstall vinyl sight obscuring slats in the existing chain link fence where replanting is not feasible. New plantings to include grounds cover and medium shrubs.**

Further conditions are to be considered as necessary or suggested by the Community Development Director.

See the Site & Parking Lot Coverage Exhibit attached.

Variance III

Zoning Requirement: 17.62.050.B.1- Vehicular access and connectivity

B. Vehicular Access and Connectivity.

1. Parking areas shall be located behind the building façade that is closest to the street, below buildings, or on one or both sides of buildings.

Applicant's Response:
Applicant requests a variance to the requirement that parking areas shall be located behind the building façade that is closest to the street. The development site contains parking areas such as these some of which will modified by the proposed development. The applicant proposes to retain the parking located beyond the front building façade and be allowed to reconfigure the existing parking for the construction of a one way drive aisle.

Improvements will be made to increase pedestrian safety and awareness, new vehicle directional signage and overall improvement of the pedestrian and vehicle circulation systems. Accessibility improvements will be made in the construction of pedestrian ramp and plaza.

See the Pedestrian Circulation Exhibit attached.

B. A nonrefundable filing fee, as listed in OCMC 17.50.080, shall accompany the application for a variance to defray the costs.

Applicant's Response:
Applicant will provide the filing fees as required.

C. Before the planning commission may act on a variance, it shall hold a public hearing thereon following procedures as established in Chapter 17.50. A Variance shall address the criteria identified in OCMC 17.60.030, Variances — Grounds.

Applicant's Response:
Applicant acknowledges and understands that a public hearing will be held as established in Chapter 17.50.

D. Minor variances, as defined in subsection E. of this section, shall be processed as a Type II decision, shall be reviewed pursuant to the requirements in OCMC 17.50.030B., and shall address the criteria identified in OCMC 17.60.030, Variance — Grounds.

Applicant's Response:
Applicant acknowledges and understands that the criteria for minor variances shall be addressed.

E. For the purposes of this section, minor variances shall be defined as follows:
1. Variances to setback and yard requirements to allow additions to existing buildings so that the additions follow existing building lines;
2. Variances to width, depth and frontage requirements of up to twenty percent;
3. Variances to residential yard/setback requirements of up to twenty-five percent;
4. Variances to nonresidential yard/setback requirements of up to ten percent;
5. Variances to lot area requirements of up to five percent;
6. Variance to lot coverage requirements of up to twenty-five percent;
7. Variances to the minimum required parking stalls of up to five percent; and
8. Variances to the floor area requirements and minimum required building height in the mixed-use districts.
9. Variances to design and/or architectural standards for single family dwellings, duplexes, single-family attached dwellings, internal conversions, accessory dwelling units, and 3-4 plexes in OCMC 17.14, 17.16, 17.20, 17.21, and 17.22.

Applicant's Response:
No minor variances are being requested by the Applicant.

17.60.030 - Variance—Grounds.
A variance may be granted only in the event that all of the following conditions exist:

VARIANCE I: 17.36.040.F -Dimensional standards; Landscaping; 15% of site

A. That the variance from the requirements is not likely to cause substantial damage to adjacent properties by reducing light, air, safe access or other desirable or necessary qualities otherwise protected by this title;

Applicant's Response:
Variance will have no impact to adjacent properties. All light, air, and safe access and other desirable or necessary qualities are maintained in proposed variance. The reduction in landscape area paving improvements are considered to have no potential to cause damage to the adjacent properties. These areas are to be used for the storage of feet vehicles and equipment a use common to industrial areas.

B. That the request is the minimum variance that would alleviate the hardship;

Applicant's Response:
The request to reduce the required percentage of site to be landscaped from 15% to 8% is the minimum variance needed to alleviate the hardship. All areas on site not used for storage of equipment or vehicle/pedestrian circulation is to be planted. These areas include stormwater facilities.

C. Granting the variance will equal or exceed the purpose of the regulation to be modified.

Applicant's Response:
The purpose of the regulation is to provide green space within developed areas. These areas help slow stormwater infiltration and assist in cooling of runoff. The proposed development includes oversized stormwater facilities, improved landscaping throughout and an open space, therefore, granting the variance will equal the purpose of the regulation to be modified.

D. Any impacts resulting from the adjustment are mitigated;

Applicant's Response:
Any impacts resulting from the adjustment are mitigated by the appropriate sizing of stormwater treatment facilities and the proposed landscaped improvements. The proposed development includes oversized treatment facilities that contribute to the mitigation of the reduced landscaping.

E. No practical alternatives have been identified which would accomplish the same purpose and not require a variance; and

Applicant's Response:
No practical alternatives have been identified that would accomplish the same purpose of the variance requested. The project team explored the use of green roofs as a method of providing additional landscaping. After researching the required maintenance and increased structural reinforcing required the green roofs were deemed unfeasible.

F. The variance conforms to the comprehensive plan and the intent of the ordinance being varied.

Applicant's Response:

The requested variance conforms to the comprehensive plan and the intent of the ordinance being varied as landscaping, parking lot landscaping and stormwater improvements are being made.

VARIANCE II: 17.52.040. D – Buffer Zone

A. That the variance from the requirements is not likely to cause substantial damage to adjacent properties by reducing light, air, safe access or other desirable or necessary qualities otherwise protected by this title;

Applicant's Response:
Variance will have no impact to adjacent properties. All light, air, and safe access and other desirable or necessary qualities are maintained in proposed variance. None of the proposed landscape and paving improvements are considered to have potential to cause damage to the adjacent properties. All vehicles and equipment to be stored in these areas meet environmental and emissions standards and will have little operating time on site and are in common in industrial areas. Visibility of the stored items will be mitigated by installing vinyl sight obscuring slats in the existing chain link fencing and five-foot landscape buffer that will consist of ground cover and shrubs.

B. That the request is the minimum variance that would alleviate the hardship;

Applicant's Response:
The request to reduce the required buffer is the minimum variance needed to alleviate the hardship caused while still providing a buffer from the outdoor storage area proposed. Approval of the variance will allow for additional equipment to be stored on site that would otherwise be stored in multiple facilities in multiple other locations.

C. Granting the variance will equal or exceed the purpose of the regulation to be modified.

Applicant's Response:
The purpose of the buffer zone is to minimize the impact on adjacent commercial properties imposed by industrial outdoor storage areas. Storage areas are typically screened from view and located away from property lines.

The applicant proposes a five-foot landscape buffer along the property lines that are to be used for outdoor storage. The buffer is to be fully landscaped and planted with ground cover and shrubs. The storage area (yard) is secured by an existing chain link fence that is to remain. New vinyl sight obscuring slats are to be installed in the chain link fencing. The outdoor storage area will be paved and striped to keep the equipment organized and secured.

The applicant feels the purpose improvements will provide the intended relief from the storage areas, therefore, equaling the purpose of the regulation.

D. Any impacts resulting from the adjustment are mitigated;

Applicant's Response:
Any impacts resulting from the adjustment are mitigated by the following:

- **New sight obscuring vinyl slats installed in the existing chain link fencing. Reduces visual impact.**

- **New 5'-0" landscape buffer planted with ground cover and shrubs. Reduces visual impact.**

- **The outdoor storage area will be paved and striped. Vehicles and equipment will be stored in an organized and secured manner. Servicing of all equipment will occur in the new fleet maintenance facility constructed in the warehouse building.**

E. No practical alternatives have been identified which would accomplish the same purpose and not require a variance; and

Applicant's Response:
In effort to maximize the site's storage capacity and to gain more parking onsite or offsite no practical alternatives have been identified. The OCPW is currently looking for offsite parking solutions and is in discussions with surrounding property owners regarding potential leasing opportunities. At this time, there are no practical alternatives that would accomplish the same purpose of the variance requested.

F. The variance conforms to the comprehensive plan and the intent of the ordinance being varied.

Applicant's Response:
The requested variance conforms to the comprehensive plan and the intent of the ordinance being varied. The intent of the comprehensive plan and ordinance being varied is to allow for industrial and commercial uses within close proximities. The requested variance and proposed improvements are the type of measures and provisions desired and typical in similar developments within the area.

Variance III: **17.62.050.B.1- Vehicular access and connectivity; increase in parking stall in front of building**

A. That the variance from the requirements is not likely to cause substantial damage to adjacent properties by reducing light, air, safe access or other desirable or necessary qualities otherwise protected by this title;

Applicant's Response:
The variance request to maintain and reconfigure parking that exists between the front façade of the existing office building and Fir Street will have no impact to adjacent properties. All light, air, and safe access and other desirable or necessary qualities are maintained in proposed variance. This condition is common within the area with multiple examples found along Fir Street.

B. That the request is the minimum variance that would alleviate the hardship;

Applicant's Response:
The requested variance is the minimum variance required to alleviate the hardship. Approval of the variance would allow the continued use of existing parking and the proposed improvements to the existing office building.

C. Granting the variance will equal or exceed the purpose of the regulation to be modified.

Applicant's Response:
The purpose of the regulation being modified is to promote pedestrian oriented development along the right of way and alternate methods of transportation. The regulation is tailored to new construction where new buildings are being sited by the developer. This proves difficult for renovation work such as the proposed development. The improvements include modifying existing parking areas which should be reviewed differently than newly constructed parking lots. Therefore, the applicant feels granting the variance would equal the purpose of the regulation to be modified.

D. Any impacts resulting from the adjustment are mitigated;

Applicant's Response:
Any impacts resulting from the adjustment are mitigated by the following:

- **The construction of a new pedestrian ramp and plaza that includes amenities such as bike parking, benches, architectural lighting, etc.**
- **Improvements to vehicular circulation.**
- **Access to accessible parking.**

E. No practical alternatives have been identified which would accomplish the same purpose and not require a variance; and

Applicant's Response:
No practical alternatives have been identified. The OCPW is currently looking for offsite parking solutions and is in discussions with surrounding property owners regarding potential leasing opportunities. At this time, there are no practical alternatives that would accomplish the same purpose of the variance requested.

F. The variance conforms to the comprehensive plan and the intent of the ordinance being varied.

Applicant's Response:
The requested variance conforms to the comprehensive plan and the intent of the ordinance being varied. The intent of the comprehensive plan and ordinance being varied is to allow for industrial and commercial use. The requested variance and proposed improvements are the type of measures and provisions desired and typical in similar developments within the area.

OCMC | NARRATIVE

Chapter 17.62 - Site Plan and Design Review

17.62.015 - Modifications that will better meet design review requirements.

The review body shall consider modification of certain site related development standards of this Chapter specified below. These modifications may be approved as part of a Type II design review process.

A. Applicability.

1. This process shall apply to modifications to:

a. Landscaping in OCMC 17.62.050.A;
b. Vehicular Connections to Adjoining Properties in OCMC 17.62.050.B.2;
c. On-site pedestrian circulation in OCMC 17.62.050.C;
d. Utility Undergrounding Requirements in OCMC 16.12.095.G;
e. Building location in OCMC 17.62.055.D;
f. Building Details in OCMC 17.62.050.B.9.055.I;
g. Windows in OCMC 17.62.050.B.10.055.J
h. Parking Lot Landscaping in OCMC 17.52.060.

Applicant's Response:

Applicant requests a modification to standard OCMC 17.62.055.J Windows.

2. Modifications that are denied through Type II design review may be requested as a variance through the Variance process pursuant to OCMC 17.60.020 or Master Plan Adjustment pursuant to OCMC 17.65.070 as applicable.

Applicant's Response

Applicant acknowledges and understands that any modifications denied through the Type II design review may be requested as a variance described in OCMC 17.60.020.

3. Rather than a modification, applicants may choose to apply for a Variance through the Variance process pursuant to OCMC 17.60.020 or Master Plan Adjustment pursuant to OCMC 17.65.070 as applicable.

Applicant's Response:

The OCPW is requesting a variance to the following items:

7.36.040 [F] – Dimensional standards: Minimum required landscaping of 15% of site

17.52.060 – Parking lot landscaping: Fleet parking lot area

17.62.050 [B][1] – Vehicular access and connectivity: Parking stall increase at building façade

See responses provided to OCMC 17.60 Variances.

B. The review body may approve requested modifications if it finds that the applicant has shown that the following approval criteria are met:

1. The modification will result in a development that better meets the applicable design guidelines; and

Applicant's Response:

MODIFICATION I

Zoning Requirement: OCMC 17.62.055.J Windows

J. Windows.

1. The minimum windows requirements are set forth in Table 17.62.055.J. Windows are measured in lineal fashion between 3.5 feet and six feet from the ground. For example, a one hundred foot long building elevation would be required to have at least sixty feet (sixty percent of one hundred feet) of windows in length between the height of 3.5 feet and six feet from the ground.

Table 17.62.055.J Minimum Windows

Use	*Ground Floor: Front and Street Facing Facades*	*Upper floor(s): Front and Street Facing Facades*	*Ground Floor: Side(s) Facades*	*Upper Floor(s): Side(s) Facades*
Non-Multi-Family (or Portions of Buildings Thereof)	*60%*	*10%*	*30%*	*10%*
Multi-Family (or Portions of Buildings Thereof)	*15%*	*15%*	*10%*	*10%*

Applicant's Response:

The applicant requests a modification to the design standard for Minimum windows for the ground floor side(s) facades. The standard, per table 17.62.055.J, requires 30% of the length of the ground floor side(s) facades to be glazed.

The following calculation is used to determine the length of glazing required for 129 ft of facade;

129 lft of side facade x.30 = 38.7 lft of glazing required.

The proposed design provides 35.5 lft (27.5%) of glazing at the west office building façade. The applicant requests a modification to the standard to allow the proposed glazing design. See Glazing Exhibit.

2. *The modification meets the intent of the standard. On balance, the proposal will be consistent with the purpose of the standard for which a modification is requested.*

Applicant's Response:
The proposed design of the west façade meets the intent of the standard for which a modification is being requested. Windows are evenly distributed across the façade providing natural daylight to all occupied spaces along the length of the wall and integrated into the exterior cladding material configuration. The composition of window and door openings provide clear wayfinding to the building entrances along the west building façade.

17.62.030 - When required.

Site plan and design review shall be required for all development of real property in all zones except the low and medium density residential districts, unless otherwise provided for by this title or as a condition of approval of a permit. Site plan and design review shall also apply to all conditional uses, cluster housing developments, multi-family uses, manufactured home parks, and non-residential uses in all zones. Site Plan and Design Review does not apply to activities occurring within the right-of-way except for communication facilities pursuant to OCMC 17.80.

Site plan and design review is required for a change in use between the uses in Table 17.62.030:
Table 17.62.030

Existing Use	*Proposed Use*
Residential	*Nonresidential use, including but not limited to: commercial, office, industrial, retail, or institutional*
Single-family or duplex	*3 or more dwellings*

Site plan and design review shall not alter the type and category of uses permitted in the underlying zoning districts.

The general standards of section 17.62.050 do not apply to 3-4 plex, duplex, single-family attached dwellings, single-family detached residential unit, internal conversions, live/work dwelling and accessory dwelling unit Type I applications.

Applicant's Response:
Applicant acknowledges and understands the proposed development requires a site plan and design review.

17.62.035 - Minor site plan and design review.

This section provides for a Minor Site Plan and Design Review process. Minor Site Plan review is a Type I or Type II decision, as described in OCMC 17.62.035.A., subject to administrative proceedings described

in OCMC 17.50 and may be utilized as the appropriate review process only when authorized by the Community Development Director. The purpose of this type of review is to expedite design review standards for uses and activities that require only a minimal amount of review, typical of minor modifications and/or changes to existing uses or buildings.

A. Type I Minor Site Plan and Design Review.

1. Applicability. Type I applications involve no discretion and are typically processed concurrently with a building permit application. The Type I process is not applicable for:

a. Any activity which is included with or initiates actions that require Type II-IV review.

b. Any increase in square footage of a conditional or nonconforming use (excluding nonconforming structures).

c. Any proposal in which nonconforming upgrades are required under OCMC 17.58.

d. Any proposal in which modifications are proposed under OCMC 17.62.015.

2. The following projects may be processed as a Type I application:

a. Addition of up to two hundred square feet to a commercial, institutional, or multifamily structure in which no increases are required to off-street parking. This includes a new ancillary structure, addition to an existing structure, or new interior space (excluding new drive thru). Increases of more than two hundred square feet in a twelve-month period shall be processed as Type II.

b. Addition of up to one thousand square feet to an industrial use in which no increases are required to off-street parking. This includes a new ancillary structure, addition to an existing structure, or new interior space (excluding ancillary retail and office). Increases of more than one thousand square feet in a twelve-month period shall be processed as Type II.

c. Temporary structures, excluding mobile vendors.

d. Removal, replacement or addition of awnings, or architectural projections to existing structures.

e. Addition, modification, or relocation of refuse enclosure.

f. Changes to amount, location, or design of bicycle parking.

g. Installation of mechanical equipment.

h. Repaving of previously approved parking lots with no change to striping.

i. Replacement of exterior building materials.

j. Addition of windows and doors, relocation of windows and doors in which transparency levels remain unchanged, or removal of windows and doors provided minimum transparency requirements are still met.

k. Addition or alteration of parapets or rooflines.

l. Modification of building entrances.

m. Addition to or alteration of a legal nonconforming single or two-family dwelling.

n. Change to parking lot circulation or layout, excluding driveway modifications.

o. Removal or relocation of vehicle parking stalls provided total parking remains between approved minimum and maximum with no new reductions other than through the downtown parking district.

p. Adoption of shared parking agreements.

q. Changes to landscaping that do not require stormwater quality and quantity treatment under OCMC 13.12.

r. New or changes to existing pedestrian accessways, walkways or plazas.

s. Installation of or alterations to ADA accessibility site elements.

t. Modification or installation of a fence, hedge, or wall, or addition of a fence, hedge or wall.

u. Addition of or alterations to outdoor lighting.

v. Demolition of any structure or portion of a structure
w. Tree removal
x. Type I Master Plan Amendments under OCMC 17.65.080.
y. Mobile food units in one location for five hours or less as identified in OCMC 17.54.115
z. 3-4 plex, duplex, single-family attached dwellings, single-family detached residential unit, internal conversions, live/work dwelling and accessory dwelling unit.
aa. Placement of a single manufactured home within an existing space or lot in a manufactured home park.

3. Submittal Requirements. A Type I application shall include:
a. A narrative describing the project.
b. Site plan drawings showing existing conditions/uses and proposed conditions/uses.
c. Architectural drawings, including building elevations and envelopes, if architectural work is proposed.
d. A completed application form.
e. Any other information determined necessary by the Community Development Director.

B. Type II Minor Site Plan and Design Review.

1. Type II Minor Site Plan and Design Review applies to the following uses and activities unless those uses and activities qualify for Type I review per OCMC 17.62.035.A.:
a. Modification of an office, commercial, industrial, institutional, public or multi-family structure that does not increase the interior usable space (for example covered walkways or entryways, addition of unoccupied features such as clock tower, etc.).
b. Modification to parking lot layout and landscaping, or the addition of up to five parking spaces.
c. A maximum addition of up to one thousand square feet to a commercial, office, institutional, public, multi-family, or industrial building provided that the addition is not more than thirty-five percent of the original building square footage.
d. Mobile food units in OCMC 17.54.115.
e. Other land uses and activities may be added if the Community Development Director makes written findings that the activity/use will not increase off-site impacts and is consistent with the type and/or scale of activities/uses listed above.

2. Application. The application for the Type II Minor Site Plan and Design Review shall contain the following elements:
a. The submittal requirements of OCMC 17.50.
b. A narrative explaining all aspects of the proposal in detail and addressing each of the applicable criteria listed in OCMC 17.62.
c. Site plan drawings showing existing conditions/uses and proposed conditions/uses.
d. Architectural drawings, including building elevations and envelopes, if architectural work is proposed.
e. Additional submittal material may be required by the Community Development Director on a case-by-case basis.

Applicant's Response:

Applicant acknowledges and understands the proposed development will be reviewed under the Type II Minor Site Plan and Design review procedure. Responses to each criterion for a Type II Minor Site Plan and Design review are listed below.

B[1][a] The proposed development will not result in an increase interior useable space.

B[1][b] The proposed development includes the modification of an existing parking lot. The modification will result in the addition of no more than five new parking spaces.

B[1][c] The proposed development will not increase any of the existing building square footage, it will be reduced by the selective demolition proposed.

B[1][d] Not applicable. The proposed development does not include a mobile food unit.

B[1][e] No additional requirements or findings have been received.

The application material submitted meets the requirement of OCMC 17.50 and includes a narrative summarizing the proposed development and addresses each applicable section of OCMC 17.62. Site plan(s), building plans and elevation drawings are included.

17.62.040 – Items required.

A complete application for Site Plan and Design Review shall be submitted. Except as otherwise in subsection I of this section, the application shall include the following:

A. A site plan or plans, to scale, containing the following:

1. *Vicinity information showing streets and access points, pedestrian and bicycle pathways, transit stops and utility locations;*
2. *The site size, dimensions, and zoning, including dimensions and gross area of each lot or parcel and tax lot and assessor map designations for the proposed site and immediately adjoining properties;*
3. *Contour lines at two foot contour intervals for grades zero to ten percent, and five-foot intervals for grades over ten percent;*
4. *The location of natural hazard areas on and within one hundred feet of the boundaries of the site, including:*
    a. *Areas indicated on floodplain maps as being within the one-hundred-year floodplain,*
    b. *Unstable slopes, as defined in OCMC 17.44.020,*
    c. *Areas identified on the seismic conditions map in the comprehensive plan as subject to earthquake and seismic conditions;*
5. *The location of natural resource areas on and within one hundred feet of the boundaries of the site, including fish and wildlife habitat, existing trees (six inches or greater in caliper measured four feet above ground level), wetlands, streams, natural areas, wooded areas, areas of significant trees or vegetation, and areas designated as being within the natural resources overlay district;*
6. *The location of inventoried historic or cultural resources on and within one hundred feet of the boundaries of the site;*
7. *The location, dimensions, and setback distances of all existing permanent structures, improvements and utilities on or within twenty five feet of the site, and the current or proposed uses of the structures;*
8. *The location, dimensions, square footage, building orientation and setback distances of proposed structures, improvements and utilities, and the proposed uses of the structures by square footage;*

9. *The location, dimension and names, as appropriate, of all existing and platted streets, other public ways, sidewalks, bike routes and bikeways, pedestrian/bicycle accessways and other pedestrian and bicycle ways, transit street and facilities, neighborhood activity centers, and easements on and within two hundred fifty feet of the boundaries of the site;*
10. *The location, dimension and names, as appropriate, of all proposed streets, other public ways, sidewalks, bike routes and bikeways, pedestrian/bicycle accessways and other pedestrian and bicycle ways, transit streets and facilities, neighborhood activity centers, and easements on and within two hundred feet of the boundaries of the site;*
11. *All parking, circulation, loading and servicing areas, including the locations of all carpool, vanpool and bicycle parking spaces as required in OCMC 17.52;*
12. *Site access points for automobiles, pedestrians, bicycles and transit;*
13. *On-site pedestrian and bicycle circulation;*
14. *Outdoor common areas proposed as open space;*
15. *Total impervious surface created (including buildings and hard ground surfaces);*
16. *The proposed location, dimensions and materials of fences and walls.*

B. *A landscaping plan, drawn to scale, showing the location and types of existing trees (six inches or greater in caliper measured four feet above ground level) and vegetation proposed to be removed and to be retained on the site, the location and design of landscaped areas, the varieties, sizes and spacings of trees and plant materials to be planted on the site, other pertinent landscape features, and irrigation systems required to maintain plant materials.*
C. *Architectural drawings or sketches, drawn to scale and showing floor plans, elevations accurately reflected to grade, and exterior materials of all proposed structures and other improvements as they will appear on completion of construction. The name of the adjacent street shall be identified on each applicable building elevation.*
D. *An electronic materials board clearly depicting all building materials with specifications as to type, color and texture of exterior materials of proposed structures.*
E. *An erosion/sedimentation control plan, in accordance with the requirements of OCMC 17.47 and the Public Works Erosion and Sediment Control Standards, and a drainage plan developed in accordance with city drainage master plan requirements, OCMC 13.12 and the Public Works Stormwater and Grading Design Standards. The drainage plan shall identify the location of drainage patterns and drainage courses on and within one hundred feet of the boundaries of the site. Where development is proposed within an identified hazard area, these plans shall reflect concerns identified in the hydrological/geological/geotechnical development impact statement.*
F. *An exterior lighting plan, drawn to scale, showing type, height, and area of illumination.*
G. *Archeological Monitoring Recommendation. For all projects that will involve ground disturbance, the applicant shall provide:*
    1. *A letter or email from the Oregon State Historic Preservation Office Archaeological Division indicating the level of recommended archeological monitoring on-site, or demonstrate that the applicant had notified the Oregon State Historic Preservation Office and that the Oregon State Historic Preservation Office had not commented within forty-five days of notification by the applicant; and*
    2. *A letter or email from the applicable tribal cultural resource representative of the Confederated Tribes of the Grand Ronde, Confederated Tribes of the Siletz, Confederated Tribes of the Umatilla, Confederated Tribes of the Warm Springs and the Confederated Tribes of the Yakama Nation indicating the level of recommended archeological monitoring on-site, or demonstrate that the applicant had notified the applicable tribal cultural resource representative and that the applicable tribal cultural resource representative had not commented within forty-five days of notification by the applicant.*

If, after forty-five days' notice from the applicant, the Oregon State Historic Preservation Office or the applicable tribal cultural resource representative fails to provide comment, the City will not require the letter or email as part of the completeness review. For the purpose of this section, ground disturbance is defined as the movement of native soils.

H. Such special studies or reports as the Community Development Director may require to obtain information to ensure that the proposed development does not adversely affect the surrounding community or identified natural resource areas or create hazardous conditions for persons or improvements on the site. The Community Development Director shall require an applicant to submit one or more development impact evaluations as may be necessary to establish that the City's traffic safety or capacity standards, natural resource, including geologic hazard and flood plain overlay districts, will be satisfied.

I. The Community Development Director may waive the submission of information for specific requirements of this section or may require information in addition to that required by a specific provision of this section, as follows:

1. *The Community Development Director may waive the submission of information for a specific requirement upon determination either that specific information is not necessary to evaluate the application properly, or that a specific approval standard is not applicable to the application. If submission of information is waived, the Community Development Director shall, in the decision, identify the waived requirements, explain the reasons for the waiver, and state that the waiver may be challenged on appeal and may be denied by a subsequent review authority. If the matter is forwarded to the Planning Commission for initial review, the information required by this paragraph shall be included in the staff report;*
2. *The Community Development Director may require information in addition to that required by a specific provision of this section upon determination that the information is needed to evaluate the application properly and that the need can be justified on the basis of a special or unforeseen circumstance as necessary to comply with the applicable standards. If additional information is required, the Community Development Director shall, in the decision, explain the reasons for requiring the additional information.*

J. One full-sized copy of all architectural and site plans.

Applicant's Response:

All required documentation and materials including site plans, landscape plan, floor plans, building elevations, digital material boards, erosion control plans, and lighting plans are provided within the submitted application. As requested, a full-size copy of all architectural and site plans have been included.

17.62.050 - General Standards

All development shall comply with the following standards:

A. Landscaping.

1. *Existing native vegetation is encouraged to be retained to the maximum extent practicable. All plants listed on the Oregon City Nuisance Plant List shall be removed from the site prior to issuance of a final occupancy permit for the building.*

Applicant's Response:

Applicant is to retain the maximum extent of native vegetation while removing all nuisance plants. Refer to the landscape plan for the identification of native and nuisance vegetation within the site.

2. *The amount of landscaping required is found in the standards for each underlying zone. Where the underlying zone does not contain and minimum landscaping standard, the minimum site landscaping shall be 15% of the total site area. Except as allowed elsewhere in Title 16 or 17 of this Code, all areas to be credited towards landscaping shall be installed with growing plant materials.*

Applicant's Response:
The project parcel is located within the GI – General Industrial zone, which, requires 15% of the site be landscaped including landscaped parking areas.

Applicant has submitted a variance on this item pursuant to OCMC 17.60.020.

3. *Pursuant to OCMC 17.49, landscaping requirements within the Natural Resource Overlay District, other than landscaping required for parking lots, may be met by preserving, restoring and permanently protecting native vegetation and habitat on development sites.*

Applicant's Response:
The project parcel is not located within a Natural Resource Overlay. Not applicable.

4. *A landscaping plan shall be prepared by a registered landscape architect for new or revised landscaped areas and parking lots. Landscape architect approval is not required for tree removal and/or installation if the species are chosen from an approved street tree list. A certified landscape designer, arborist, or nurseryman shall be acceptable in lieu of a landscape architect for projects with less than five hundred square feet of landscaping. All landscape plans shall include a mix of vertical (trees and shrubs) and horizontal elements (grass, groundcover, etc.) that within three years will cover one hundred percent of the landscape area. Plant species listed on the Oregon City Nuisance Plant list are prohibited and native species are encouraged. No mulch, bark chips, or similar materials shall be allowed at the time of landscape installation except under the canopy of shrubs and within two feet of the base of trees.*

Applicant's Response:
A landscaping plan has been included within the application material. All proposed plantings are selected from the Oregon City approved plating list and include a mix of vertical and horizontal elements that within three years will cover the entire landscape area.

5. *Landscaping shall be visible from public thoroughfares to the extent practicable.*

Applicant's Response:
The proposed landscaping will be visible from public thoroughfares throughout the public street frontage.

6. *The landscaping in parking areas shall not obstruct lines of sight for safe traffic operation and shall comply with all requirements of OCMC 10.32, Traffic Sight Obstructions.*

Applicant's Response:
The proposed and existing landscaping with parking areas is design and will be constructed to not obstruct lines of sight for safe traffic operation and compliance with the requirements of OCMC 10.32 Traffic Sight Obstructions.

B. Vehicular Access and Connectivity.

1. Parking areas shall be located behind the building façade that is closest to the street, below buildings, or on one or both sides of buildings.

Applicant's Response:
Applicant has submitted a variance on this item pursuant to OCMC 17.60.020.

Applicant proposes to retain existing parking located beyond the building façade (south) that is closest to Fir street. The proposed development will remove of one of the three existing driveways serving the project site. Therefore, modification to the existing parking areas located between the office building and street frontage will be made but overall existing site configuration, primary egress to the site, and vehicle and pedestrian circulation patterns will be maintained as is. Maintaining these conditions with the proposed improvements will allow full and efficient use of the site.

See the Pedestrian Circulation Exhibit attached.

2. Existing or future connections to adjacent sites through the use of vehicular and pedestrian access easements which provide connection from the right-of-way to the adjoining property shall be provided.

Applicant's Response:
The proposed development does not have any existing or future connections to adjacent sites that require access easements to from the right-of-way. Not applicable.

3. Parcels larger than three acres shall provide streets as required in OCMC 16.12.

Applicant's Response:
The existing project parcel is approximately 4.79 acres. See responses to OCMC 16.12-Minimum Public Improvements and Design Standards.

4. Parking garage entries shall not be more than half of the streetscape.

Applicant's Response:

The proposed development does not include garage entrances along the streetscape. Not applicable.

C. A well-marked, continuous and protected on-site pedestrian circulation system meeting the following standards shall be provided:

1. Pathways between all building entrances and the street are required. Pathways between the street and buildings fronting on the street shall be direct and not cross a drive aisle. Exceptions may be allowed by the director where steep slopes, a physically constrained site, or protected natural resources prevent a direct connection or where an indirect route would enhance the design and/or use of a common open space.

Applicant's Response:
Clearly defined, continuous and protected pedestrian circulation pathways are provided from the main office building entrance to Fir Street and visitor/staff parking areas. Signage and other wayfinding measures will be used to direct visitors to the main building entrance.

The existing site conditions require that a vehicle drive aisle cross the pedestrian pathway from the main building entrance to the public right of way, therefore, an exception is requested. Multiple pedestrian amenities such as signage, benches, bicycle racks, enhance concrete paving and landscaping are proposed to help alert drivers of potential pedestrians at the crossing.

2. The pedestrian circulation system shall connect all main entrances, parking areas, bicycle parking, recreational areas, common outdoor areas, and any pedestrian amenities on the site. For buildings fronting on the street, the sidewalk may be used to meet this standard.

Applicant's Response:
The proposed development includes a pedestrian plaza that connects the main building entrance to the existing sidewalk located along the project parcels street frontage. The plaza will be the main pedestrian circulation system to the entrance of the office building and include multiple pedestrian amenities such as bicycle parking, bench seating and increased landscape areas and visitor (public) parking. Secondary sidewalks and pathways will provide a pedestrian connection to other parking areas on site.

3. The pedestrian circulation system shall connect the principal building entrance to those of buildings on adjacent sites, except within industrial zoning designations.

Applicant's Response:
The project parcel is located with the GI- General Industrial zone, therefore, pedestrian circulation system is not required between adjacent buildings.

4. Elevated external stairways or walkways shall not extend beyond the building facade except for external stairways or walkways located in, or facing interior courtyard areas that are not visible from the street or a public access easement. This standard does not apply to sky-bridges or sky-ways.

Applicant's Response:
The proposed development does not include external stairways or walkways, therefore, this standard is not applicable.

5. *On-site pedestrian walkways shall be hard surfaced, well drained and at least five feet wide. Surface material shall contrast visually to adjoining surfaces. When bordering parking spaces other than spaces for parallel parking, pedestrian walkways shall be a minimum of seven feet in width unless curb stops are provided. When the pedestrian circulation system is parallel and adjacent to an auto travel lane, the walkway shall be raised or separated from the auto travel lane by a raised curb, bollards, landscaping or other physical barrier. If a raised walkway is used, the ends of the raised portions shall be equipped with curb ramps for each direction of travel. Pedestrian walkways that cross drive isles or other vehicular circulation areas shall utilize a change in textual material or height to alert the driver of the pedestrian crossing area.*

Applicant's Response:
All proposed pedestrian routes are hard surfaced, well drained and at least five feet in width. Where pedestrian routes are along parking spaces curb stops have been provided. The pedestrian walkway along Fir Street is separated from the auto travel land by a raised curb. Existing walkway ramps at driveways along Fir Street will be improved for accessibility and way finding. The pedestrian route from the right of way to the building's main entrance will incorporate enhanced concrete paving, enhanced landscaping, and pedestrian lighting and signage to help alert drivers of the pedestrian crossing area.

D. All development shall maintain continuous compliance with applicable federal, state, and City standards .

Applicant's Response:
The applicant ensures that the proposed development will maintain continuous compliance will applicable federal, state and city standards.

E. Adequate public water and sanitary sewer facilities sufficient to serve the proposed or permitted level of development shall be provided pursuant to OCMC 16.12. The applicant shall demonstrate that adequate facilities and services are presently available or can be made available concurrent with development. Service providers shall be presumed correct in the evidence, which they submit. All facilities shall be designated to City standards as set out in the City's facility master plans and public works design standards. A development may be required to modify or replace existing offsite systems if necessary to provide adequate public facilities. The City may require over sizing of facilities where necessary to meet standards in the City's facility master plan or to allow for the orderly and efficient provision of public facilities and services. Where over sizing is required, the developer may request reimbursement from the City for over sizing based on the City's reimbursement policy and fund availability, or provide for recovery of costs from intervening properties as they develop.

Applicant's Response:

The applicant acknowledges the demonstration of adequate public water and sanitary sewer facilities sufficient for the proposed development.

F. If a transit agency, upon review of an application for an industrial, institutional, retail or office development, recommends that a bus stop, bus turnout lane, bus shelter, accessible bus landing pad, lighting, or transit stop connection be constructed, or that an easement or dedication be provided for one of these uses, consistent with an agency adopted or approved plan at the time of development, the review authority shall require such improvement, using designs supportive of transit use. Improvements at a major transit stop may include intersection or mid-block traffic management improvements to allow for crossings at major transit stops, as identified in the City's Transportation System Plan.

Applicant's Response:
The applicant understands the potential improvements the transit agency may request upon review of the application.

G. Screening of Mechanical Equipment: Commercial, mixed-use, institutional, and multi-family buildings shall include the following measures to screen or block views of mechanical equipment from adjacent streets according to the following requirements.

1. Rooftop mechanical equipment, including HVAC equipment and utility equipment that serves the structure, shall be screened from view from the adjacent street on all new buildings or building additions. Screening shall be accomplished through the use of parapet walls or a sight-obscuring enclosure around the equipment constructed of one of the primary materials used on the primary facades of the structure, and that is an integral part of the building's architectural design. The parapet or screen shall completely surround the rooftop mechanical equipment to an elevation equal to or greater than the highest portion of the rooftop mechanical equipment being screened from adjacent streets, as viewed from the sidewalk or future sidewalk location on the adjacent street at pedestrian level. In the event such parapet wall does not fully screen all rooftop equipment, then the rooftop equipment shall be enclosed by a screen constructed of one of the primary materials used on the primary facade of the building so as to achieve complete screening. Screening requirements do not apply to new or replacement equipment on existing buildings. New or replacement rooftop mechanical equipment on existing buildings shall be painted or powder-coated.

2. Wall-mounted mechanical HVAC and air conditioning equipment, and groups of multiple utility meters shall not be placed on the front facade of a building or on a facade that faces a right-of-way. Wall-mounted mechanical equipment, including–air conditioning and groups of multiple utility meters, that extend six inches or more from the outer building wall shall be screened from view from adjacent streets; from residential, public, and institutional properties; and from public areas of the site or adjacent sites through the use of (a) sight-obscuring enclosures constructed of one of the primary materials used on the primary facade of the structure, (b) sight-obscuring fences, or (c) trees or shrubs that block at least eighty percent of the equipment from view or (d) painting the units to match the building. Wall-mounted mechanical equipment that extends six inches or less from the outer building wall shall be designed to blend in with the color and architectural design of the subject building. Vents which extend six inches or less from the outer building wall shall exempt from this standard if painted.

3. *Ground-mounted above-grade mechanical equipment shall be screened by ornamental fences, screening enclosures, trees, or shrubs that block at least eighty percent of the view from the public right of way.*
4. *This section shall not apply to the installation of solar energy panels, photovoltaic equipment, wind power generating equipment, dishes/antennas, pipes, vents, and chimneys.*

Applicant's Response:

The project proposes to reuse the existing building while modifying / replacing the existing units as needed. Screening is not required as the building is existing.

H. Building Materials.

1. *Prohibited Materials. The following materials shall be prohibited in visible locations from the right-of-way or a public access easement unless an exception is granted by the Community Development Director based on the integration of the material into the overall design of the structure.*
   - *i. Vinyl or plywood siding (including T-111 or similar plywood).*
   - *ii. Glass block or highly tinted, reflected, translucent or mirrored glass (except stained glass) as more than ten percent of the building facade.*
   - *iii. Corrugated fiberglass.*
   - *iv. Chain link fencing (except for temporary purposes such as a construction site, gates for a refuse enclosure, stormwater facilities, when excepted by 17.62.050.H.2.vii, or when located on properties within the General Industrial District).*
   - *v. Crushed colored rock/crushed tumbled glass.*
   - *vi. Non-corrugated and highly reflective sheet metal.*
   - *vii. Tarps, except for the protection of outside storage.*

Applicant's Response:

The proposed development does not include any of the prohibited building materials with exception to chain link fencing. The site is currently partially enclosed by chain link fencing which is to remain with only minor repairs and improvements to be made. Improvements include the installation of vinyl sight obscuring slats to the fencing along the easterly property boundary.

The project parcel is located with the GI- General Industrial zone, therefore, the use of chain link fencing is allowed.

2. *Special Material Standards. The following materials are allowed if they comply with the requirements found below:*
   - *i. Concrete Block. When used for the front façade of any building, concrete blocks shall be split, rock- or ground-faced and shall not be the prominent material of the elevation. Plain concrete block or plain concrete may be used as foundation material if the foundation material is not revealed more than three feet above the finished grade level adjacent to the foundation wall.*
   - *ii. Metal Siding. Metal siding shall have visible corner moldings and trim and incorporate masonry or other similar durable/permanent material near the ground level (first two feet above ground level) except when used for a temporary structure.*

iii. *Exterior insulation and finish system (EIFS) and similar troweled finishes shall be trimmed in wood, masonry, or other approved materials and shall be sheltered from extreme weather by roof overhangs or other methods.*

iv. *Building surfaces shall be maintained in a clean condition and painted surfaces shall be maintained to prevent or repair peeling, blistered or cracking paint.*

v. *Membrane or fabric covered storage areas are permitted as temporary structures, excluding the use of tarps.*

vi. *Vinyl or powder coated chain link fencing is permitted for City-owned stormwater management facilities, reservoirs, and other public works facilities such as pump stations, maintenance yards, and storage yards not located within the General Industrial District.*

vii. *Chain link fencing is permitted in the following circumstances:*

1. *Within City-owned parks and recreational facilities*
2. *On any property when used for a baseball or softball backstop or dugout, track and field facility, or sports court.*

Applicant's Response:

A response for each of the special material standards is provided below. Further information for where these materials are being proposed can be found in the architectural drawings included in the application materials.

Concrete Block; Concrete block is proposed in limited quantities. Small site amenities such as the refuse and recycle enclosure, boot wash station, vehicle wash station will be constructed of concrete block.

Metal Siding; Metal siding is the predominant building cladding material proposed. The existing warehouse building is fully cladded in metal panel and is to remain as is. The renovated office building will be clad utilizing two different metal panel profiles and will be accented by existing concrete walls and other similar materials. The metal paneling will be detailed and constructed to included visible corner modeling and metal trim around wall openings.

Exterior Insulation and Finish System; none proposed

Applicant agrees to maintain and keep the building in a clean condition. All painted surfaces will be maintained to prevent and/or repair peeling, blistering or cracking paint.

Membrane or Fabric covered storage areas; non proposed

The project parcel is located within the GI – General Industrial zone which allows the use of chain link fencing. The site is currently partially enclosed by chain link fencing which is to remain as is with minor repair and improvements to be made. Improvements include the installation of vinyl sight obscuring slats to the fencing along the easterly property boundary. No additional chain link fencing is proposed.

I. Temporary Structures. Temporary structures are permitted pursuant to the following standards:

1. *Structures up to two hundred square feet:*
   - i. *Shall not be on a property for more than three consecutive days; and*
   - ii. *Shall not be on a property more than six times per year; and*
   - iii. *Shall comply with the minimum dimensional standards of the zoning designation; and*
   - iv. *Shall be sited so as to leave the minimum number of parking spaces for the primary uses as required by OCMC 17.52 or as otherwise specified in a land use approval;*
   - v. *Shall not disturb ingress or egress to the site; and*
   - vi. *Shall be exempt from all sections of s OCMC 12.08, 16.12, 17.52 and 17.62 except subsections 17.62.050.I and J.*
2. *Temporary structures larger than two hundred square feet may be permitted up to 2 times per year; and:*
   - i. *Structures larger than two hundred square feet up to eight hundred square feet:*
     - a. *Shall not be on a property for more than thirty consecutive days;*
     - b. *Shall comply with the minimum dimensional standards of the zoning designation;*
     - c. *Shall be sited so as to leave the minimum number of parking spaces for the primary uses as required by OCMC 17.52 or as otherwise specified in a land use approval;*
     - d. *Shall not disturb ingress or egress to the site; and*
     - e. *Shall be exempt from all sections of OCMC 12.08, 16.12, 17.52 and 17.62 except subsections 17.62.050.I and J.*
   - ii. *Structures larger than eight hundred square feet:*
     - a. *Shall not be on a property for more than seven consecutive days;*
     - b. *Shall comply with the minimum dimensional standards of the zoning designation;*
     - c. *Shall be sited so as to leave the minimum number of parking spaces for the primary uses as required by OCMC 17.52 or as otherwise specified in a land use approval;*
     - d. *Shall not disturb ingress or egress to the site; and*
     - e. *Shall be exempt from all sections of OCMC 12.08, 16.12, 17.52 and 17.62 except subsections 17.62.050.I and J.*
3. *Government owned properties are exempt from all sections of OCMC 12.08, 16.12, 17.52 and 17.62 except subsections 17.62.050.H and I and the dimensional standards of the zoning designation.*

J. Development shall comply with requirements of the following Oregon City Municipal Code chapters, as applicable, including but not limited to:

1. *12.04 Streets, Sidewalks and Public Places*
2. *12.08 Public and Street Trees*
3. *13.04 Water Service System*
4. *13.08 Sewer Regulations*
5. *13.12 Stormwater Management*
6. *16.12 Minimum Improvements and Design Standards for Development*
7. *17.20 Residential Design Standards for ADU's, Cluster Housing, Internal Conversions, Live/Work Units, and Manufactured Home Parks*
8. *17.40 Historic Overlay District*
9. *17.41 Tree Protection Standards*
10. *17.42 Flood Management Overlay District*
11. *17.44 Geologic Hazards*

12. *17.47 Erosion and Sediment Control*
13. *17.48 Willamette River Greenway*
14. *17.49 Natural Resource Overlay District*
15. *17.50 Administration and Procedures*
16. *17.52 Off-Street Parking and Loading*
17. *17.54 Supplemental Zoning Regulations and Exceptions*
18. *17.58 Lawful Nonconforming Uses, Structures, and Lots*
19. *17.65 Master Plans and Planned Unit Development*

Applicant's Response:

The proposed development does not include temporary structures, therefore, sections 17.62.050.I.1-2 are not applicable.

17.62.055 –Institutional, office, multi-family, retail, and commercial building standards.

A. *Purpose. The primary objective of the regulations contained in this section is to provide a range of design choices that promote creative, functional, and cohesive development that is compatible with surrounding areas. Buildings approved in compliance with these standards are intended to serve multiple tenants over the life of the building, and are not intended for a one-time occupant. The standards encourage people to spend time in the area, which also provides safety though informal surveillance. Finally, this section is intended to promote the design of an urban environment that is built to human scale by creating buildings and streets that are attractive to pedestrians, create a sense of enclosure, provide activity and interest at the intersection of the public and private spaces, while also accommodating vehicular movement.*

B. *Applicability. This section applies to institutional, office, multi-family, retail and commercial buildings except accessory structures less than one thousand square feet and temporary structures. .*

Applicant's Response:

The applicant understands building standards will apply to the proposed development as it a institutional building.

C. *Conflicts. With the exception of standards for building orientation and building front setbacks, in the event of a conflict between a design standard in this section and a standard or requirement contained in the underlying zoning district, the standard in the zoning district shall prevail.*

Applicant's Response:

Applicant acknowledges and understands hierarchy of standards.

D. *Siting of Structures. On sites with one hundred feet or more of frontage at least sixty percent of the site frontage width shall be occupied by buildings placed within five feet of the property line. For sites with less than one hundred feet of street frontage, at least fifty percent of the site frontage width shall be occupied by buildings placed within five feet of the property. Multi-family developments shall be placed no farther than twenty feet from the front property line. This section does not apply to properties with less than forty feet of frontage.*

A larger front yard setback may be approved through site plan and design review if the setback area incorporates at least one element from the following list for every five feet of increased setback requested:

1. *Tables, benches or other approved seating area.*
2. *Cobbled, patterned or paved stone or enhanced concrete.*
3. *Pedestrian scale lighting.*
4. *Sculpture/public art.*
5. *Fountains/Water feature.*
6. *At least twenty square feet of landscaping or planter boxes for each tenant facade fronting on the activity area.*
7. *Outdoor café.*
8. *Enhanced landscaping or additional landscaping.*
9. *Other elements, as approved by the Community Development Director, that can meet the intent of this section.*

Applicant's Response:
The proposed development will be setback seventy feet from the front property line, therefore, (14) approved elements must be incorporated into the front setback. The proposed pedestrian elements include a combination of the following;

Bike Rack (total of 4 parking spaces)
Bike Repair Station
Electric Bike Charging Station
Benches (total of 4)
Enhanced Concrete
Community Information Board (first floor lobby)
Flag Pole
Monument Sign
Pedestrian Lighting
ADA Ramp
Public Art Display (first floor lobby)
Decorative Landscaping with planting signage
Stormwater Facility & Water Quality info signage
Building renovation and design info signage

E. Building Orientation. All buildings along the street frontage shall face the front most architecturally significant facade toward the street and have a functional primary entrance facing the street. Primary building entrances shall be clearly defined and recessed or framed by a sheltering element such as an awning, arcade or portico in order to provide shelter from the summer sun and winter weather.

Applicant's Response:
The existing office building to be renovated, orientated such that the dominant building façade and main (public) entrance is street facing and oriented to the south. The main entrance is recessed from the primary façade plain and is clearly defined by a sheltering portico. Signage with lighting among other features will be provided to help further define the main entrance of the office building.

F. Entryways. Entrances shall include a doorway and a minimum of four of the following elements:

1. Display windows;

Recesses or projections; Peaked roof or raised parapet over the door; Canopy of at least five feet in depth; Porch; Distinct materials; Architectural details such as tile work and moldings; Pedestrian amenities such as benches, planters or planter boxes; Landscape treatments integrating arbors, low walls, trellis work; or Similar elements. Trellises, canopies and fabric awnings may project up to five feet into front setbacks and public rights-of-way, provided that the base is not less than eight feet at the lowest point and no higher than ten feet above the sidewalk.

Applicant's Response:

Each entry way to the office building include a doorway and four design elements. Design elements include relite windows, recesses, metal canopy, landscape planters and other pedestrian amenities.

G. Corner Lots.

For buildings located at the corner of intersections, the primary entrance of the building shall be located at the corner of the building or within twenty-five feet of the corner of the building. Additionally, one of the following treatments shall be required:

1. *Incorporate prominent architectural elements, such as increased building height or massing, cupola, turrets, or pitched roof, at the corner of the building or within twenty-five feet of the corner of the building.*
2. *Chamfer the corner of the building (i.e. cut the corner at a forty-five degree angle and a minimum of ten feet from the corner) and incorporate extended weather protection (arcade or awning), special paving materials, street furnishings, or plantings in the chamfered area.*
3. *Standards 1 and 2 above do not apply to vertically attached 3-4 plexes, multi-family buildings or multi-family portions of residential mixed-use buildings.*

Applicant's Response:

The proposed development is located mid-block, therefore, this section is not applicable.

H. Variation in Massing. For street facing facades greater than 120 feet in length a modulation is required which extends through all floors. Decks and roof overhangs may encroach up to three feet per side into the modulation. The modulation shall meet one of the following dimensional requirements:

1. A minimum depth of two percent of the length of the façade and a minimum width of thirty percent of the length of the façade; or

2. A minimum depth of four percent of the length of the façade and a minimum width of twenty percent of the length of the façade.

Applicant's Response:

The proposed development includes one primary street façade that is approximately 144 feet in length. The proposed variation in massing meets the requirement of a minimum depth of two percent of the length of the façade and a minimum width of thirty percent of the length of the façade. The proposed variation includes a 4 foot modulation depth over 44 feet in length, thus, meeting the variation in massing standard.

The following calculations were used to determine compliance with the standard.

144ft x 2% = 2.88ft min depth required
144ft x 30% = 43.2ft min length required

I. Building Design Elements.

1. All front and side facades shall provide a design element or architectural feature that add interest and detail such that there are no blank walls of thirty feet in length or more, measured horizontally. Features that can meet this requirement include:

a. Change in building material or texture;
b. Window or door;
c. Balcony; or
d. Pillar or post

Applicant's Response:
The applicant would like a modification to the building design standard considering the existing warehouse is to be reused in its entirety with little to no renovation as its function is to remain as a storage warehouse. It is important to mention the warehouse is in a GI district, the exterior finishes, materials and design elements are consistent with all adjacent vernacular buildings. In addition, the warehouse located in the secured back of house portion of the site, it is hidden behind the office building but most importantly away from the public eye. The applicant believes the modification is best not applied as the existing warehouse conditions are to remain in this portion of the development.

Connected to the south of the warehouse [grid line 3], the office portion is to receive a complete renovation on which the applicant agrees should be subject to the building design standards. The east, south [street facing] and west elevations all have been developed with design elements and feature to be complaint whether it be change in color, material, textures, extrusions, recessions, doors, windows, or shading canopies.

2. Street facing facades shall include additional design features. For every thirty feet of façade length, three of the following elements are required:

a. Decorative materials on more than ten percent of the total wall area (e.g., brick or stonework, shingles, wainscoting, ornamentation, and similar features);
b. Decorative cornice and/or roof line (e.g., for flat roofs);
c. Roof gable;
d. Recessed entry;
e. Covered canopy entry;
f. Cupola or tower;
g. Dormer;
h. Balcony;
i. Pillars or posts;
j. Repeating pattern of building materials;
k. A change in plane of at least two feet in width and six inches in depth;
l. Bay or oriel window; or

m. An alternative feature providing visual relief and detail as approved by the Community Development Director

Applicant's Response:

The proposed development includes a single primary street facing façade. For every thirty feet of façade length a min of three of the listed design features are incorporated. The design features include a recessed entry, a covered entry canopy, repeating pattern of building materials, and/or a change in plane of at least two feet in width and six inches in depth.

3. Building Detail Variation. Architectural features shall be varied on different buildings within the same development. At least two of the required features on each street-facing elevation shall be distinct from the street-facing elevations of other buildings within the same development.

Applicant's Response:

The proposed development only has a single street-facing elevation in which it meets the design features stated in 17.62.055[I][2]. Not applicable.

J. Windows.

1. The minimum windows requirements are set forth in Table 17.62.055.J. Windows are measured in lineal fashion between 3.5 feet and six feet from the ground. For example, a one hundred foot long building elevation would be required to have at least sixty feet (sixty percent of one hundred feet) of windows in length between the height of 3.5 feet and six feet from the ground.

Table 17.62.055.J Minimum Windows

Use	*Ground Floor: Front and Street Facing Facades*	*Upper floor(s): Front and Street Facing Facades*	*Ground Floor: Side(s) Facades*	*Upper Floor(s): Side(s) Facades*
Non-Multi-Family (or Portions of Buildings Thereof)	*60%*	*10%*	*30%*	*10%*
Multi-Family (or Portions of Buildings Thereof)	*15%*	*15%*	*10%*	*10%*

Applicant's Response:

The applicant requests a modification to the design standard for Minimum windows for the ground floor side(s) facades. The standard, per table 17.62.055.J, requires 30% of the length of the ground floor side(s) facades to be glazed.

The following calculation is used to determine the length of glazing required for 129 ft of facade;

129 lft of side facade x.30 = 38.7 lft of glazing required.

The proposed design provides 35.5 lft (27.5%) of glazing at the west office building façade. The applicant requests a modification to the standard to allow the proposed glazing design. See Glazing Exhibit.

2.Reflective, glazed, mirrored or tinted glass is limited to ten percent of the lineal footage of windows on the street facing facade. Highly reflective or glare-producing glass with a reflective factor of one-quarter or greater is prohibited on all building facades. Any glazing materials shall have a maximum fifteen percent outside visual light reflectivity value. No exception shall be made for reflective glass styles that appear transparent when internally illuminated.

Applicant's Response:

The proposed development does not include the use of reflective, glazed, mirrored or tinted glass, therefore, this standard is not applicable.

3. Side walls that face walkways may include false windows and door openings only when actual doors and windows are not feasible because of the nature of the use of the interior use of the building. False windows located within twenty feet of a right-of-way shall be utilized as display windows with a minimum display depth of thirty-six inches.

Applicant's Response:

The project does not propose any false windows or door openings to any exterior wall.

4. Multi-family windows shall incorporate window trim at least four inches in width when surrounded by horizontal or vertical lap siding.

Applicant's Response:

The proposed development does not include multi-family; therefore, this standard is not applicable.

K. Roof Treatments. The maximum length of any continuous roofline on a street-facing façade shall be seventy-five feet without a cross gable or change in height of at least two feet.

Applicant's Response:

The existing roofline of the industrial warehouse will be re-used. Currently, it is 144'-7" with a single cross gable on center; the existing condition will be maintained.

L. Drive-through facilities shall:

1. Be located at the side or rear of the building.

2. Be designed to maximize queue storage on site.

Applicant's Response:

The proposed development does not include drive-through facilities; therefore, this standard is not applicable.

M. Special development standards along transit streets.

1. Purpose. This section is intended to provide direct and convenient pedestrian access to retail, office and institutional buildings from public sidewalks and transit facilities and to promote pedestrian and transit travel to commercial and institutional facilities.

Applicant's Response:

Fir Street is not designated a transit street, therefore, this standard is not applicable.

2. *Applicability. Except as otherwise provide in this section, the requirements of this section shall apply to the construction of new retail, office and institutional buildings which front on a transit street.*

Applicant's Response:
Applicant's Response:
Fir Street is not designated a transit street, therefore, this standard is not applicable.

3. *Development Standards.*
   a. *All buildings shall have at least one main building entrance oriented towards the transit street. A main building entrance is oriented toward a transit street if it is directly located on the transit street, or if it is linked to the transit street by an on-site pedestrian walkway that does not cross off-street parking or maneuvering areas.*
      i. *If the site has frontage on more than one transit street, or on a transit street and a street intersecting a transit street, the building shall provide one main building entrance oriented to the transit street or to the corner where the two streets intersect.*
      ii. *For building facades over three hundred feet in length on a transit street, two or more main building entrances shall be provided as appropriate and oriented towards the transit street.*

Applicant's Response:
Applicant's Response:
Fir Street is not designated a transit street, therefore, this standard is not applicable.

   b. *In the event a requirement of this section conflicts with other requirements in Title 17, the requirements of this section shall control.*

Applicant's Response:
Applicant's Response:
Fir Street is not designated a transit street, therefore, this standard is not applicable.

4. *Exemptions. The following permitted uses are exempted from meeting the requirements of subsection 3. of this section:*
   a. *Heavy equipment sales;*
   b. *Motor vehicle service stations, including convenience stores associated therewith; or*
   c. *Solid waste transfer stations.*

Applicant's Response:
Applicant's Response:
Fir Street is not designated a transit street, therefore, this standard is not applicable.

17.62.056 - Additional standards for large retail establishments.
Retail building(s) occupying more than ten thousand gross square feet of floor area

shall contribute to the establishment or enhancement of community and public spaces by providing at least two of the following:

A. Patio/seating area;
B. Pedestrian plaza with benches;
C. Transportation center;
D. Window shopping walkway;
E. Outdoor playground area;
F. Kiosk area, water feature;
G. Clock tower; or
H. Other such deliberately shaped area and/or a focal feature or amenity that, in the judgment of the appropriate decision maker, adequately enhances such community and public spaces. Any such areas shall have direct access to the public sidewalk network and such features shall not be constructed of materials that are inferior to the principle materials of the building and landscape.

Applicant's Response:

Section 17.62.056 Additional standards for large retail establishments is not applicable. The proposed development does not include retail.

17.62.057 - Multifamily Usable Open Space Requirements

A. Intent. Creating areas of usable open space that are easily accessed by residents provides focal points for community recreation and interaction and adds to the overall quality of life for residents. Given the environmental and recreational benefits of common open space, it should be integrated purposefully into the overall design of a development and not merely be residual areas left over after buildings and parking lots are sited.

B. Open Space Required. All new multi-family developments in all zones shall provide usable open space.

1. In residential zones, each development shall provide a minimum of one hundred square feet of open space per dwelling unit.
2. In non-residential, commercial and mixed-use zones, each development shall provide a minimum of fifty square feet of open space per dwelling unit.
3. Required setback areas shall not count toward the open space requirement unless setback areas are incorporated into spaces that meet all other requirements of this section.
4. Required open space areas may be counted towards both the open space requirements and the minimum landscaping requirements in OCMC 17.62.050.A, if the spaces meet the requirements of both sections.

C. Usable Open Space Types.

1. Common open spaces shall be accessible to all residents of the development and include landscaped courtyards, decks, gardens with pathways, children's play areas, common rooftop decks and terraces, and other multipurpose recreational or green spaces. Common open spaces may be used to meet one hundred percent of the usable open space requirement. Design standards:
a. Minimum dimensions for common open space shall be twelve feet with a minimum size of two hundred square feet for developments with twenty units or less, and twenty feet with a minimum size of four hundred square feet for developments with twenty-one or more units.
b. Common open space shall feature a mix of natural and recreational amenities to make the area more functional and enjoyable for a range of users. Sites with twenty units or

less shall provide a minimum of two of the following amenities, and sites with twenty-one units or more shall provide a minimum of three of the following amenities and an additional amenity for every twenty units over forty, rounded up.

1. *Landscaping areas.*
2. *Community gardening areas.*
3. *Large trees expected to reach over eighteen inches dbh at maturity.*
4. *Seating.*
5. *Pedestrian-scaled lighting.*
6. *Hard-surfaced pedestrian paths in addition to those required for internal pedestrian circulation.*
7. *Paved courtyard or plaza.*
8. *Gazebos or other decorative shelters.*
9. *Play structures for children.*
10. *Sports courts.*
11. *An alternative amenity as approved by the Community Development Director.*

c. *Common open space shall be separated from ground level windows, streets, service areas and parking lots with landscaping, low-level fencing, and/or other treatments as approved by the City that enhance safety and privacy for both the common open space and dwelling units.*

d. *Common open space shall be accessible from the dwelling units and, as appropriate, from public streets and sidewalks. The space shall be oriented to encourage activity from local residents.*

2. *Private open space that is not open to all residents includes balconies, patios, and other outdoor multi-purpose recreational or green spaces. It may be used to meet up to fifty percent of the usable open space requirement.*
   a. *Minimum dimensions for private open space shall be five feet with a minimum size of forty square feet.*
3. *Indoor recreational space may be used to meet up to twenty-five percent of the usable open space requirement provided the space is:*
   a. *Accessible to all dwelling units.*
   b. *Designed for and includes equipment for a recreational use (e.g., exercise, group functions, etc.).*

Applicant's Response:

Section 17.62.057 Multifamily Usable Open Space Requirements is not applicable. The proposed development does not include multifamily uses or multifamily useable open space.

17.62.059 - Cluster housing.

All cluster housing shall comply with the standards in Chapter 17.20.020 in addition to the standards in this chapter.

Applicant's Response:

Section 17.62.059 Cluster Housing is not applicable. The proposed development does not include cluster housing.

17.62.065 - Outdoor lighting.

A. *Purpose. The general purpose of this section is to require outdoor lighting that is adequate for safety and convenience; in scale with the activity to be illuminated and its surroundings; directed to the*

surface or activity to be illuminated; and designed to clearly render people and objects and contribute to a pleasant nighttime environment. Additional specific purposes are to:

1. *Provide safety and personal security as well as convenience and utility in areas of public use or traverse, for uses where there is outdoor public activity during hours of darkness;*
2. *Control glare and excessive brightness to improve visual performance, allow better visibility with relatively less light, and protect residents from nuisance and discomfort;*
3. *Control trespass light onto neighboring properties to protect inhabitants from the consequences of stray light shining in inhabitants' eyes or onto neighboring properties;*
4. *Result in cost and energy savings to establishments by carefully directing light at the surface area or activity to be illuminated, using only the amount of light necessary; and*
5. *Control light pollution to minimize the negative effects of misdirected light and recapture views to the night sky.*
6. *Encourage energy efficient lighting with new technologies such as Light Emitting Diodes (LED) or similar to reduce ongoing electrical demand and operating costs.*

B. *Applicability.*

1. *General.*
   a. *All exterior lighting for any type of commercial, mixed-use, industrial, institutional, or multi-family development shall comply with the standards of this section, unless excepted in subsection B.3.*
   b. *The City Engineer or Public Works Director shall have the authority to enforce these regulations on private property if any outdoor illumination is determined to present an immediate threat to the public health, safety and welfare.*

Applicant's Response:

The applicant acknowledges and understands that all proposed outdoor lighting is subject to the expectations and requirements listed in OCMC 17.62.065.

2. *Lighting Plan Requirement. All commercial, industrial, mixed-use, cottage housing and multi-family developments shall submit a proposed exterior lighting plan. The plan shall be submitted concurrently with the site plan. The exterior lighting plan shall include plans and specifications for streetlights, parking lot lights, and exterior building lights. The specifications shall include details of the pole, fixture height and design, lamp type, wattage, and spacing of lights.*

Applicant's Response:

A lighting plan with specifications on streetlights, parking lot lights and exterior building light fixtures have been included in the application material, see appendix.

3. *Excepted Lighting. The following types of lighting are excepted from the requirements of this section.*
   a. *Residential lighting for single-family attached and detached homes, and duplexes*
   b. *Public street and right-of-way lighting.*
   c. *Temporary decorative seasonal lighting provided that individual lamps have a light output of sixty watts or less.*
   d. *Temporary lighting for emergency or nighttime work and construction.*
   e. *Temporary lighting for theatrical, television, and performance areas, or for special public events.*

f. Lighting for a special district, street, or building that, according to an adopted municipal plan or ordinance, is determined to require special lighting aesthetics as part of its physical character.

g. Lighting required and regulated by the Federal Aviation Administration.

Applicant's Response:

Applicant acknowledges and understands the excepted lighting types, none of which are included in proposed development.

C. Design and Illumination Standards.

1. Outdoor lighting, if provided, shall be provided in a manner that enhances security, is appropriate for the use, avoids adverse impacts on surrounding properties, and the night sky through appropriate shielding as defined in this section. Glare shall not cause illumination on other properties in excess of a measurement of 0.5 footcandles of light as measured at the property line.

Applicant's Response:

All proposed site and building lighting are located and will be installed such that adverse impacts on surrounding properties is avoided. A site lighting plan is included and indicates the light levels for proposed lighting. Site lighting is essential to the security and operations of the proposed facility.

2. Lighting shall be provided in parking lots and vehicular circulation areas.

Applicant's Response:

The proposed development provides lighting in all parking lots and vehicular circulation areas. These areas are served by pole mounted fixtures or fixtures mounted to the exterior building walls.

3. Lighting shall be provided in pedestrian walkways, pedestrian plazas, and pedestrian circulation areas.

Applicant's Response:

The proposed development provides lighting at all pedestrian walkways, pedestrian plazas and pedestrian circulation areas.

4. Lighting shall be provided at all building entrances.

Applicant's Response:

The proposed development provides lighting at all building entrances. Lighting will be enhanced at the main entrance to serve as wayfinding for visitors.

5. With the exception of pedestrian scale lighting, all light sources shall be concealed or shielded with a full cut-off style fixture in order to minimize the potential for glare and unnecessary diffusion on adjacent property.

Applicant's Response:

All proposed light fixtures include shielding and will be installed such that glare and unnecessary diffusion onto adjacent property is minimized.

6. *The maximum height of any lighting pole serving a multi-family residential use shall be twenty feet. The maximum height serving any other type of use shall be twenty-five feet, except in parking lots larger than five acres, the maximum height shall be thirty-five feet if the pole is located at least one hundred feet from any residential use.*

Applicant's Response:

the proposed development does not include new pole mounted lighting, therefore, this standard is not applicable.

7. *Floodlights shall not be utilized to light all or any portion of a building facade between 10 p.m. and 6 a.m.*

Applicant's Response:

The applicant acknowledges and understands flood lights are to be utilized between 10 a.m. and 6 a.m. only.

8. *Lighting on outdoor canopies shall be fully recessed into the canopy and shall not protrude downward beyond the ceiling of the canopy.*

Applicant's Response:

All proposed lighting at canopies will be fully recessed so that the fixture does not protrude below the ceiling of host canopy.

9. *All outdoor light not necessary for security purposes shall be reduced, activated by motion sensor detectors, or turned off during non-operating hours.*

Applicant's Response:

The applicant understands the requirement and install lighting controls such that all outdoor lighting not necessary for security purposes will be motion activated during non-operating hours.

10. *Light fixtures used to illuminate flags, statues, or any other objects mounted on a pole, pedestal, or platform shall use a narrow cone beam of light that will not extend beyond the illuminated object.*

Applicant's Response:

The proposed project will include an illuminated flagpole and platform sign, both of which shall be illuminated by a narrow cone light fixture that does not extend beyond the subject.

11. *For upward-directed architectural, landscape, and decorative lighting, direct light emissions shall not be visible above the building roofline.*

Applicant's Response:

All proposed architectural, landscape and decorative lighting will be installed such that direct light emissions will not be visible above the roofline of the building.

12. *No flickering or flashing lights shall be permitted, except for temporary decorative seasonal lighting.*

Applicant's Response:

No flickering or flashing light fixtures are proposed as part of this application. Not applicable.

13. Lighting for outdoor recreational uses such as ball fields, playing fields, tennis courts, and similar uses, are allowed a light post height up to eighty feet in height.

Applicant's Response:

The proposed development does not include any outdoor recreational uses. Not applicable.

14. Main building entrances shall be well lighted and visible from any transit street. The minimum lighting level for building entries fronting on a transit street shall be three foot-candles.

Applicant's Response:

The main building entrance and pedestrian plaza from public right of way will be lit to a minimum lighting level of three foot-candles.

17.62.085 - Refuse and recycling standards for commercial, industrial, office, institutional, and multi-family developments.

The purpose and intent of these provisions is to provide an efficient, safe and convenient refuse and recycling enclosure for the public as well as the local collection firm. All new development, change in property use, expansions or exterior alterations to uses, other than single-family or duplex residences, single-family attached dwellings, 3-4 plexes, internal conversions, or accessory dwelling units (ADUs), shall include a refuse and recycling enclosure. The area(s) shall be:

A. Fully enclosed and visually screened;
B. Located in a manner easily and safely accessible by collection vehicles;
C. Located in a manner so as not to hinder travel lanes, walkways, streets or adjacent properties;
D. On a level, hard surface designed to discharge surface water runoff and avoid ponding;
E. Maintained by the property owner;
F. Used only for purposes of storing solid waste and recyclable materials;
G. Designed in accordance with applicable sections of the Oregon City Municipal Code (including OCMC 8.20—Solid Waste Collection and Disposal) and city adopted policies.

Enclosures are encouraged to be sized appropriately to meet the needs of current and future tenants and designed with sturdy materials which are compatible to the primary structure(s).

Applicant's Response:

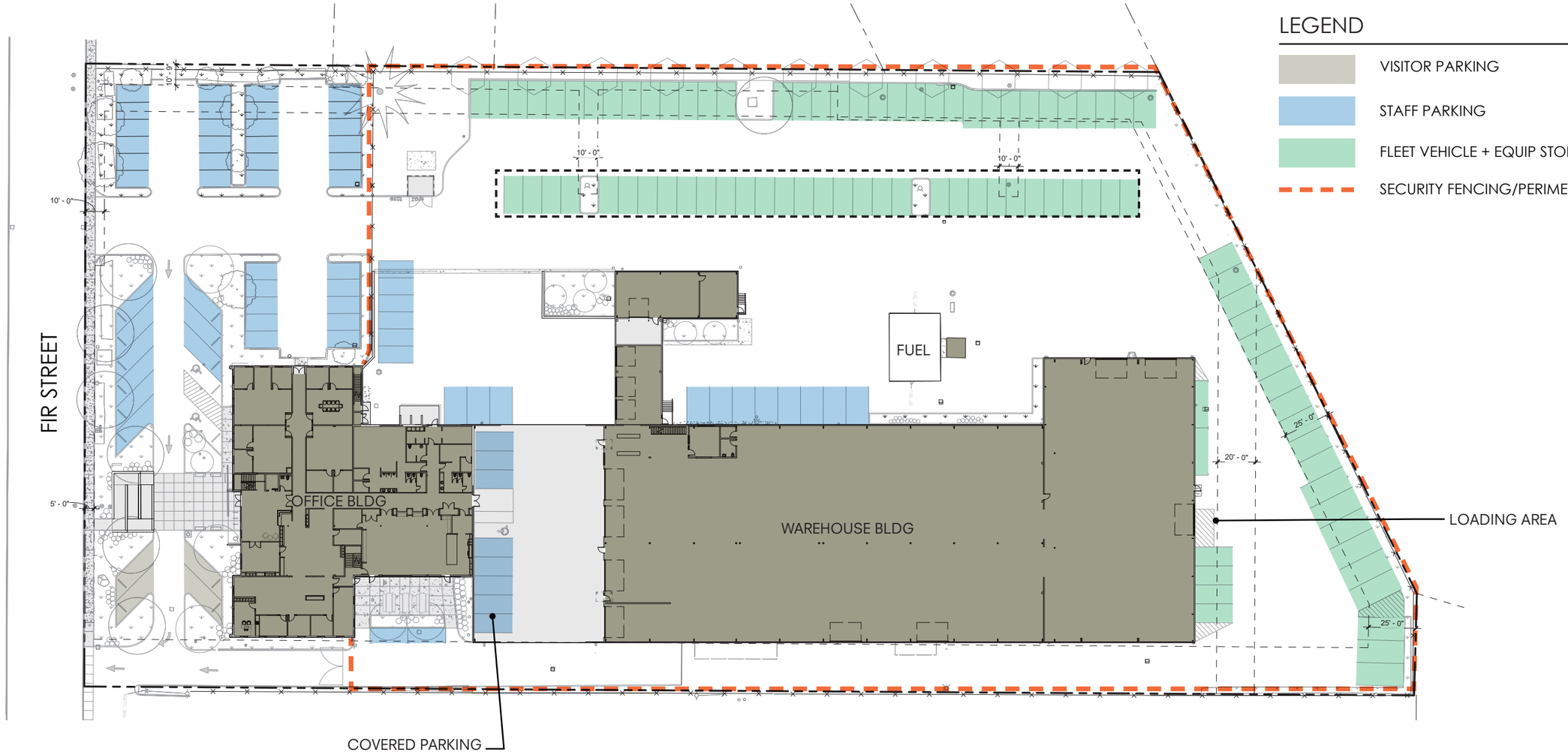
The proposed development includes the construction of a new refuse and recycling enclosure. The new refuse and recycling enclosure are to be located within an existing fenced yard and will be fully enclosed and screened from view. The location of the enclosure is compatible with traffic and pedestrian circulation and will be easily accessible by building users and waste management service providers. It is to be on a leveled hard surface able to self-discharge any water runoff. The use of the enclosure will be limited to refuse and recycling material storage and constructed in accordance with applicable sections from OCMC 8.20 Solid Waste Collection and Disposal.

PARKING SUMMARY

VISITOR PARKING	4
STAFF PARKING:	62
ACCESSIBLE PARKING:	3
PROPOSED PARKING SPACES:	69
*FLEET + EQUIP STORAGE SPACES:	98

LEGEND

- VISITOR PARKING
- STAFF PARKING
- FLEET VEHICLE + EQUIP STORAGE
- SECURITY FENCING/PERIMETER



OREGON CITY PUBLIC WORKS COMPLEX
13895 FIR ST.
OREGON CITY, OR 97045
10 APRIL 2020 | PROJ. NO. 19112

PARKING SITE EXHIBIT

SCALE: 1" = 60' 0' 30' 60' 120'

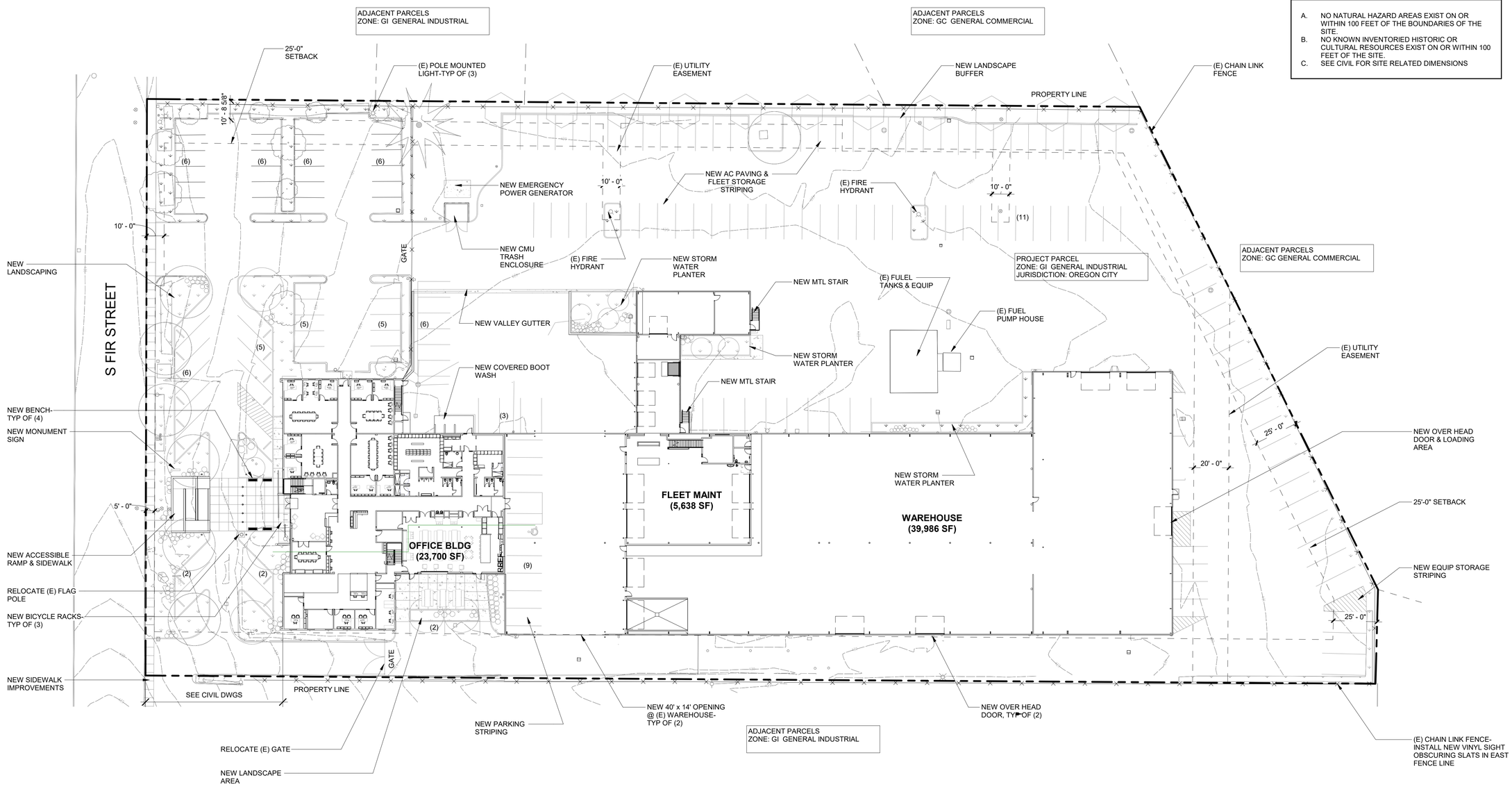
SCOTT | EDWARDS A

ZONING SUMMARY

ADDRESS:	13895 FIR ST. OREGON CITY, OR 97045
TAX LOT: TAXMAP:	1101 3-2E-09B
LOT SIZE:	4.79 ACRES
TOTAL IMPERVIOUS AREA CREATED:	9,400 SF (0.21 ACRES)
(E) PARKING SPACES: PARKING SPACES:	110 (2 ADA) 69 (3 ADA)

SHEET NOTES

A. NO NATURAL HAZARD AREAS EXIST ON OR WITHIN 100 FEET OF THE BOUNDARIES OF THE SITE.
B. NO KNOWN INVENTORIED HISTORIC OR CULTURAL RESOURCES EXIST ON OR WITHIN 100 FEET OF THE SITE.
C. SEE CIVIL FOR SITE RELATED DIMENSIONS



1 **SITE PLAN**
1" = 30'-0"

N

S|E A
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2525 E Burnside Street, Portland, OR 97214
phone: (503) 226-3617 www.seallp.com

NOT FOR CONSTRUCTION

OREGON CITY PUBLIC WORKS

Job Number: 19112

13895 FIR STREET
OREGON CITY, OR 97045

DD SET	MAY 22, 2020
ISSUE	DATE

Drawing:

SITE PLAN

Sheet No:

A1.01

FILE PATH: C:\Revit_Local\OC - Public Works Facility_bdoleYSGC4.rvt

THESE DRAWINGS ARE THE ORIGINAL UNPUBLISHED WORK OF THE ARCHITECT AND MAY NOT BE DUPLICATED OR USED WITHOUT THE WRITTEN CONSENT OF THE ARCHITECT.

Diliana Vassileva

From: Brandon Dole <bdole@seallp.com>
Sent: Tuesday, June 2, 2020 2:33 PM
To: Diliana Vassileva
Cc: Samra Egger
Subject: RE: OCPW Land Use Application Submittal...
Attachments: 2019-11-27 OCPW Equip List.xlsx

Follow Up Flag: Follow Up
Flag Status: Flagged

Hi Diliana,

See attached, this is our parking and equipment program. Listed is all the items we're intending to store at the site that will require a parking space. There are 112 items though some of them will be stored inside the warehouse. The program breaks this down.

See below for employee count. Each department will have seasonal staff that will vary. The numbers indicated are based on last year's count.

Employee Count			
	Full Time	Seasonal	Future
Operations	37	13	1
Parks + Facilities	13	5	1
Engineering	16	1	
subtotal	66	19	2
Overall Total 87			

Hopefully, this gives you the information needed. Let me know if you need anything else.

Thanks,

Brandon Dole
Project Manager

S|EA

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Please contact us via email or phone

Mailing Address: 2525 E Burnside St. Portland, OR 97214
O: 503.226.3617 | D: 503.896.5313
C: 503.539.4594 | www.seallp.com

From: Diliana Vassileva <dvassileva@orcity.org>
Sent: Friday, May 29, 2020 11:45 AM
To: Brandon Dole <bdole@seallp.com>
Cc: Samra Egger <segger@planbconsult.net>
Subject: Re: OCPW Land Use Application Submittal...

Hi Brandon,

I think we have enough to deem the application complete, however, at some point over the next couple of weeks could you please provide some more information on the number of employees and number of fleet vehicles. If that information is already in the application and I just missed it, please just let me know where in the application I can find it. I will follow up next week with the hearing date and information for the posting the public notice.

Thanks,
Diliana

Diliana Vassileva
Assistant Planner
Planning Division
City of Oregon City
PO Box 3040
695 Warner Parrott Road,
Oregon City, Oregon 97045
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Planning Division - 503.722.3789
Fax 503.722.3880

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PUBLIC RECORDS LAW DISCLOSURE: This e-mail is subject to the State Retention Schedule and may be made available to the public.

From: Brandon Dole <bdole@seallp.com>
Date: Monday, May 25, 2020 at 10:19 PM
To: Diliana Vassileva <dvassileva@orcity.org>
Cc: Samra Egger <segger@planbconsult.net>
Subject: RE: OCPW Land Use Application Submittal...

Hi Diliana,

I hope you had a nice Memorial Day weekend. Our responses to your email regarding our application submittal a below. Revised drawings and OCMC 17.52 -Off-Street Parking and Loading and 17.60 -Variances section responses are attached.

- Minor Site Plan
  It seems that the back area is being treated as a parking lot rather than an outdoor storage area. Does this result in more than 5 parking spaces being added (compared to what is currently there)? If so that would trigger the full site plan process. The application should provide more information on the existing number of parking stalls compared to what is being proposed to demonstrate that no more than 5 stalls are being added.

Per our discussion, the back area (yard) is being designated as outdoor storage area with the intent to store fleet vehicles and equipment. Variance number two is revised to request variance from the twenty five foot setback required at adjacent commercial uses. OCMC 17.52 and 17.60 have been revised accordingly. We revised our site plan and site parking exhibit to help clarify existing parking spaces vs proposed. There are currently 110 parking spaces our revisions indicate 69 proposed parking spaces for staff and visitors with the remaining yard area as outdoor storage. This keeps the parking count within the min and max allowed and does not add to the existing parking count of 110.

- Variance Code Responses
  More detail should be provided in the responses for the variance criteria, including what other options have been explored and why they are not feasible, specific goals and policies from the comprehensive plan should be referenced, and more discussion on how granting the variance will meet the intent of the standard. We almost always require some form of mitigation for variances because we want to be mindful about setting a precedent for future variances, so some mitigation should be proposed.

See attached revised OCMC 17.60 for addition detail incorporated into the responses. Let me know if you have any further suggestions on the justification.

- Building Location (17.62.055.D)
  Because the site is already out of compliance with the 15% landscaping requirement, I'm having trouble with the additional landscaping as a pedestrian amenity allowing the increased setback.

Understood. We confirmed the setback is seventy feet from ROW. This means fourteen amenities will be required. Seems we'll need direction how to address the quantities being required.

- NA Meeting
  Thank you for forwarding the video of the meeting. For records management purposes, please could you provide a memo or email with the meeting invite that was sent out, list of attendees, and summary of issues discussed at the meeting.

- Variances
  The planner on duty when the application came in didn't realize that multiple variances are being requested, so only one variance was paid for. I can work with PW to get the payment for the other variances so I don't think we'll need anything from you, but just a heads-up.

Let me know If you need anything further. I'm available to discuss in detail at your convenience.

Thank you!

Brandon Dole
Project Manager

S|EA

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C: 503.539.4594 | www.seallp.com

From: Diliana Vassileva <dvassileva@orcity.org>
Sent: Friday, May 22, 2020 10:38 AM
To: Brandon Dole <bdole@seallp.com>
Cc: Samra Egger <segger@planbconsult.net>
Subject: Re: OCPW Land Use Application Submittal...

Hi Brandon,

Just wanted to check in on this. I haven't seen the remaining incompleteness items come through and I just wanted to make sure I didn't miss anything.

Thanks,
Diliana

Diliana Vassileva
Assistant Planner
Planning Division
City of Oregon City
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Planning Division - 503.722.3789
Fax 503.722.3880

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From: Brandon Dole <bdole@seallp.com>
Date: Thursday, May 14, 2020 at 11:09 AM
To: Diliana Vassileva <dvassileva@orcity.org>
Cc: Samra Egger <segger@planbconsult.net>
Subject: RE: OCPW Land Use Application Submittal...

Hi Diliana,

Hope you're still doing well. Here is the information regarding the neighborhood association presentation. We're in the process of uploading the video of the presentation to the Public Works website. That should be completed today.

I plan on following up tomorrow with the remaining items discussed. My plan is to still send you a draft for your review and comments later this afternoon.

Let me know if you have any questions or concerns.

Thanks,

Brandon Dole
Project Manager

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From: Diliana Vassileva <dvassileva@orcity.org>
Sent: Wednesday, May 6, 2020 12:37 PM
To: Brandon Dole <bdole@seallp.com>
Subject: Re: OCPW Land Use Application Submittal...

Hi Brandon,

In preparation for our discussion today, below are the completeness items I wanted to discuss. Sorry this is last minute and hopefully the explanations below make sense. I'll provide more information when we talk, just wanted to give you some context going into our meeting.

- Minor Site Plan
  It seems that the back area is being treated as a parking lot rather than an outdoor storage area. Does this result in more than 5 parking spaces being added (compared to what is currently there)? If so that would trigger the full site plan process. The application should provide more information on the existing number of parking stalls compared to what is being proposed to demonstrate that no more than 5 stalls are being added.
- Variance Code Responses
  More detail should be provided in the responses for the variance criteria, including what other options have been explored and why they are not feasible, specific goals and policies from the comprehensive plan should be referenced, and more discussion on how granting the variance will meet the intent of the standard. We almost always require some form of mitigation for variances because we want to be mindful about setting a precedent for future variances, so some mitigation should be proposed.
- Building Location (17.62.055.D)

Because the site is already out of compliance with the 15% landscaping requirement, I'm having trouble w additional landscaping as a pedestrian amenity allowing the increased setback.

- NA Meeting
  Thank you for forwarding the video of the meeting. For records management purposes, please could you provide a memo or email with the meeting invite that was sent out, list of attendees, and summary of issues discussed at the meeting.
- Variances
  The planner on duty when the application came in didn't realize that multiple variances are being requested, so only one variance was paid for. I can work with PW to get the payment for the other variances so I don't think we'll need anything from you, but just a heads-up.

Thanks,
Diliana

Diliana Vassileva
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City of Oregon City
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695 Warner Parrott Road,
Oregon City, Oregon 97045
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Planning Division - 503.722.3789
Fax 503.722.3880

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From: Diliana Vassileva <dvassileva@orcity.org>
Date: Tuesday, May 5, 2020 at 6:23 PM
To: Brandon Dole <bdole@seallp.com>
Subject: RE: OCPW Land Use Application Submittal...

Sounds good!
Thanks,
Diliana

Diliana Vassileva
Assistant Planner
Planning Division
City of Oregon City
PO Box 3040
695 Warner Parrott Road,
Oregon City, Oregon 97045
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From: Brandon Dole <bdole@seallp.com>
Sent: Tuesday, May 5, 2020 6:21 PM
To: Diliana Vassileva <dvassileva@orcity.org>
Subject: Re: OCPW Land Use Application Submittal...

Hi Diliana,

We're doing well. Hope the same for you.

Tomorrow after 2pm works great. I can send you a zoom invite?

Brandon

Get Outlook for iOS

From: Diliana Vassileva <dvassileva@orcity.org>
Sent: Tuesday, May 5, 2020 6:16:14 PM
To: Brandon Dole <bdole@seallp.com>
Subject: Re: OCPW Land Use Application Submittal...

Hi Brandon,

Hope you are doing well. Are you available for a phone call or zoom meeting to discuss the OCPW application tomorrow or Thursday? I'm free tomorrow after 2, and 10-1 or after 3 on Thursday.

Diliana

Diliana Vassileva
Assistant Planner
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City of Oregon City
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PUBLIC RECORDS LAW DISCLOSURE: This e-mail is subject to the State Retention Schedule and may be made available to the public.

From: Brandon Dole <bdole@seallp.com>
Date: Monday, April 13, 2020 at 11:36 AM
To: Diliana Vassileva <dvassileva@orcity.org>, "John M. Lewis" <jmlewis@orcity.org>
Cc: Vance Walker <vwalker@orcity.org>, Denise Conrad <dconrad@orcity.org>, Samra Egger <segger@planbconsult.net>, Gerard Mulrooney <gmulrooney@planbconsult.net>, Sang Pau <spau@orcity.org>, Manuel Saldivar-Aguirre <msaldivaraguirre@seallp.com>
Subject: RE: OCPW Land Use Application Submittal...

Hi Diliana,

I was able to upload the application forms and a site plan through the portal. The application material include files that were too large to upload. You can use the link below to download all of the submittal material.

https://seallp.box.com/s/er5yi4s8fl8e92up0e31zwh6lepg1x86

The application material have been numbered according to the checklists provided. All drawings required have been packaged into one pdf named *"Architectural Drawings."* Let me know if any of these need to be separated. If you have any trouble with the link or files provided, please, don't hesitate to reach out.

We're looking forward to your review of the application. Let us know if you have any initial questions or clarifications.

Sincerely,

Brandon Dole
Project Manager

S|EA

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O: 503.226.3617 | D: 503.896.5313 | www.seallp.com

From: Diliana Vassileva <dvassileva@orcity.org>
Sent: Wednesday, April 8, 2020 11:49 AM
To: Brandon Dole <bdole@seallp.com>
Subject: Re: OCPW...

Hi Brandon,

We have set up an online submittal portal here. If you are unable to upload all of the application materials due to the file size limits, you can email me for a large file upload link. Once you submit, we will get back to you with the assigned file numbers and to arrange payment. In this case we can just work directly with PW for an interdepartmental transfer for the fee.

Please let me know if you have any questions. Hope you and your family are staying healthy!

Thanks,
Diliana

Diliana Vassileva

Assistant Planner

Planning Division

City of Oregon City
PO Box 3040
698 Warner Parrott Road,

Oregon City, Oregon 97045
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From: Brandon Dole <bdole@seallp.com>
Sent: Wednesday, April 8, 2020 11:03 AM
To: Diliana Vassileva <dvassileva@orcity.org>
Subject: OCPW...

Hi Diliana,

Hope you're doing well and staying healthy! We're looking to submit our application for the Operations Complex soon. What is the new protocol submitting applications with the COVID closures? Anything we should be aware of?

As usual, your help is greatly appreciated.

Thanks,

Brandon Dole
Project Manager

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Veh#	Dept	Year	Description	Comments
373	Water	2002	VAC-TAC TRAILER (self cont vac)	Warehouse
389	Water	2007	HEFTEE 4000	Fleet Maintenance
475	Street	2003	ASPHALT ZIPPER TRENCH/MILL	
476	Street	2014	Wirtgen Milling Machine	Warehouse
477	Street	2015	LEEBOY ASPHALT PAVER	
479	Street	2016	CRAFCO CRACK SEALER	
482	Street	2002	ASPHALT TACK DISTRIBUTOR	
483	Street	2015	15" SOLAR SPEEDCHECK TRAILER	Warehouse
484	Street	1998	GS COMPRESSOR	Warehouse
485	Street	2001	INGERSOLL-RAND DD30 ROLLER	
488	Street	2013	ADDCO SIGN TRAILER	Electrical, Service, Warehouse
490	Street	2012	VER-MAC SIGN TRAILER	Warehouse
492	Street	2009	GRAYCO LINE LAZAR	Warehouse
494	Street	2011	ADDCO SIGN TRAILER	
542	Sewer	2017	FORD E-450 CCTV HI-CUBE VAN	
564	Sewer	2016	VAC-CON FREIGHT 114 SD 5 YD	Warehouse
566	Sewer	2010	2010 VAC-CON	Warehouse
581	Sewer	1992	KOHLER GENERATOR	
660	Storm	2005	GMC Truck T8500 (SWEEPER)	
661(JH)	Storm	2016	PETERBUILT 220 ELGIN SWEEPER	
680	Storm	2003	DRBRUSH MOWER	Warehouse
681	Storm		JOHN DEERE 345 MOWER	Warehouse
682	Storm		TORO Z100 MOWER	Warehouse
683	Storm	1992	CONCRETE SAW	Warehouse

Veh#	Dept	Year	Description	Comments
347(DF)	Water	2011	FORD F-450 EXT. CAB UTILITY 4X4	
348(DJ)	Water	2014	FORD F-450 EXT. CAB UTILITY 4X4	
441	Street	1998	DODGE BR 3500 DUMP TRUCK 4X4	
445(HW)	Street	2014	FORD F-450 EXT. CAB UTILITY 4X4	
460	Street	2009	FREIGHTLINER ASPHALT	
466	Street	2005	FORD F-550 ARIAL TRUCK 4X2	
471	Street	2008	T190 BOBCAT LOADER W/TRAIL	
473	Street	1999	JOHN DEERE 310SE BACKHOE	
480	Street	2007	BG BRUSH CUTTER	Walk behind; Warehouse
481	Street	2015	JOHN DEERE MOWER	Warehouse
487	Street	1999	JD 4500 TRACTOR	
489	Street	2016	CHICAGO PNEUMATIC AIR COMP	Warehouse
540	Sewer	2005	FORD F-350 ULITILY	
560	Sewer	1999	GMC FLUSHER TRUCK	
570	Storm		Backhoe	
641(RB)	Storm	2011	F-450 EXT. CAB UTILITY 4X4	
643	Storm	2002	DODGE BR3500 1 TON 4X4	
670	Storm	1980	JD 444 LOADER	
671	Storm	2002	CAT 924G SHEEL LOADER	
880	Parks/Cem	2006	SALSCO CHIPPER	Warehouse

Veh#	Dept	Year	Description	Comments
345	Water	2002	DODGE 1 TON DUMP TRUCK 4X4	
361	Water	2006	STERLING L7500 DUMP	
362	Water	2002	VOLVO 10-YD DUMP	
440	Street	1998	DODGE 1 TON FLAT BED 4X2	
442(WW)	Street	2006	FORD F-350 STANDARD CAB 4X4	
443(JT)	Street	2016	FORD F-350 EXT. 4X4	
444(JC)	Street	2002	FORD F-350 PU STD. CAB 4X4	
446(CH)	Street	2014	FORD F-450 EXT. CAB DUMP 4X4	
464	Street	2000	INT-L 10 YD DUMP TRUCK	
467	Street	2006	STERLING L7500 DUMP	
493	Street	1983	EPOKE SANDER	
497	Street	2002	HENDERSON DROP-IN SANDER	
640	Storm	1998	DODGE BR3500 DUMP 4X4	
642	Storm	2014	FORD F-450 DUMP 4x4	
644(JP)	Storm	2014	FORD F-450 DUMP 4x4	
841(BW)	Parks/Cem	2015	F350 SUPERCAB 4X4	
842(TW)	Parks/Cem	2010	FORD F-350 PICK UP 4X4	
843	Parks/Cem	2011	FORD F-450 DUMP 4X4	
844	Parks/Cem		ford f350 flat bed	recent add
?	Facilites		van	recent add
?	Facilites		van	recent add

Item #1.

	Spaces Needed
Indoor (warehouse)	25
covered	21
covered if possible	22
uncovered	44

total	112
total covered	87

OREGON CITY OPERATIONS COMPLEX

NEIGHBORHOOD PRESENTATION

MAY 04, 2020

TODAY’S AGENDA

PROJECT BACKGROUND + INTENT

DESIGN CHALLENGES

THE NEW OPERATIONS COMPLEX

SCHEDULE

Q+A

HWY 213

BEAVERCREEK RD

FIR ST

MOLALLA AVE

DESIGN CHALLENGES.....

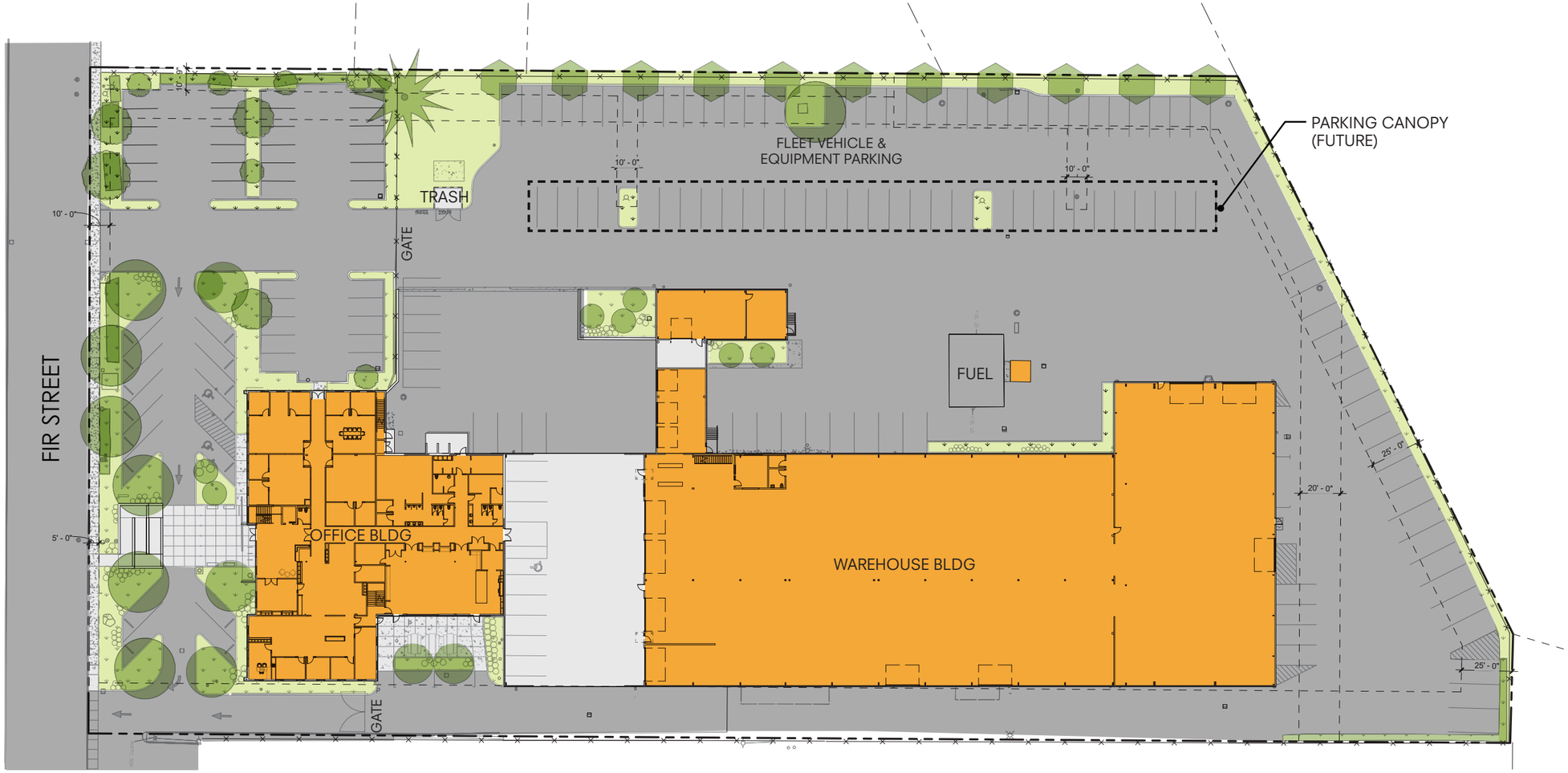
SITE IS ONLY 4.79 ACRES (8-10 NEEDED)

NON-CONFORMING SITE

SEISMIC CATEGORY IV BUILDING

BUDGET

the new OREGON CITY OPERATIONS COMPLEX



OREGON CITY PUBLIC WORKS COMPLEX
13895 FIR ST.
OREGON CITY, OR 97045
10 APRIL 2020 | PROJ. NO. 19112

PROPOSED SITE EXHIBIT

SCALE: 1" = 60'

0' 30' 60' 120'

LEGEND

- OPERATIONS & PARKS
- FLEET MAINTENANCE
- LOCKER ROOM
- COMMON AREAS & STORAGE

OREGON CITY PUBLIC WORKS COMPLEX

13895 FIR ST.
OREGON CITY, OR 97045
10 APRIL 2020 | PROJ. NO. 19112

FLOOR PLAN

Office + Fleet Maintenance

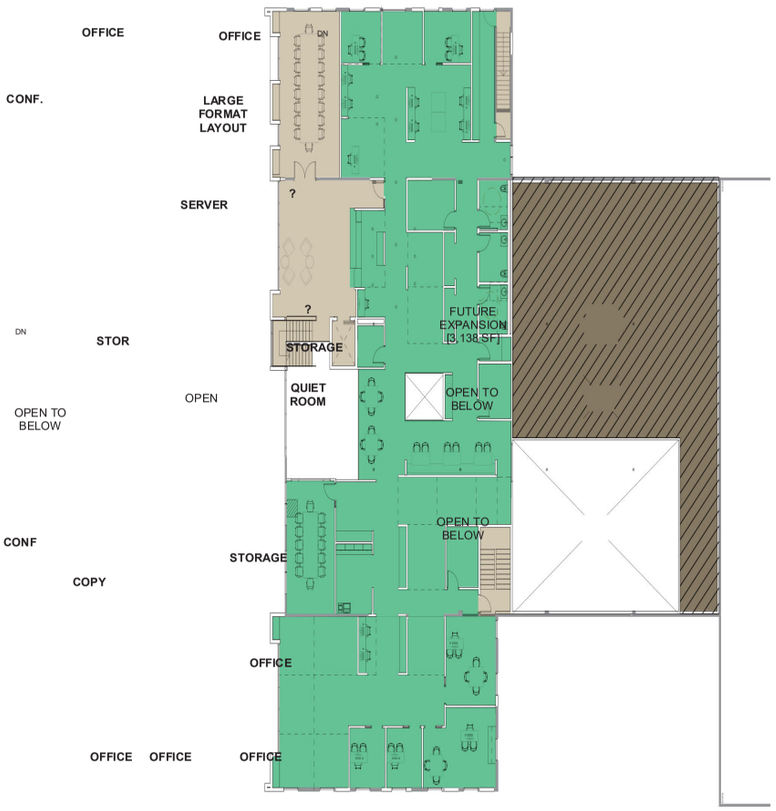
SCALE: NTS

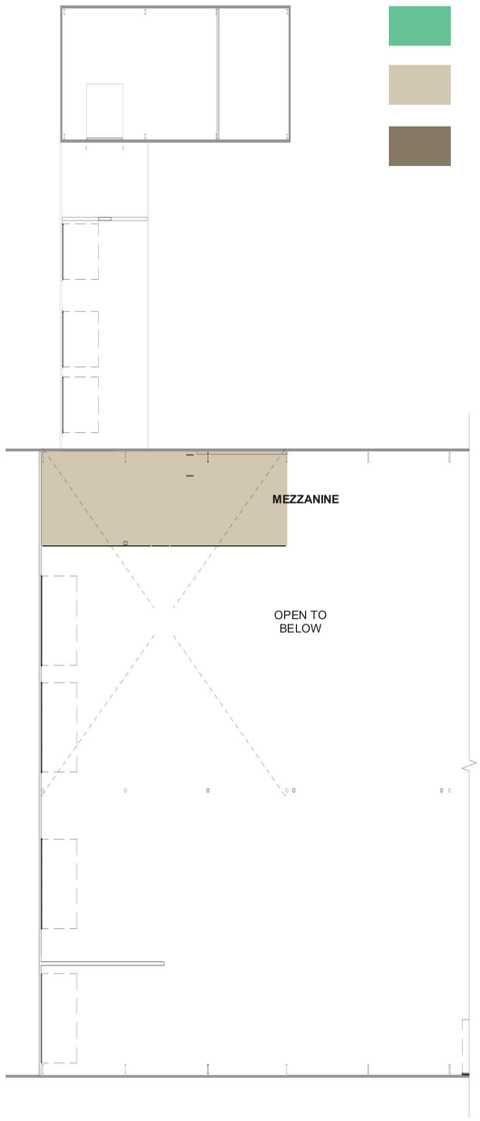
LEGEND

ENGINEER

COMMO

FUTURE E





ORKS COMPLEX

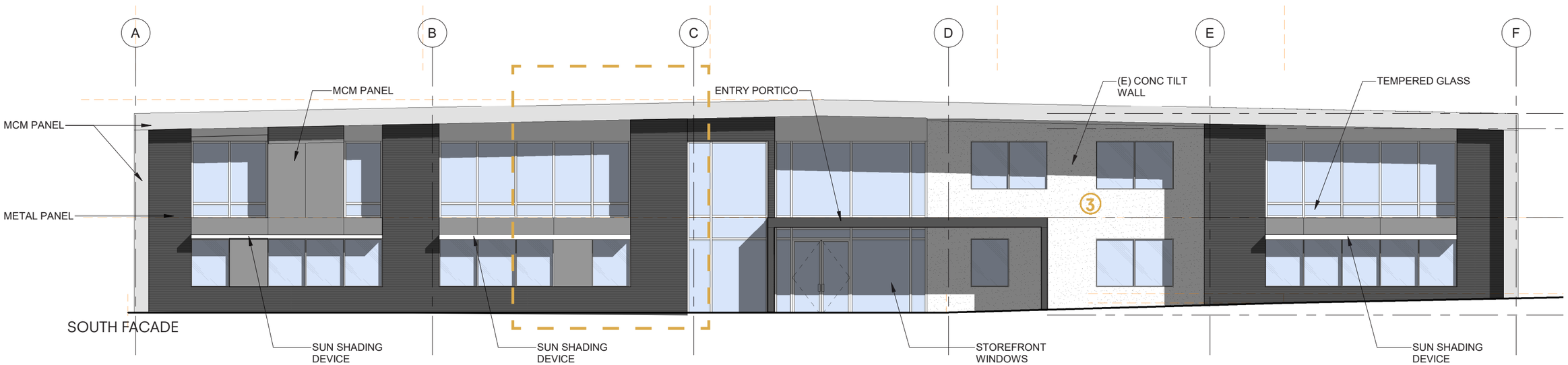
FLOOR PLAN

Office + Fleet Maintenance

SCALE: NTS

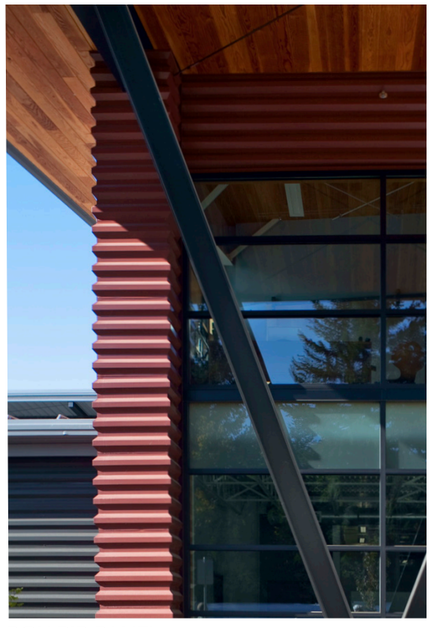
SEA

SCOTT EDWARDS A



SOUTH FACADE

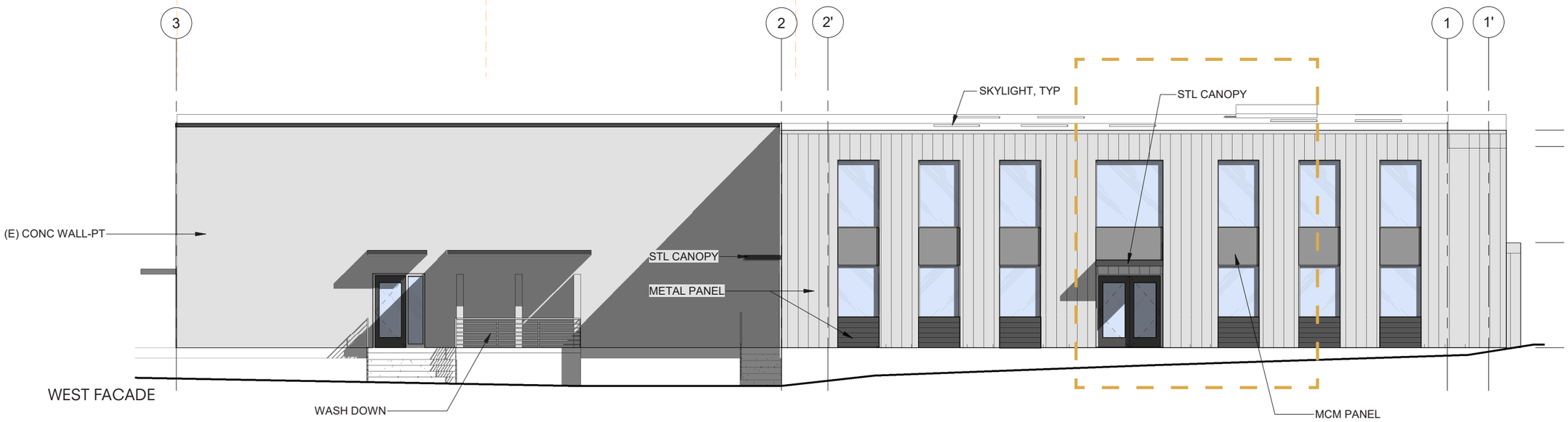
ENLARGED SOUTH FACADE



1 BOX RIB PANEL

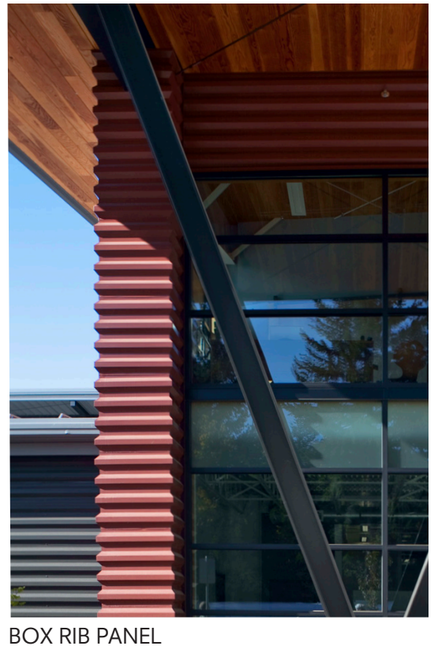
2 MCM PANEL

3 CONCRETE WALL

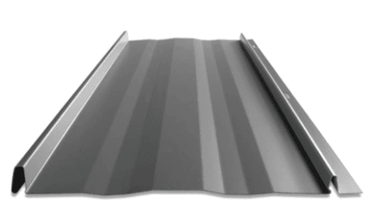


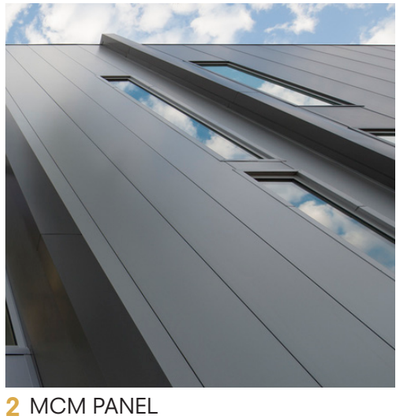
WEST FACADE

ENLARGED WEST FACADE

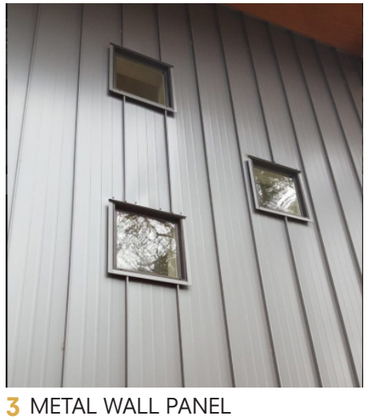


1 BOX RIB PANEL

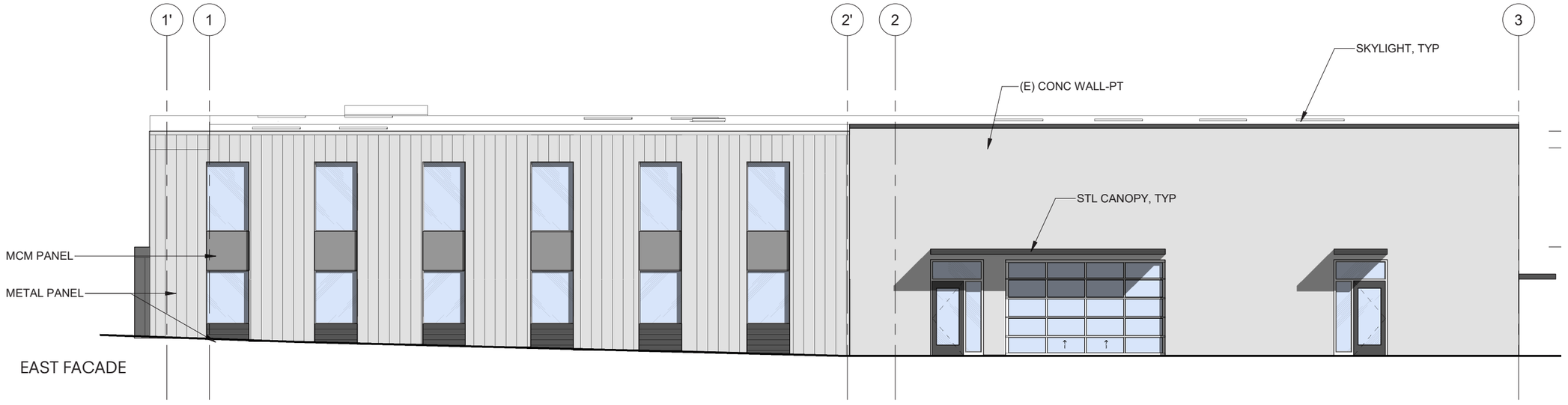


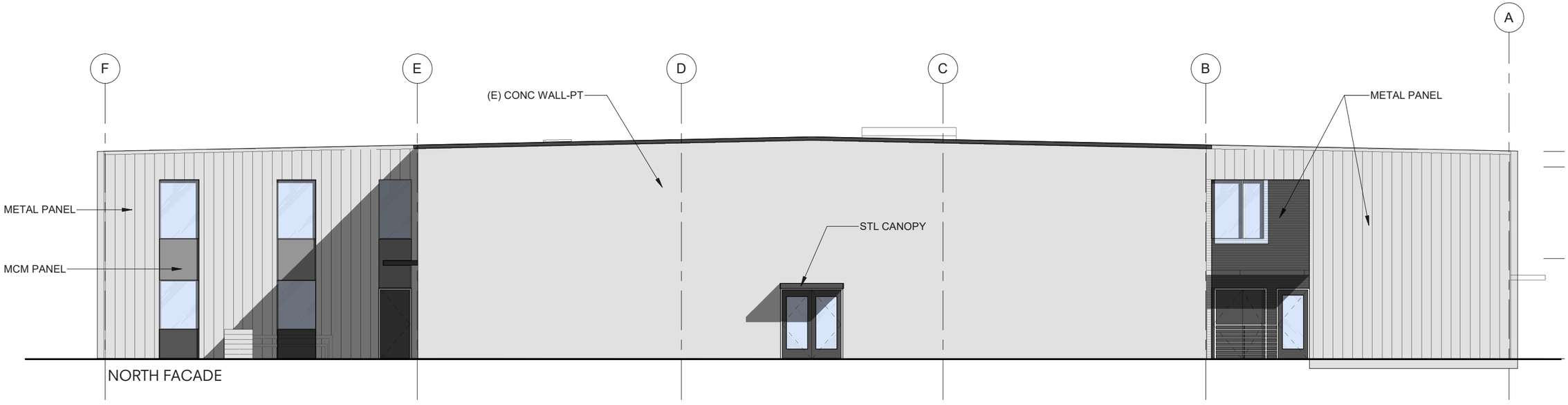


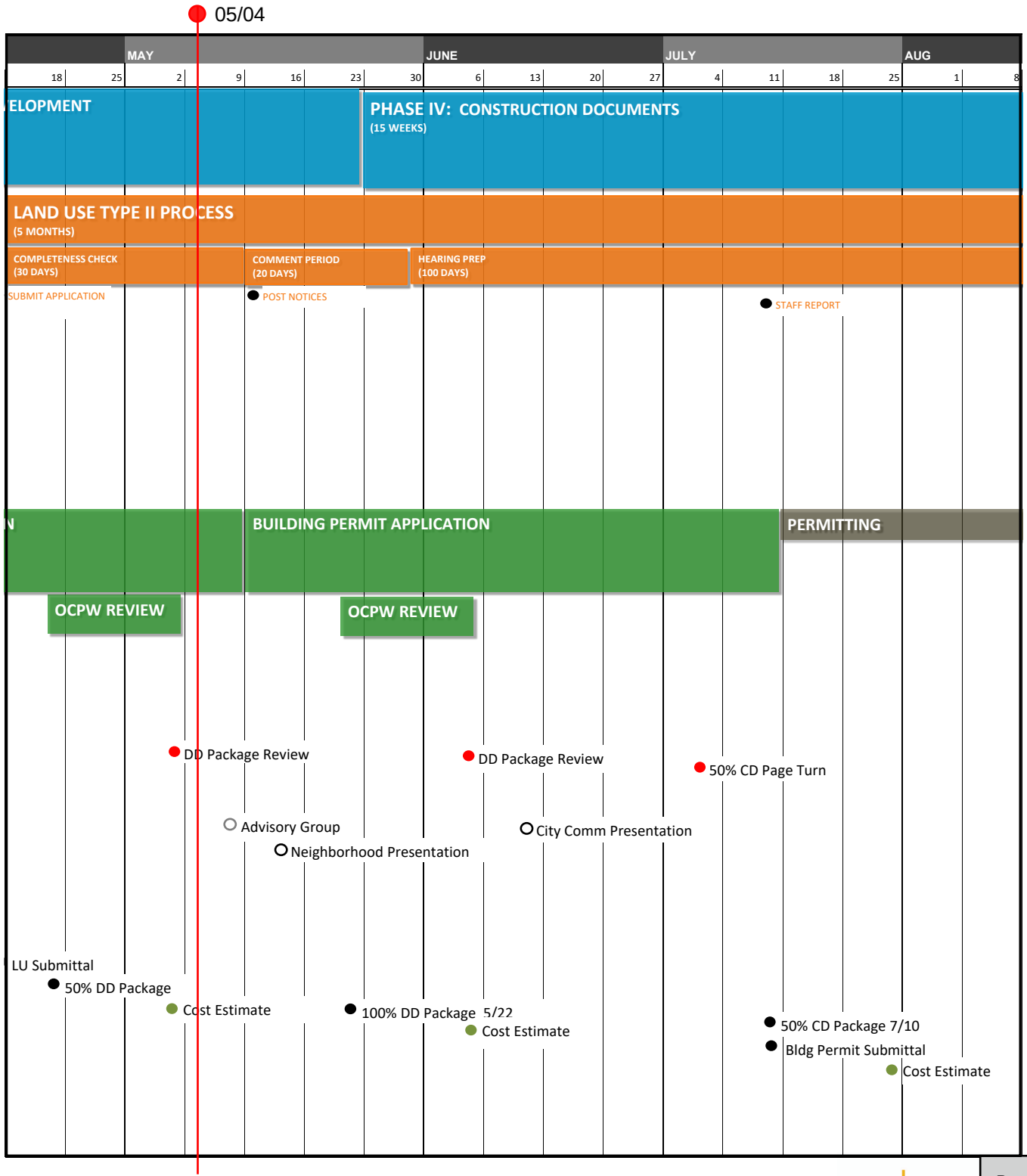
2 MCM PANEL



3 METAL WALL PANEL


1'
1
2'
2
3
SKYLIGHT, TYP
(E) CONC WALL-PT
STL CANOPY, TYP
MCM PANEL
METAL PANEL
EAST FACADE


F
E
D
C
B
A
(E) CONC WALL-PT
METAL PANEL
METAL PANEL
STL CANOPY
MCM PANEL
NORTH FACADE


05/04
MAY
JUNE
JULY
AUG
18
25
2
9
16
23
30
6
13
20
27
4
11
18
25
1
8
ELOPMENT
PHASE IV: CONSTRUCTION DOCUMENTS
(15 WEEKS)
LAND USE TYPE II PROCESS
(5 MONTHS)
COMPLETENESS CHECK
(30 DAYS)
COMMENT PERIOD
(20 DAYS)
HEARING PREP
(100 DAYS)
SUBMIT APPLICATION
POST NOTICES
STAFF REPORT
N
BUILDING PERMIT APPLICATION
PERMITTING
OCPW REVIEW
OCPW REVIEW
DD Package Review
DD Package Review
50% CD Page Turn
Advisory Group
City Comm Presentation
Neighborhood Presentation
LU Submittal
50% DD Package
Cost Estimate
100% DD Package 5/22
Cost Estimate
50% CD Package 7/10
Bldg Permit Submittal
Cost Estimate

THANK YOU

Gaffney Lane Neighborhood Association

Minutes of the Special Land Use Meeting
May 4, 2020
Video Presentation of proposed new Public Works Building
Fir Street, Oregon City

- **In Attendance**:
- Amy Willhite - Chair
- Angela Wright - Secretary/Treasurer
- Ray Atkinson
- Vance Walker
- Samra Egger
- Jordan Fell
- Gerard Mulrooney
- Brandon Dole
- Bill Judge
- Abigail Marlatt

A GoTo video presentation on the proposed new Public Works building was made on May 4, 2020. All those residents of the Gaffney Lane NA who have provided email addresses were informed of the video meeting. Following the meeting, the follow-up link to view the meeting was also emailed.

GLNA - Public Works Building - Fir Street

Inbox

Angela Wright <englishimport@gmail.com> Wed, Apr 29, 10:10 AM

to bcc: Amy, bcc: Amy, bcc: April, bcc: Ben, bcc: Bruce, bcc: Carl, bcc: Carroll, bcc: Char, bcc: Charlotte, bcc: Cherie, bcc: Christine, bcc: Connie, bcc: Craig, bcc: Dean, bcc: Dirk, bcc: Don, bcc: Michelle, bcc: Doug, bcc: Ed, bcc: Gary, bcc: Gayle, bcc: Geneva, bcc: Gerald, bcc: Gloria, bcc: Ingrid, bcc: Jack, bcc: Jackey, bcc: Jan, bcc: Janine, bcc: Jann, bcc: Jay, bcc: Jean, bcc: Jeanette, bcc: Jerry, bcc: Joan, bcc: JoAnn, bcc: Joanne, bcc: John, bcc: John, bcc: John, bcc: Jon, bcc: Joseph, bcc: Julia, bcc: Larry, bcc: Larry, bcc: Les, bcc: Linda, bcc: Loretta, bcc: Mark, bcc: Maureen, bcc: Michael, bcc: Mika, bcc: Mike, bcc: Misty, bcc: Mort, bcc: Pamalynn, bcc: Pat, bcc: Paul, bcc: Paul, bcc: Paula, bcc: Ramona, bcc: Ray, bcc: Ray, bcc: Richard, bcc: Ron, bcc: Rus, bcc: S

bcc: Scott, bcc: Shaele, bcc: Sharon, bcc: Sharon, bcc: Shaun, bcc: Sheila, bcc: Tasha, bcc: Tyler, bcc: Vance, bcc: Vicki, bcc: William

Due to the COVID-19 virus, there will be no Gaffney Lane Neighborhood Association meeting in May.

However, we have received two applications for courtesy presentations for upcoming LAND USE APPLICATIONS.

The first one concerns the new Public Works Building on Fir Street. Please see below for details of how to view the presentation **May 4 at 6:00 pm**

Details of the second presentation will be emailed closer to the viewing date.

Thank you. Keep well and safe.

Amy and Angela

Attachments area

Angela Wright <englishimport@gmail.com> May 5, 2020, 8:48 AM (8 days ago)

to bcc: Amy, bcc: Amy, bcc: April, bcc: Ben, bcc: Bruce, bcc: Carl, bcc: Carroll, bcc: Char, bcc: Charlotte, bcc: Cherie, bcc: Christine, bcc: Connie, bcc: Craig, bcc: Dean, bcc: Dirk, bcc: Don, bcc: Michelle, bcc: Doug, bcc: Ed, bcc: Gary, bcc: Gayle, bcc: Geneva, bcc: Gerald, bcc: Gloria, bcc: Ingrid, bcc: Jack, bcc: Jackey, bcc: Jan, bcc: Janine, bcc: Jann, bcc: Jay, bcc: Jean, bcc: Jeanette, bcc: Jerry, bcc: Joan, bcc: JoAnn, bcc: Joanne, bcc: John, bcc: John, bcc: John, bcc: Jon, bcc: Joseph, bcc: Julia, bcc: Larry, bcc: Larry, bcc: Les, bcc: Linda, bcc: Loretta, bcc: Mark, bcc: Maureen, bcc: Michael, bcc: Mika, bcc: Mike, bcc: Misty, bcc: Mort, bcc: Pamalynn, bcc: Pat, bcc: Paul, bcc: Paul, bcc: Paula, bcc: Ramona, bcc: Ray, bcc: Ray, bcc: Richard, bcc: Ron, bcc: Rus, bcc: Scott, bcc: Scott, bcc: Shaele, bcc: Sharon, bcc: Sharon, bcc: Shaun, bcc: Sheila, bcc: Tasha, bcc: Tyler, bcc: Vance, bcc: Vicki, bcc: William

For those of you who missed (or couldn't log on!) here is the video recording of the meeting which took place Monday evening, May 4. You will see that initially Ray and I had a problem getting into the site, but in the end, it worked out well.

I have tested the link and it works!! If you have any questions/comments please address them to

Samra Egger email: segger@planbconsult.net

Thanks

Angela

A recording of your recent meeting is ready to view & share:

Gaffney Neighborhood Meeting

View interactive recording

Recorded on: Mon, 4 May 2020 06:04 PM. **Duration:** 50 Min.

Organizer: Samra Egger. **Participants:** Jordan Fell, +17047875859, Brandon, Abigail Marlatt, Gerard Mulrooney and 8 more.

SCOTT|EDWARDS ARCHITECTURE

May 13, 2020

ATTN: Diliana Vassileva

Planning Division
City of Oregon City
698 Warner Parrott Road
Oregon City, OR 97045

RE: NEIGHBORHOOD ASSOCIATION MEETING

Dear: Diliana Vassileva,

On May 4TH, 2020, the Oregon City Operations Complex project team presented the proposed development to the Gaffney Lane Neighborhood Association. Due to the ongoing covid19 epidemic and social distancing guidelines the presentation was held via a Go-To Meeting and hosted by PlanB Consultancy and Scott Edwards Architecture. Vance Walker, Assistant Public Works Director, was in attendance representing Oregon City and the stakeholder group. Notice of the meeting was distributed to all property owners within 300ft of the development site.

The information presented included the project background and intent, design challenges with regards to the site, the proposed site and building improvements including exterior material selections, and project schedule. Following the presentation those in attendance discussed in further detail the variances being requested and concerns of the Gaffney Lane Association. The neighborhood had two primary concerns.

The first concern discussed was the traffic impacts to the neighborhood during construction. Attendees mentioned that the Molalla Ave project will be under construction at the time and wanted to know if any provisions were being made to minimize traffic impacts. The project team indicated that no specific provisions were being made but that all construction related activities and staging of equipment or material would occur onsite.

The second concern discussed was the development impact to the intersections of Fir Street and Molalla Avenue and Fir Street and Beavercreek Road. Attendees asked if the proposed development was contributing to a new traffic light that is to be installed at the intersection of Fir and Molalla. The project team indicated that the proposed development was not contributing demand for the mentioned new traffic light and that a traffic impact analysis was submitted with the land use application as required. The traffic impact analysis, competed by a registered traffic engineer, indicated there are no anticipated impacts to the intersections in question. Due the similarity between the prior use of the site and the proposed develop no anticipated changes in intensity or traffic conditions are anticipated.

No concerns were expressed with regards to the variances being requested. The feedback provided was the variance made sense per the development and would be supported by the neighborhood association.

We concluded the meeting with the understanding that the project team included the contractor are available to address any concerns that may arise as the development progresses. The project team committed to open lines of communication and doing what is necessary to mitigate any concerns expressed by the Gaffney Lane Neighborhood.

The following items are being provided for your records. We ask they be included as part of the application material submitted prior.

- Presentation slide deck
- Meeting minutes provide by the Gaffney Lane Neighborhood Association
- List of meeting attendees (included in the meeting minutes)
- Meeting Invitation and property addresses within 300ft

We look forward to hearing from you and hope you are staying safe and healthy. Please, let us know if you require any additional information.

Sincerely,

Brandon Dole
Project Manager

SCOTT | EDWARDS ARCHITECTURE, L.L.P.

(503) 896-5313 | bdole@seallp.com

Public Works Director
City of Oregon City
625 Center Street
Oregon City, OR 97045

PLEASE JOIN US

Land Use Neighborhood Meeting

Monday, May 4th, 2020
6 pm to 6:30 pm PST

Dear Neighbor:

Please join us for a “Social Distancing” approved Land Use Application meeting regarding the upcoming Oregon City Operations Complex due to start construction in September 2020. We will be presenting the plans and have an open forum for questions. If you can not attend the meeting, a recording of the meeting will be posted to the City of Oregon City website.

Project Background

The City of Oregon City has planned and budgeted for a new Public Works Center (PWC) since 2004. In June 2018, the City of Oregon City identified and acquired property to be utilized for an Oregon City Operations Complex. This new complex would house the 44 existing members of the Public Works Department (PW), the 10 members of Parks and their respective operation materials and equipment, as well as room for future growth. The site will also serve as a Fleet Shop. The new site is a 4.79 acre industrially-zoned parcel located at 13895 Fir Street in Oregon City. The parcel has an existing 59,564 square feet of warehouse space and an additional square feet of office space. The Fir Street Property is well suited for use as an Operations Complex in that it includes 4.7 acres zoned industrial and is relatively level and fenced. The site includes two 10,000 gallon underground fuel tanks with pumps, there is plenty of warehouse space, and the warehouse buildings are equipped with heat and fire suppression.

Construction Milestones

Start: September 2020
Completion: Fall of 2021

Date, time and link for live meeting/presentation

Land Use Application Meeting
May 4th, 2020, 6 pm to 6:30pm PST

Please join from your computer, tablet or smartphone:
https://global.gotomeeting.com/556407789

You can also dial using your phone:
+1 (872) 240 3212
(Access code: 556-407-789)

Email address for submitting questions:
segger@planbconsult.net

Recording of the meeting to be posted on the City of Oregon City website by end of day May 5th, 2020.

Thank you for the opportunity to present this exciting project that will serve the Oregon City for years to come. Looking forward to hearing from you on May 4th.

BITAR BROS-R A BITAR CORP
2929 E BURNSIDE
PORTLAND, OR 97214

CHUNG KENNETH L DDS MPH & WANFEI
6920 SE 34TH AVE
PORTLAND, OR 97202

CITY OF OREGON CITY
PO BOX 3040
OREGON CITY, OR 97045

DEL MESA FARMS
PO BOX 457
LIVINGSTON, CA 95334

FRAHM HINRICH J & ELSA
26810 S HABELT RD
ESTACADA, OR 97023

GLEANERS CLACKAMAS CO INC
PO BOX 1660
OREGON CITY, OR 97045

GLEANORS OF CLACK CNTY INC
PO BOX 1660
OREGON CITY, OR 97045

HAAKENSON-MOORE INVESTMENT GRO
PO BOX 1404
CHEHALIS, WA 98532

LIZER GEORGE M & DOLORES M
9855 SE TOP OSCOTT ST
HAPPY VALLEY, OR 97086

METROPOLITAN LIFE INS CO
1014 VINE ST 7TH FL
CINCINNATI, OH 45202

MILLER VIRGINIA J
13923 FIR ST
OREGON CITY, OR 97045

ORCHID ORTHOPEDIC SOLUTIONS OR IN
1489 CEDAR ST
HOLT, MI 48842

RESIDENT
13821 FIR ST
OREGON CITY, OR 97045

RESIDENT
13833 FIR ST
OREGON CITY, OR 97045

RESIDENT
13895 FIR ST
OREGON CITY, OR 97045

RESIDENT
13896 FIR ST #B
OREGON CITY, OR 97045

RESIDENT
13896 FIR ST #C
OREGON CITY, OR 97045

RESIDENT
13904 FIR ST
OREGON CITY, OR 97045

RESIDENT
13925 FIR ST
OREGON CITY, OR 97045

RESIDENT
13929 FIR ST #A
OREGON CITY, OR 97045

RESIDENT
13929 FIR ST #B
OREGON CITY, OR 97045

RESIDENT
13929 FIR ST #C
OREGON CITY, OR 97045

RESIDENT
13929 FIR ST #F
OREGON CITY, OR 97045

RESIDENT
13929 FIR ST #G
OREGON CITY, OR 97045

RESIDENT
13963 FIR ST
OREGON CITY, OR 97045

RESIDENT
13970 FIR ST
OREGON CITY, OR 97045

RESIDENT
1820 BEAVERCREEK RD
OREGON CITY, OR 97045

RESIDENT
1837 MOLALLA AVE
OREGON CITY, OR 97045

RESIDENT
1839 MOLALLA AVE
OREGON CITY, OR 97045

RESIDENT
1839 MOLALLA AVE #7
OREGON CITY, OR 97045

RESIDENT
1839 MOLALLA AVE #A
OREGON CITY, OR 97045

RESIDENT
1839 MOLALLA AVE #B
OREGON CITY, OR 97045

RESIDENT
1839 MOLALLA AVE #C
OREGON CITY, OR 97045

RESIDENT
1839 MOLALLA AVE #D
OREGON CITY, OR 97045

RESIDENT
1839 MOLALLA AVE #E
OREGON CITY, OR 97045

RESIDENT
1839 MOLALLA AVE #F
OREGON CITY, OR 97045

RESIDENT
1841 MOLALLA AVE
OREGON CITY, OR 97045

RESIDENT
19136 MOLALLA AVE
OREGON CITY, OR 97045

RESIDENT
19140 MOLALLA AVE
OREGON CITY, OR 97045

RESIDENT
19142 MOLALLA AVE #A
OREGON CITY, OR 97045

RESIDENT
19142 MOLALLA AVE #B
OREGON CITY, OR 97045

RESIDENT
19142 MOLALLA AVE #C
OREGON CITY, OR 97045

RESIDENT
19144 MOLALLA AVE #A
OREGON CITY, OR 97045

RESIDENT
19144 MOLALLA AVE #B
OREGON CITY, OR 97045

RESIDENT
19146 MOLALLA AVE
OREGON CITY, OR 97045

RESIDENT
19146 MOLALLA AVE #A
OREGON CITY, OR 97045

RESIDENT
19146 MOLALLA AVE #B
OREGON CITY, OR 97045

RESIDENT
19146 MOLALLA AVE #C
OREGON CITY, OR 97045

RESIDENT
19170 MOLALLA AVE
OREGON CITY, OR 97045

RESIDENT
19172 MOLALLA AVE
OREGON CITY, OR 97045

RESIDENT
19224 MOLALLA AVE
OREGON CITY, OR 97045

RESIDENT
2000 BEAVERCREEK RD
OREGON CITY, OR 97045

RESIDENT
2500 BEAVERCREEK RD
OREGON CITY, OR 97045

RESIDENT
2502 BEAVERCREEK RD
OREGON CITY, OR 97045

ROWLEY TIMOTHY C & LORRAINE A
215 BELLEVUE AVE
OREGON CITY, OR 97045

US POSTAL SERVICE
19300 MOLALLA AVE
OREGON CITY, OR 97045

Gaffney Lane NA Chair
13083 Setera Cir
Oregon City, OR 97045

Hillendale NA Chair
1304 Beaver Ln
Oregon City, OR 97045

OREGON CITY
Community Development – Planning
698 Warner Parrott Road | Oregon City OR 97045
Ph (503) 722-3789 | Fax (503) 722-3880

LAND USE APPLICATION TRANSMITTAL

Date: _____

DISTRIBUTION OF APPLICATION			
	Building Division		Clackamas County Transportation
	Development Services		Clackamas County Planning
	Public Works Operations		Clackamas Fire District #1
	City Engineer		ODOT – Division Review
	Public Works Director		Oregon City School District
	Parks Manager		Tri-Met
	Community Services Director		Metro
	Police		PGE
	Economic Development Manager		South Fork Water Board
	Traffic Engineer		Hamlet of Beavercreek
	City Manager's Office		Holcomb Outlook CPO
	Oregon City Neighborhood Associations		Central Point / Leland Road / New Era CPO
	N.A Chair		Other – See Email List
	N.A. Land Use Chair		Natural Resource Committee
	Notice of the application mailed to all properties within 300 feet		Other:

COMMENTS DUE BY:	July 17, 2020 to be included in staff report		
DECISION BODY:	Staff Review ☐	Planning Commission ☑	City Commission ☐
HEARING DATE(s):	June 22, 2020		
DECISION TYPE:	Type I ☐	Type II ☐	Type III ☑ Type IV ☐
FILE #S:	GLUA-20-00016/SP-20-00034/VAR-20-00010/VAR-20-00011/VAR-20-00012		
PLANNER:	Diliana Vassileva	Phone 503.974.5501	Email dvassileva@orcity.org
APPLICANT:	Brandon Dole, Scott Edwards Architecture		
OWNER:	City of Oregon City		
REPRESENTATIVE:	Gerald Mulrooney, Plan B Consultancy		
REQUEST:	Building renovation and site improvements for the Fir Street Public Works Operations Center.		
ROJECT WEBPAGE:	https://www.orcity.org/planning/project/glua-20-00016		
ZONING:	GI, General Industrial		
ADDRESS(ES):	13895 Fir Street, Oregon City, OR 97045		
TAX LOTS:	Clackamas County Map 3-2E-09B, TL 1101		

This application material is referred to you for your information, study and official comments. If extra copies are required, please contact the Planning Department. Your recommendations and suggestions will be used to guide the Planning staff when reviewing this proposal. If you wish to have your comments considered and incorporated into the staff report, please return the attached copy of this form to facilitate the processing of this application and will insure prompt consideration of your recommendations.

Please check the appropriate spaces below.

☑	The proposal does not conflict with our interests.
☐	The proposal conflicts with our interests for the reasons attached.
☐	The proposal would not conflict our interests if the changes noted below are included.

Signature Wes Rogers

Digitally signed by Wes Rogers
DN: cn=Wes Rogers, o=OCSD62, ou=Bond Manager, email=wes.rogers@ocsd62.org, c=US
Date: 2020.06.22 09:49:47 -07'00'

CONTACT THE PLANNING DIVISION IF YOU HAVE ANY QUESTIONS ABOUT THIS APPLICATION

REPLINGER & ASSOCIATES LLC
TRANSPORTATION ENGINEERING

July 15, 2020

Ms. Diliana Vassileva
City of Oregon City
PO Box 3040
Oregon City, OR 97045

SUBJECT: REVIEW OF TRANSPORTATION IMPACT ANALYSIS – OREGON CITY OPERATIONS COMPLEX – GLUA20-16

Dear Ms. Vassileva:

In response to your request, I have reviewed the materials submitted in support of the proposed development of the Oregon City Operations Complex at 13895 Fir Street. The proposal would consist of the conversion of an existing industrial building of approximately 50,000 square feet. The relevant materials included the project narrative, site plan, and the Transportation Impact Analysis (TIA). The TIA, dated February 27, 2020, was prepared under the direction of Christopher Brehmer, PE of Kittelson Associates.

The site is on the north side of Fir Street approximately 0.2 miles east of Molalla Avenue. The southern section of the existing building will be a 25,290 square-foot office building for public works operations, engineering, and parks operations staff; the northern section will be a 24,670 square-foot warehouse and maintenance shop for fleet vehicles. The existing parking lot on the western half of the site will also be divided into two sections: the southern section will have 95 spaces for visitors and staff vehicles, while the northern section will have 125 spaces for fleet vehicles. The current site access will remain.

The TIA provides a basis upon which the development proposal can be evaluated for transportation impacts.

Comments

1. ***Study Area.*** The study addresses the appropriate intersections. The engineer examined traffic patterns and traffic volumes and provided relevant information for five locations. The key locations were:

    - Molalla Avenue at Gaffney Lane
    - Molalla Avenue at Fir Street
    - Fir Street at Beavercreek Road
    - Site driveway on Fir Street
    - Beavercreek Road at Highway 213

In accordance with established procedures, the only information provided in connection with the intersection of Beavercreek Road and Highway 213 were the predicted traffic volumes at the intersection. No traffic counts or operational analysis was conducted at this location.

The study area is appropriate.

2. ***Traffic Counts.*** The traffic counts were conducted in December 2019 at the appropriate intersections identified in #1, above. Traffic counts were conducted during the AM weekday and PM weekday peak periods. The base year traffic volumes appear reasonable.

3. ***Trip Generation.*** The TIA presents information on trip generation based on a combination of field data collected from the existing Oregon City operations facilities and trip rates for a government office building (land use code 730) from the Institute of Transportation Engineers' *Trip Generation Manual.* The calculations were based on the number of employees (73). The engineer calculated the operations complex would generate 824 daily trips; 57 AM peak hour trips; and 82 PM peak hour trips.

   The engineer also estimated traffic generated by the prior use based on a combination of office and warehousing. After subtracting the prior use, the engineer calculated the operations complex would generate 568 net new daily trips; 28 net new AM peak hour trips; and 53 net new PM peak hour trips. I found the trip generation calculations to be reasonable.

4. ***Trip Distribution.*** The engineer's trip distribution was based on an analysis of existing traffic patterns and likely origins and destinations throughout the city. The initial distribution at the site driveway shows 60 percent to and from the west on Fir Street to Molalla Avenue and 40 percent to and from the east on Fir Street connecting to Beavercreek Road. The distribution shows 15 percent of traffic going to and from the west on Beavercreek Road; 25 percent going to and from the north on Molalla Avenue; 25 percent going to and from the north on Highway 213; 15 percent going to and from the south on Molalla Avenue; and 5 percent going to and from the southwest on Gaffney Lane. The distribution of trips to major streets appears reasonable.

5. ***Traffic Growth.*** To account for background traffic growth, the traffic counts were adjusted by two percent annually through 2021, the year associated with occupancy of the facility. The traffic growth assumptions and methodology appear reasonable.

6. ***Analysis.*** Traffic volumes were calculated for the intersections described in #1, above. At each location, except for Highway 213 and Beavercreek Road, the level of service (LOS) and delay calculations and the volume-to-capacity (v/c) ratios were provided to assess traffic operations relative to the city's operational standards. The analysis was undertaken for the AM and PM peak hours and included year 2019 existing conditions, 2021 background conditions, and year 2021 total traffic conditions. The intersection of Molalla Avenue was analyzed as a signalized intersection because the signal planned as part of the Molalla Avenue improvements is expected to be operational by 2021, the year associated with occupancy of the proposed facility.

   According to the analysis, the study area intersections are predicted to operate acceptably in 2021 with or without the proposed development. With the development, the intersections of Molalla Avenue with Gaffney Lane and Fir Street and the intersection of Beavercreek Road and Fir Street are all calculated to operate at LOS "C" or better during both the AM and PM peak hours with a v/c ratio of 0.69 or better. These easily meet city operational standards.

   Since the intersection of Highway 213 and Beavercreek Road has already been studied extensively and a project has been identified, an operational analysis was not conducted. Instead, the TIA provided estimates of development traffic anticipated to use the intersection. These are used to calculate the proportional share of the project attributable to the development. The TIA predicts the intersection will be used by 23 trips during the AM peak hour and 32 during the PM peak hour.

   The engineer concluded no mitigation measures for traffic operations were necessary. I concur.

7. ***Turn Lanes at Site Entrance(s).*** The driveway on Fir Street is calculated to operate acceptably with minimal queues. A left turn lane on Fir Street is not necessary.

8. ***Traffic Signal and Turn Lane Warrants.*** As noted above, signalization of the intersection of Molalla Avenue with Fir Street is planned in connection with improvements to Molalla Avenue and is expected to be operational when the operations complex is occupied in 2021.

9. ***Crash Information.*** The TIA provides crash information for the most recent five-year period for the study area intersections. During the five-year period, 22 crashes were reported at the intersection of Beavercreek Road and Fir Street; 3 at the intersection of Molalla Avenue and Fir Street; and 19 at the intersection of Molalla Avenue and Gaffney Lane. All three intersections experienced modest crash rates and were lower than the

90th percentile for crashes at similar intersections. The engineer identified no patterns that suggest design deficiencies.

The TIA noted that two fatal collisions occurred at the intersection of Beavercreek Road and Fir Street. Both involved motorcyclists. One involved a motorcycle operator disregarding the signal; the second involved a truck driver failing to yield to an oncoming motorcyclist. The intersection is identified in the top five percent of sites on ODOT's 2017 SPIS list. The TIA indicates a SPIS investigation report for the intersection is currently not available.

The engineer did not recommend any safety-related mitigation. I concur.

10. ***Pedestrian and Bicycle Facilities.*** The TIA describes pedestrian and bicycle facilities in the area. Sidewalks are present along the site frontage.

11. ***Site Plan and Access.*** No changes to the site access are proposed. As noted above, on-site queues are calculated to be minimal.

12. ***Intersection Spacing.*** No new intersections or site access changes are proposed. Queuing for the proposed signal at the intersection of Molalla Avenue and Fir Street is not expected to impact the site access.

13. ***Sight Distance.*** The engineer notes that landscaping, above ground utilities, and signing should be located and maintained along the site frontage and throughout the site in a manner that provides adequate intersection sight distance the future per City Code. I concur.

14. ***Consistency with the Transportation System Plan (TSP).*** The TIA notes that the intersection of Molalla Avenue and Fir Street is being signalized in connection with the Molalla Avenue improvements consistent with the Transportation System Plan (TSP).

15. ***Conclusions and Recommendations.*** The engineer concludes that traffic operations would be adequate and meet city operational standards at key intersections. He recommends no mitigation measures to accommodate traffic impacts of the development.

    The engineer does not recommend mitigation for sight distance or safety issues in connection with the development.

    I concur with the engineer's conclusions and recommendations.

Conclusion and Recommendations

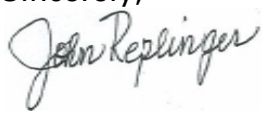
I find that the TIA provides an adequate basis upon which to assess the impacts of the proposed development.

I recommend the following conditions of approval:

> That the developer participates in the funding of improvements of the intersection of Highway 213 and Beavercreek Road in proportion to the development's traffic volume as a percentage of the predicted 2035 traffic volume. A project to add a right-turn lane on westbound Beavercreek Road and a merge lane on northbound Highway 213 was identified in the July 2017 Highway 213 Corridor Alternative Mobility Study. The project's cost was estimated at $1.5 million. Based on previously established methodology, the contribution for each peak hour trip is calculated to be $211. Based on the preliminary PM peak hour trip generation from the proposed development, the development's share of the project is $6,752.

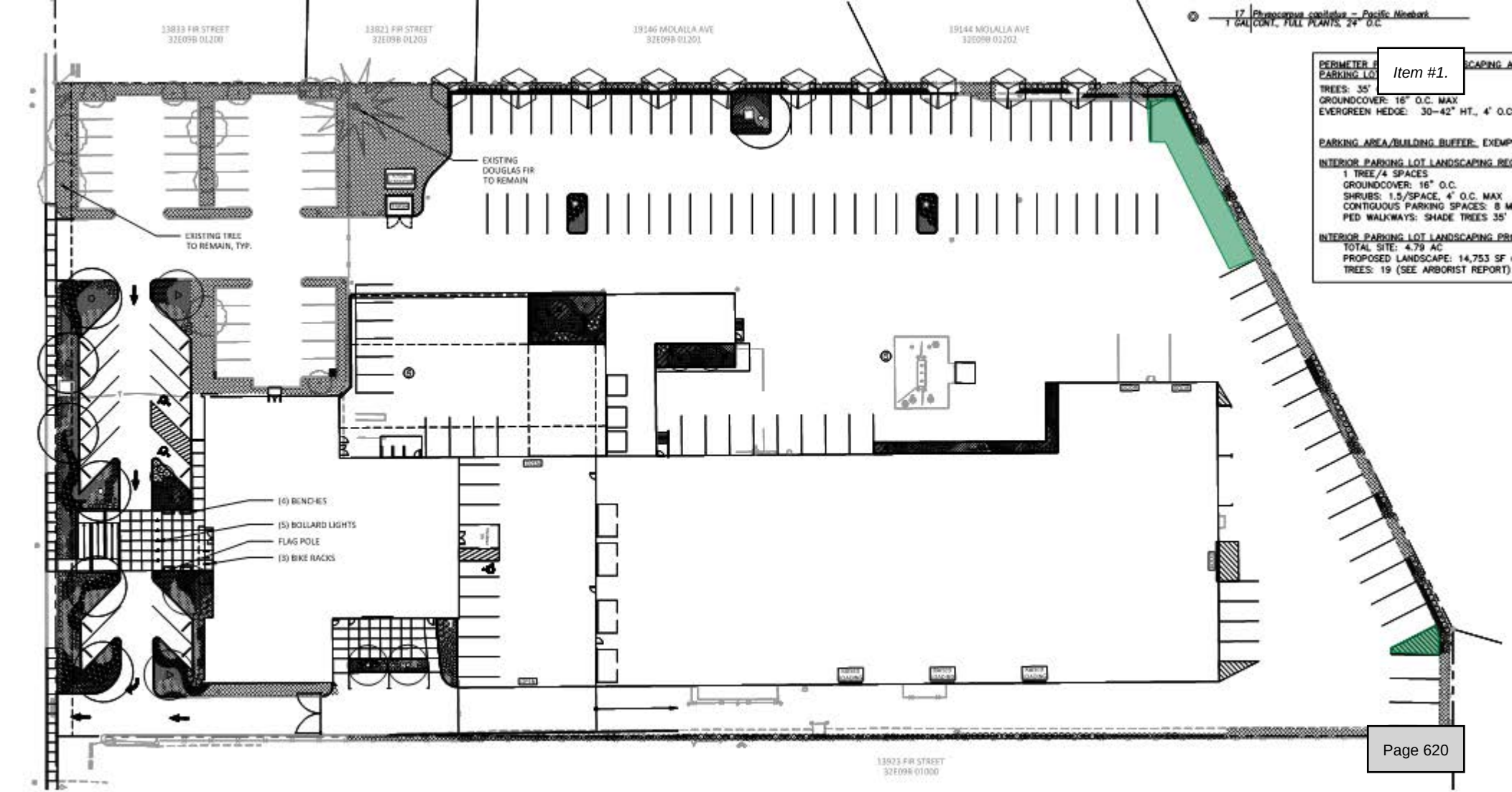
If you have any questions or need any further information concerning this review, please contact me at replinger-associates@comcast.net.

Sincerely,



John Replinger, PE
Principal

Oregon City\2020\GLUA20-16TIA


13833 FIR STREET
32E09B 01200
13821 FIR STREET
32E09B 01203
19146 MOLALLA AVE
32E09B 01201
19144 MOLALLA AVE
32E09B 01202
17 Physocarpus capitatus – Pacific Ninebark
1 GAL CONT., FULL PLANTS, 24" O.C.
PERIMETER
PARKING LO
TREES: 35'
GROUNDCOVER: 16" O.C. MAX
EVERGREEN HEDGE: 30–42" HT., 4' O.C
PARKING AREA/BUILDING BUFFER: EXEMP
INTERIOR PARKING LOT LANDSCAPING RE
1 TREE/4 SPACES
GROUNDCOVER: 16" O.C.
SHRUBS: 1.5/SPACE, 4' O.C. MAX
CONTIGUOUS PARKING SPACES: 8 M
PED WALKWAYS: SHADE TREES 35'
INTERIOR PARKING LOT LANDSCAPING PR
TOTAL SITE: 4.79 AC
PROPOSED LANDSCAPE: 14,753 SF
TREES: 19 (SEE ARBORIST REPORT)
EXISTING
DOUGLAS FIR
TO REMAIN
EXISTING TREE
TO REMAIN, TYP.
(6) BENCHES
(5) BOLLARD LIGHTS
FLAG POLE
(3) BIKE RACKS
13923 FIR STREET
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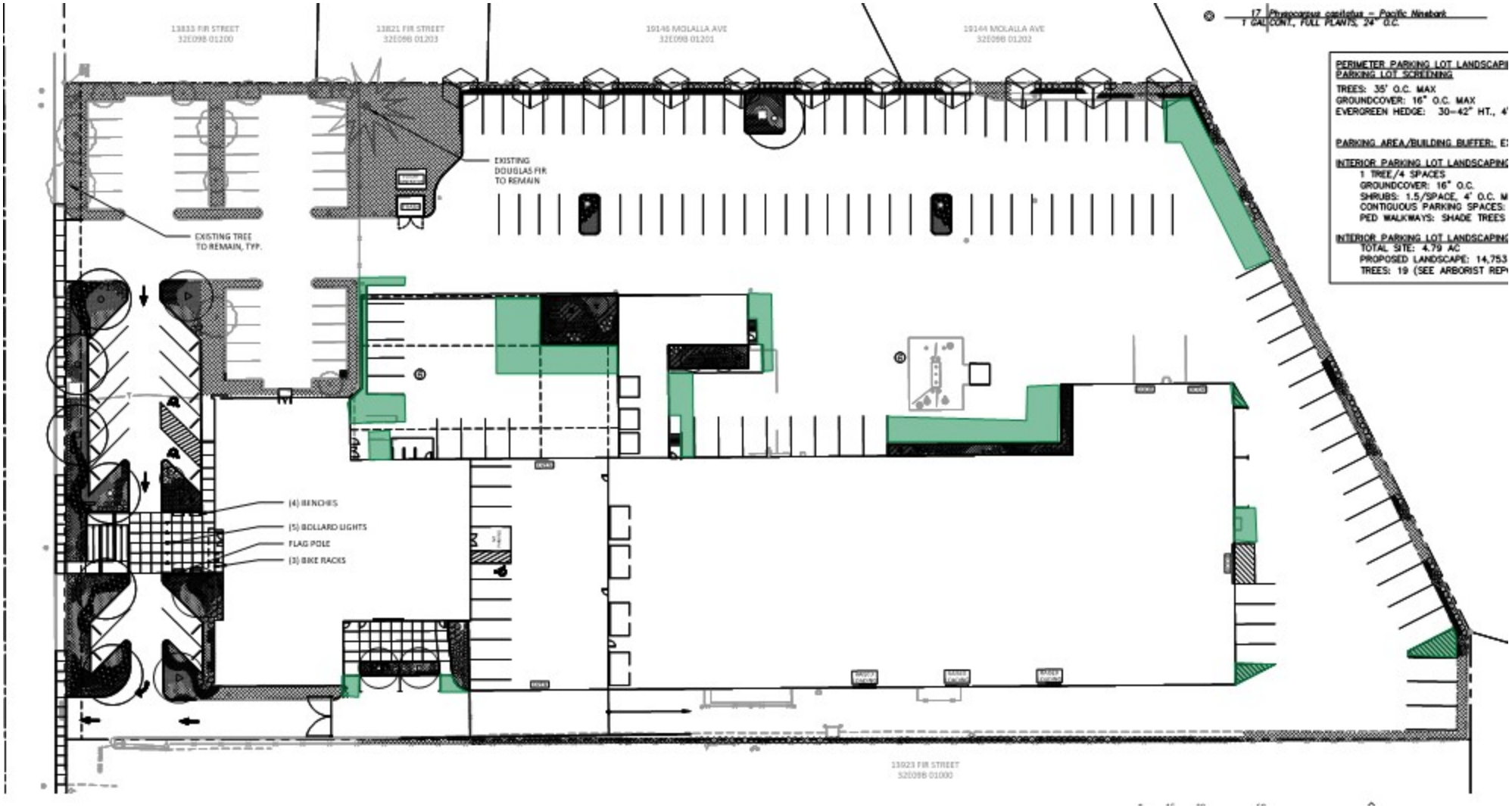
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(3) BIKE RACKS
13923 FIR STREET
32E09B 01000

CITY OF OREGON CITY

Staff Report

625 Center Street
Oregon City, OR 97045
503-657-0891

To: Planning Commission **Agenda Date:** 07/27/2020

From: Senior Planner Pete Walter

SUBJECT:

Overview of the OC2040 Community Conversation Kit

STAFF RECOMMENDATION:

Discussion.

EXECUTIVE SUMMARY:

As part of the OC2040 Public Involvement Plan for Community Vision, a Community Conversations Kit will be used to guide City staff, PAT/City advisory board members, and the public to hold meetings and document community comments and ensure that our outreach process is diverse, inclusive and equitable.

BACKGROUND:

The Community Conversations Kit will allow project members to connect with the community where people gather and through channels which they receive information. The kit will be available in English and Spanish.

Each PAT member will be responsible for hosting up to five conversations and City advisory board members at least one conversation. City staff will host community conversations with the general community and underrepresented communities.

Given the restrictions on in-person gatherings and the cancellation of events, even though the Community Conversation may be scaled to larger groups, many community conversations will likely occur via phone interviews, small group video conferencing, or even by families on their own. Community Conversation kits will be made available on the project website, along with video-recorded instructions and a choice of a video-recorded mini slideshow to explain the project or a mini slideshow which the host may talk through. Community Conversation kits will be promoted through all lines of communication, encouraging community members to host their own conversations.

Staff will also explain how to use the Community Conversation Kit at the first PAT meeting on July 29, and also we will provide an explanatory video on the OC2040 website so that anyone who is interested can access and download the kit.

OPTIONS:

1. Discussion

Oregon City Comprehensive Plan Update

COMMUNITY CONVERSATIONS KIT

July 20, 2020

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Discussion Leader Tips	4
Community Visioning Questions	5
Notes Page	6
Sign-In Sheets	7

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PREPARATION CHECKLIST

Before the Event	(√)
Be familiar with all the items in this guide. Contact Pete Walter (503) 496-1568) or via email pwalter@orcity.org	
For In-Person Community Conversations: *If you are able, **print** clean copies of materials, including:* • Sign-in sheet • Discussion Questions (enough to share with participants) • Notes page(s) for small groups • This Community Conversations Kit as your quick reference guide	
For Virtual or Phone-In Community Conversations Have the following materials handy (paper copies or on a computer) for notetaking: • Sign-in sheet • Discussion Questions • Notes page(s) • This Community Conversations Kit as your quick reference guide	
***Ask** yourself the following questions:* • Have you confirmed the meeting location or video conference information? • If this Community Conversation in part of another meeting, have you confirmed a place on the agenda? How long do you have? • Do you have enough materials to share with expected participants?	
After Event	(√)
Within one week, please email or scan the sign in sheet and your notes directly to Pete (pwalter@orcity.org) Or Enter into the online survey form. For the online survey form; • Skip the demographic questions that don't apply. • For the last question, **enter your name** and the **name of your group** into the Name prompt. • Enter your email address into the Email prompt. • Please send additional email addresses for the project mailing list to Pete Walter.	

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PRESENTER'S GUIDE (Up to 60 Minutes)

Please review this guide prior to leading your discussion. If you have between 15 – 60 minutes for the presentation, please adjust the timing below accordingly leaving more a majority of the time for discussion. Prompts and explanatory text are included in bullets below.

Presentation

0 – 15 minutes: Introduction and Overview

- *Distribute sign-in sheet. Invite participants to sign up for the project email list.*
- For Virtual or Phone Community Conversations, identify the name and email address of participants expected prior to the meeting. At the beginning of the meeting, have everyone confirm their name and email addresses, and whether they would like to be signed up for the project email list. (or follow up via email or in a video-conferencing chatroom).
- Share the discussion questions in advance, and/or share your screen with the discussion questions. *Distribute copies of the discussion questions so people can follow along.*
- Introduce yourself and your role in the project.
- Provide a brief contextual overview of the 2040 Oregon City Comprehensive Plan Update and your role. A sample is provided below:

"The City of Oregon City is launching OC2040, a citywide effort to update the Oregon City Comprehensive Plan that will guide land use decisions over the next 20 years. The first step in the process is to create a community vision that reflects what community members love and want to preserve about Oregon City, and what they would like to see change by 2040. The Comprehensive Plan will consist of broad goals and policies to implement the vision and guide future growth and development.

The purpose of these Community Conversations is to engage with a broad cross-section of Oregon City residents, business owners and partners around a Community Vision. These Community Conversations are anticipated through the summer into October of 2020. The creation and adoption of the Community Vision will occur in late Fall-early Winter, which will inform the development of policy recommendations in the update to the Comprehensive Plan next year. Thank you for talking with us!"

15 – 45 minutes: Listening and Discussion.

- Lead the group discussion around the questions in this kit.
- Have participants affirm your understanding of the discussion by repeating back any major themes or ideas.
- *For frequently mentioned themes, ideas or topics, place a check mark for each mention in your notes.*
- Ask for additional questions and comments.

45 – 60 minutes: Report Back and Next Steps.

- Thank participants for the discussion.
- Point participants to the project web site (www.OC2040.com) for access to materials and updates on meetings, events and surveys.
- Invite members to the next community event or survey.

After the meeting

Within a week: Scan or email the discussion notes and sign-in sheet to Pete.

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DISCUSSION LEADER TIPS

General Principles

As the presenter and discussion leader, your role is to help create an open and shared environment so that all participants have the opportunity for discussion. Please follow the agenda closely as you have only limited time. "Prompts" are shown in the italicized print below. It is OK if people disagree! There is no need for consensus or agreement.

General Guidelines

- Stick to the agenda and move the conversation forward.
- If a point is made that is off-topic, write it down, then guide the discussion back to the question at hand.
- Encourage everyone to participate but do not allow anyone to dominate.
- Keep the discussion moving by summarizing and synthesizing.
- Resist the temptation to voice your own opinions or to be the "expert" on the subject.
- Start and end each meeting on time.
- Have fun!

Specific Guidelines

- Emphasize that there are no "right" or "wrong" answers. Everyone's opinion is valid.
- Give credence to differences, but do not dwell on them. *It's important that we have an open discussion. There are no right or wrong answers.*
- Do not hesitate to say you do not know the answers to a specific question. Make note of the question and ask the individual to see you later.
- Follow the meeting flow. *That's a good question/idea/issue, I'll write it down to make sure we don't forget that point.*
- Move the group along politely but firmly. *I see we have only a few minutes left and we have more discussion questions to cover* or *Thank you for your suggestion*.
- Make sure each participant has a chance to speak. *Who else has something to add?*
- Summarize the discussion as you go along, validating it with participants. *Have I captured all key points?*
- Five minutes before the discussion ends, summarize the discussion. Ask participants for any final thoughts. *Is there anything we have missed?*

Thank everyone for participating!

DRAFT

COMMUNITY VISIONING QUESTIONS

Oregon was one of the first places in the United States to pioneer the use of community-based visioning. In a state recognized for innovative local planning and growth management policies, visioning is an important precursor to local planning and a tool to help communities better manage complex change. A comprehensive approach to visioning can be framed by the following **bolded** question themes (and the many ways to ask them!). Based on your audience, choose one from each question theme.

Why did you choose live/work in Oregon City?

What makes Oregon City special today? What should we strive to preserve or enhance?

- What are some of Oregon City's most cherished attributes?
- Where do you spend time in Oregon City? Specific parks, stores, restaurants, etc.
- What is going well in Oregon City?
- What about Oregon City makes you proud?

What about Oregon City would you like to change in the future? What can improve?

- As the community develops a 2040 Vision and Comprehensive Plan update, what is on the horizon that we should be sure to consider?
- What, if anything, causes you concern about the future of Oregon City?
- How has Oregon City changed over the last 5 years? 10 years? 20 years?
- What changes have you seen in Oregon City that you like? What changes don't you like?
- Describe your ideal Oregon City in 2040. What has changed?
- Looking into the future, what do you want to see in the Oregon City of 2040?

Is there anything else you want to share about the future of Oregon City?

- What are some of the steps towards making your vision a reality?
- What do we need to work on and overcome to achieve your vision?
- What should the Vision process address for the Comprehensive Plan Update?

In what ways would you like to participate in the OC2040 process?

- Attend public meetings
- Comment on the vision website
- Follow on the City's Facebook page or other social media
- Complete online questionnaires
- Through my neighborhood association
- Through my school, place of worship or other group
- Read the Oregon City news and/or Trail news
- Stay informed by email
- Other

What people, groups or communities should we contact to make this an inclusive process?

DRAFT

DISCUSSION NOTES

(Use a √ = Frequently mentioned)

INTRODUCTIONS

Why did you choose live/work in Oregon City?

What makes Oregon City special today? What should we strive to preserve or enhance?

What about Oregon City would you like to change in the future? What can improve?

Is there anything else you want to share about the future of Oregon City?

In what ways would you like to participate in the OC2040 process?

What people, groups or communities should we contact to make this an inclusive process?

√ = Frequently mentioned

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SIGN-IN SHEET

Organization: _____

Date: _____ Discussion leader(s): _____

NAME	E-MAIL ADDRESS	ADD ME TO THE MAILING LIST (√)

DRAFT

Oregon City Comprehensive Plan Update

Draft Public Involvement Plan for Community Vision

May 19, 2020

Project Overview

The City of Oregon City is launching OC2040, a citywide effort to update the Oregon City Comprehensive Plan that will guide land use decisions over the next 20 years. The first step in the process is to create a community vision that reflects what community members love and want to preserve about Oregon City, and what they would like to see change by 2040. The Comprehensive Plan will consist of broad goals and policies to implement the vision and guide future growth and development.

Oregon City has seen significant changes in its population since the current Comprehensive Plan was adopted in 2004. Furthermore, previous outreach measures were not successful in soliciting input from those not already connected to local government. Traditional outreach methods coupled with long and complicated documents written only in English failed to engage a wider range of community members who really need to be heard. Therefore, the current Comprehensive Plan does not adequately reflect the needs of all community members in Oregon City.

OC2040 will employ a new approach that ensures all community members are given the opportunity to participate in a collective vision for the future that reflects our values and equitably supports all. Our approach will take care to assure marginalized community members have a voice. Outreach efforts will empower the community with information and facilitate careful listening to a diverse array of community members. We will work together to create a Comprehensive Plan that reflects the entire community, encourages participation in future decisions, and inspires future leaders.

The purpose of this document is to identify the community engagement which will shape the Community Vision. The community input is anticipated to be collected from May – October of 2020. The process will be followed by the creation and adoption of the Community Vision October – January.

Community Engagement Objectives

The City is committed to engaging the community early and often throughout the process using a variety of means. The intent is to lift up the voices of all community members, including underrepresented populations such as communities of color, living in subsidized housing, homeless to understand how to better support them. The community engagement process is designed to meet the following objectives:

- ✓ Design and implement a robust and equitable community outreach program.
- ✓ Inform the community with timely, transparent, and accurate information.
- ✓ Engage a representative cross-section of Oregon City residents, businesses and partners.
- ✓ Consult the community in the identification, refinement, and prioritization of policy updates.
- ✓ Ensure community members understand how decisions are made, their concerns are heard, and they know how their feedback influenced decisions.
- ✓ Work with partners to conduct outreach in a culturally and linguistically appropriate manner, using methods and locations that are safe and familiar.
- ✓ Employ accessible and appropriate tools and technologies to inform and engage the community.

Key Messages

The following statements characterize the project and communicate the information people need to know. These messages will be updated and augmented throughout the course of the project and used across platforms.

- Oregon City is launching OC2040, a citywide effort to update the Oregon City Comprehensive Plan.
- Oregon City has seen many changes since the last comprehensive plan was adopted in 2004.
- The Comprehensive Plan will guide growth and development in our community over the next 20 years. It establishes goals and policies for future housing, economy, community, infrastructure, government and ecosystems in Oregon City.
- City leaders use the Plan to manage expected population and employment growth, coordinate public investments and make decisions about new development, existing neighborhoods, transportation, and a variety of other topics.
- Oregon state law requires that all cities and counties adopt Comprehensive Plans that are consistent with statewide planning goals.
- There will be multiple opportunities to participate in the comprehensive planning process in the coming months.
- Community members can provide comments or ask questions at any time by visiting OC2040.com.

Stakeholders and Partners

The following table is a sample of the interests and stakeholders the project team will work to engage through the comprehensive planning process. With guidance provided by the Project Advisory Team, the project team will continue to identify specific organizations and groups within these interest areas.

Interests	Organizations/Groups to Engage
Youth	Elementary Schools Alliance Charter Academy Gardiner Middle School Ogden Middle School Oregon City Senior High School Oregon City Service Learning Academy Clackamas Community College Oregon City Optimist Club The Living Room LGBTQ Youth Group
Parks/recreation and nature	Oregon City Parks and Recreation Advisory Committee Oregon City Parks Foundation Oregon City Natural Resources Committee Greater Oregon City Watershed Council Metro eNRG Kayaking Classic Cycle

Industry and business	Oregon City Economic Development Oregon City Chamber of Commerce Oregon City Business Alliance Downtown Oregon City Association Large employers Oregon City Development Stakeholders Group
Public safety	Oregon City Police Department Clackamas Fire District #1
Utilities	Oregon City Public Works South Fork Water Board Clackamas County Water Environment Services Northwest Environmental Defense Center
Health	Providence Willamette Falls Medical Center Oregon City Healthy Living Meetup Group
Historic Preservation	Oregon City Historic Review Board End of the Oregon Trail Museum Restore Oregon Museum of the Oregon Territory Architecture Foundation of Oregon
Transportation and Development	TriMet Clackamas County Transportation and Development Oregon City Transportation Advisory Committee Oregon City Development Stakeholder Group
Housing	Clackamas County Health and Human Services Oregon City Development Stakeholder Group
Services	Gleaners My Fathers Heart A Safe Place Library Homeless Coalition of Clackamas County Clackamas County Social Services
Non-Native English speakers	Hispanic Interagency Networking Team Non-English Churches - Oregon City Church of Christ
Arts	Oregon City Arts Alliance Three Rivers Artist Guild
Seniors	AARP Pioneer Senior Center
County and State Agencies	Clackamas County, Metro, ODOT, DLCD
Oregon City Elected and Appointed Officials	City Commission Planning Commission Citizen Involvement Committee Library Board
Other Community Organizations	Oregon City Neighborhood Associations Oregon City Women's Club

Demographics

The following demographic profile will allow the City to tailor outreach efforts to meet the needs of specific community groups. The following information comes from the U.S. Census

Race and Ethnicity

Approximately 37,129 people lived in the City of Oregon City in 2018. More than 89 percent of Oregon City residents identify as White. No other racial group makes up more than 2 percent of the population. About 7 percent of residents identify as Hispanic or Latino.

Race/Ethnicity	Oregon City
White	89.5%
African American	1.2%
American Indian or Alaska Native	1.4%
Asian	1.2%
Native Hawaiian and other Pacific Islander	0.2%
Two or more races	3.9%
Hispanic or Latino (any race)	7.1%

U.S. Census July 1, 2018 Population Estimate,
https://www.census.gov/quickfacts/fact/table/oregoncitycityoregon/PST045218

Languages Spoken at Home

Most Oregon City residents speak only English at home (92 percent), while about 8 percent speak a language other than English. The most commonly spoken language other than English in the city is Spanish (4 percent).

Income

From 2014-2018, the median household income in Oregon City was $71,856 which is lower than the Clackamas County average ($76,597) but higher than the state average ($59,393). However, more than a quarter (31 percent) of Oregon City households earn less than $50,000.

Income	Oregon City
<$15,000	7.3%
$15,000 - $24,999	5.4%
$25,000 - $49,999	18.8%
$50,000 - $74,999	20.6%
$75,000+	47.9%

People with Disabilities

About 8.2 percent of Oregon City residents live with a disability. This is higher than the Clackamas County average of 7.6 percent and lower than the Oregon state average of 10.1 percent.

Housing

More than half (61.9%) of Oregon City residents own a single-family home. Approximately 21 percent of Oregon City residents occupy multi-family homes. More than 1/3 of residents are renters (33.6%).

Community Participation Strategy and Activities

Outreach during the Community Vision phase will be based on careful listening and reflection. Activities will capture the community's vision for the future through a responsive and constructive dialogue among community members. The strategy will develop broad project awareness and provide multiple, creative ways to engage in discussion about what community members value about Oregon City today and what could make it a better place to live in the future. The strategy will be implemented and promoted as a positive, fun and community-building campaign.

Activities and tools focus on a combination of engaging trusted referral sources, creating a robust social media and web presence, and face-to-face (or phone-to-phone, or video-to-video) outreach to the extent that circumstances allow. With the understanding that online portals will drive much of the dissemination of information and collection of input, special attention will be made to the promotion and messaging of online and virtual engagement activities and tools. Activities will provide community members with information about the project and engage them in discussions about what they value about Oregon City today, and what changes they would like to see in the future, as well as how they'd like to be involved in the process going forward.

With a focus on equity, Community Vision activities designed to reach the general public, also will be tailored to reach underrepresented communities that do not normally participate in city planning efforts. Strategies may include targeted outreach to certain geographic locations, the use of phone interviews rather than online surveys, and partnerships with county agencies and culturally specific nonprofits. Incentives will be offered to encourage participation while instilling a culture of community-wide support.

Incentives will include:

- City purchase of gift cards from local restaurants, focusing on minority-owned businesses, for distribution to populations such as youth, communities of color, non-English speaking community members, people on social services to entice participation for completing surveys and/or participating in a photo contest.
- Rewarding the general population for completing surveys and/or participating in a photo contest with an opportunity to win one of 10 gift cards

The use of incentives may be advertised through the following avenues:

- Targeted notices to apartment complexes, community centers and churches which cater to communities of color/underrepresented people
- Distributing printed surveys with a return envelope or information cards directing people to the website with a special code
- Advertised on the introductory postcard/mailed notice all property owners and residences.
- Social media and social media partners

Activities

This section describes the activities and communication tools for developing a Community Vision. Where applicable, alternative strategies are discussed for in-person gatherings that are restricted due to the uncertainties of COVID-19. Before initiating each activity, the project team will assess current conditions and refine the strategy or approach behind each activity or tool to meet project needs and engage a full range of community members.

Project Advisory Team

The Project Advisory Team (PAT) is comprised of members that represent a broad cross-section of community interests and areas of expertise. The PAT reviews and comments on work products, guides public outreach and engagement efforts, acts as liaisons to specific constituencies or interest groups, hosts public events, encourages community members to participate in the process, and acts as champions of the ultimate Oregon City Vision and Comprehensive Plan update that emerges from the process. The PAT will meet nine (9) times during the project. Representation from PAT members may include the following:

Advisory Team Positions	Representation
Rental Housing / Public Assistance Advocate	1
Arts and Culture	1
Active Transportation / Bicycle / Pedestrian Advocate	1
City Commissioner	1 + 1 Alt
Planning Commissioner	1 + 1 Alt
Latinx and Hispanic Association or Speaking Household	1
Russian Association or Speaking Household	1
Indigenous People/Tribal Association or Household	1
Elderly/Aging in Place	1
Youth Representatives	2
Citizen Involvement Committee (CIC)	1
Historic Resources- Historic Review Board (HRB)	1
Natural Resources -Natural Resources Committee (NRC)	1
Parks - Parks and Recreation Advisory Committee (PRAC)	1
Transportation- Transportation Advisory Committee (TAC)	1
Development- Development Stakeholder Group (DSG)	1
Clackamas Community College	1
Residential Developer / Home Builders Association / Realtor	1
Large Employer	1
Small Employer	1
Chamber of Commerce	1
Downtown Oregon City Association (DOCA)	1
Faith Based Organization/Local Church Pastor	1
Public Health	1
At Large	2
LGBTQ Advocate	1
Disabilities Advocate	1

In addition, the following members will attend PAT meetings but are not part of the PAT decision-making structure:

- City Departments (Police, Public Works, Economic Development, Community Development, Community Services, Communications, Library, City Transportation Engineer)
- Metro
- State Agencies (DLCD, ODOT)
- Clackamas County Agencies (Health Housing and Human Services, Planning and Zoning)

- Oregon City School District

Until restrictions on in-person gatherings are lifted and members are comfortable meeting, PAT meetings will be held online via video conferencing. The City will provide additional support for communities of color and other representatives of underserved populations, including Wi-Fi access, day care, accessible locations, phone conversations prior to meetings, and incentives for participation.

Citizen Involvement Committee

The Citizen Involvement Committee (CIC) members will be engaged early in the process to review and provide feedback and guidance on the Public Involvement Plan for the Community Vision. The CIC will consider identified stakeholder groups, outreach activities, desired outcomes, and a schedule of opportunities for participation in the Community Vision process. CIC comments will be incorporated into the Plan.

Community Conversations

A Community Conversations Kit will guide City staff, PAT/City advisory board members, and the general public to hold meetings and document community comments. Community conversations allow project members to connect with the community where people gather and through channels which they receive information. Each PAT member will be responsible for hosting up to five conversations and City advisory board members at least one conversation. City staff will host community conversations with the general community and underrepresented communities.

Given the restrictions on in-person gatherings and the cancellation of events, even though the Community Conversation may be scaled to larger groups, many community conversations will likely occur via phone interviews, small group video conferencing, or even by families on their own. Community Conversation kits will be made available on the project website, along with video-recorded instructions and a choice of a video-recorded mini slideshow to explain the project or a mini slideshow which the host may talk through. Community Conversation kits will be promoted through all lines of communication, encouraging community members to host their own conversations.

Social Media

Bi-Weekly social media posts and monthly email blasts will provide project updates and encourage participation. Posts will solicit feedback on questions and administering visual preference surveys.

Surveys

Online surveys will supplement in-person and virtual community engagement activities. The surveys will ask the same questions that are posed through other outreach activities. The first survey will ask general questions about what people love about Oregon City as well as what they would like to see in their community over the next 20 years. The second survey will solicit the community's opinions on balancing competing interests. Surveys will also be available in a hard copy format and may be distributed with a return envelope to communities of color or underrepresented people.

Community Satisfaction Survey

In August of 2020, the City will be completing a city-wide as part of an effort to identify satisfaction of City services. Results will help ensure that the City's priorities are aligned with the needs of our residents. The survey contains both a mailed statistically valid component which is mailed to 3,500

households as well as an online survey, widely advertised on social media as well as to community members and partners.

Passive Poster Activity

Four interactive posters will be designed to be placed in prominent public spaces (downtown, City Hall, library, grocery stores, coffee shops, churches) so people can participate in a passive activity to help develop the community vision. Posters will pose a key vision question and use dots or other markers to indicate preferences. This will help supplement activities that are restricted due to their in-person nature, such as tabling at Community Events and conducting in-person Community Conversations.

Photo Contest

The design and facilitation of photo contest will encourage residents to share and showcase the elements they love about their community and provide engaging content for social media. Materials collected through the photo contest may be used in a visual preference survey.

Youth Engagement

At least one activity will be designed to engage youth in the vision process, such as a drawing contest that ask participants to draw their dream city. One possible opportunity is the Summer Reading Program at the Oregon City Public Library.

Community Events

Tabling at community events such as the farmer's market, concerts at the park, grocery stores, First City Festival, National Night Out, etc. provide a unique opportunity to reach many people in one place. While COVID-19 will limit the extent to which these venues can have a role in the engagement strategy for the Community Vision, the project team will reassess the situation on a month-by-month basis. Materials for tabling will be designed to solicit community comments, create project awareness, drive people to the project website, and describe the opportunities to get involved. City staff and the PAT will be responsible for staffing community events. Some possible early locations include the Pioneer Center kiosk, Comm Development kiosk, and the Oregon City Public Library.

Mailed Notice

Postcard notices will be mailed to all property owners and renters within the urban growth boundary surrounding Oregon City. These mailers will provide information about the project and highlight opportunities to participate at three points in the process: at the beginning of the Community Vision process, at the beginning of the comprehensive planning process, and at the beginning of the hearings process. Additional targeted notices may be sent to apartment complexes, community centers and churches which cater to communities of color or underrepresented people.

Communication Tools

In addition to the above activities, the following communication tools will provide information about events, activities and opportunities to be involved in developing the Community Vision.

Logo/Branding

A project "look" based on the selected OC2040 logo, including colors, fonts, headers and related graphic elements will appear on all project materials and provide continuity and visibility for the project, ensuring its identity is unique and compelling.

Key Messages

A series of statements, characterizing the project and communicating the information people need to know, are organized under the **Key Messages** section of this document. These key messages will be used throughout the Community Vision process and incorporated across all platforms.

Project Website

A project webpage will include a project overview and timeline, important contacts, schedule of opportunities for engagement, updates on project status, a library of documents and mechanism to submit general comments.

Social media

Social media platforms may include Facebook, Twitter, Instagram, etc. to increase project awareness and provide additional avenues for community input. Postings will coordinate with various City departmental accounts.

Mailed Notices

Postcard notices will provide target engagement to residents and property owners.

Media Releases and Project Promotion

Media releases will announce the project kickoff and advertise key opportunities for public participation. Additional project information will be posted through advertisements in the Trail News, utility bills, cable station, and other local publications.

Promotional Materials

Flyers or other printed materials will help advertise public engagement events and activities. This may include window signs or lawn signs.

Project Email List

E-mail addresses of people who express interest in the planning process will be maintained in a database and used when the City sends e-blasts to notify people about events and activities. Interested parties will have several opportunities to join the mailing list, such as on the project website and at public meetings and events.

Internal Tracking

The consultant will be responsible for maintaining a spreadsheet to track community comments and provide responses, as needed, via the project website. The tracking tool will be used to summarize the results of outreach activities and highlight vision themes in a concise and illustrative report. It will document frequent comments that lend themselves to developing policies and actions. The comments will be summarized in a report and grouped by themes in order to inform the development of the Community Vision.

Roles and Responsibilities

Activity	Consultant Lead	City Lead
PAT Meetings	Meeting materials Facilitation	Communications Logistics
CIC Meetings	Meeting materials	Communications Logistics Facilitation
Community Conversations	Community Conversations Kit Train facilitators as needed	Identify community groups Assignments to PAT and community advisory groups Facilitation Summaries
Community Events	Event materials	Secure place at events Staff events
Passive Poster Activity	Interactive poster boards	Stage and monitor posters with community partners
Photo Contest	Description and instructional content	Implement and manage contest
Youth Engagement	Activity format Materials	Staffing Summaries
Online Engagement	Two surveys Implement engagements Summaries	Implement web updates
Communication Tool		
Logo/Branding	Graphic look and design	Implement graphic look and design
Key Messages	Develop content	Distribute key messages
Project Website	Project web page content	Implement website
Social media	Bi-Weekly social media posts	Distribute via City platforms
Mailed Notices	Content for mailed notice	Distribute via City methods
Media Releases and Project Promotion	Six media releases Support of additional advertisements	Distribute via City avenues Develop and implement additional advertisements
Promotional materials	Flyers	Distribute via City methods
Project Email List	Monthly email blasts (MailChimp)	Create and maintain database
Internal Tracking	Internal tracking spreadsheet	Regular updates to spreadsheet

Schedule

Activities	May	June	July	Aug	Sept	Oct
Advisory Committee Meetings	●	▲				▲
Community Conversations						
Community Events						
Passive Poster Activity						
Photo Contest						
Youth Engagement						
Online Engagement						
Communication Tools						

● CIC Input Via Email

▲ PAT Meeting